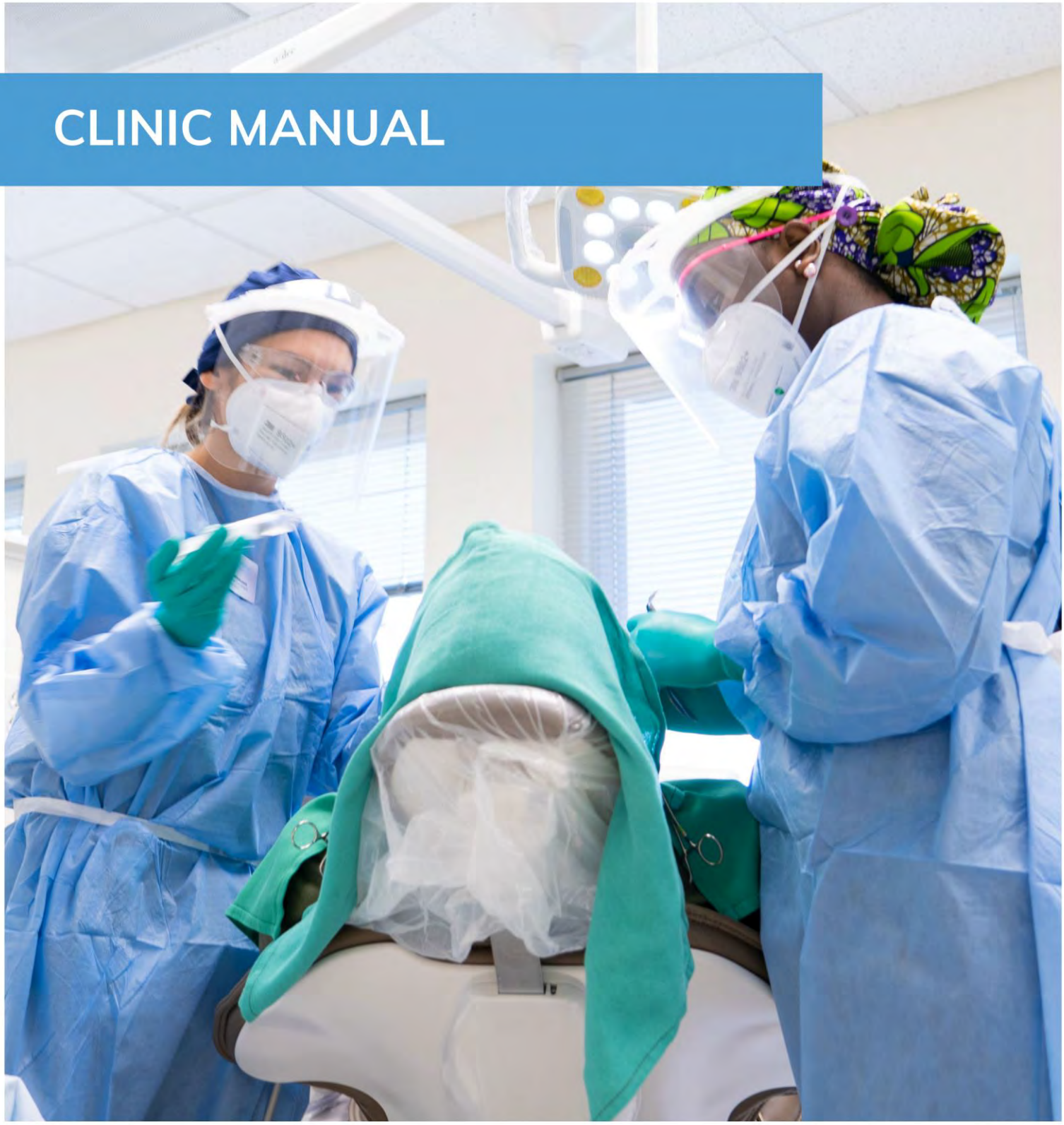
CLINIC MANUAL



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UNC | ADAMS SCHOOL OF DENTISTRY

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Purpose

The purpose of the Carolina Dentistry and Adams School of Dentistry Clinic Manual is to guide the clinic teams to develop inter/intra professional collaborative practice to ensure safe, high quality, person-centered care in a humanistic learning environment that supports the well-being and success of each learner.

This manual is one of the tools used to achieve a high-quality education, enhance communication, and obtain high levels of patient satisfaction. All members of the clinic teams will understand its content and consult it when questions arise.

The manual should be followed to the extent that individual cases allow. Clinical faculty will learn from each other and remain current with best practices.

Any new methods or procedures will be evaluated and discussed among clinical faculty and Adams School of Dentistry administrators, and the manual will be updated with agreed upon revisions on a continual basis.

Introduction

GAP Clinical Model

The general dentistry clinical experiences in the third and fourth year of the ACT curriculum are housed in Guided and Advanced Practice (GAP). The UNC Adams School of Dentistry operates its clinics with the focus on providing person-centered care to all patients regardless of race, ethnicity, gender, sexual identity, national origin, religion, age, or disability status.

The faculty and staff are committed to creating a humanistic, inclusive learning environment for all learners and for each other. All faculty, staff, and learners will abide by the school's Code of Professional Conduct that states that all dental professionals should possess not only knowledge, skill, and technical competence, but also character traits that foster professionalism and adherence to ethical principles.

The objective of GAP is to provide comprehensive collaborative person-centered care using a vertically and horizontally integrated learner-centered model with generalist and specialty areas and access to other health professionals. This model will prepare learners with the knowledge, skills and attitudes to provide comprehensive person-centered oral health care within an intra/inter-professional collaborative team.

Defining Person-Centered Care

"Person-centered care" is approaching your patients (caregivers) as equal partners in planning, developing and monitoring care to make sure it meets their needs, thereby making the patient an integral component of the oral health team. This requires taking a holistic approach to care, considering the patient's preferences, values, cultural, religion, socioeconomic situation, and other health issues and priorities. This may mean deviating from the established algorithm for/standards of treatment to meet a patient's specific needs and expectation. (Glick, 2019)

Some features of person-centered care are (based on Starfield, 2011):

- Focuses on the person and his/her relationship with the provider over time.
- Focuses on disease management in the context of the personal, social, religious, ethnic, and other factors.
- Views patient in a holistic with all systems interrelated.
- Uses professionally defined conditions but allows modifications using people's health concerns and social determinants.
- Modifies diagnoses and treatment from large cohort studies, taking into consideration individual information and desire for care.
- Bases outcomes on improvement of the person's overall health and well-being, taking into consideration multiple factors.

As an integral member of the oral health team, the patient must understand the necessary information to make informed decisions (such as their diagnoses and the risks, benefits, costs, time course, and expected outcomes of all treatment options). This places an emphasis on the patient's rights and choices, in addition to their responsibilities. Decisions will be made as a team and the provider maintains the responsibility to follow the dental profession's and the school's standards of care and ethical behavior.

To achieve the goal of person-centered care requires continually refining your communication skills to build a relationship with each unique individual that demonstrates respect and care, builds trust, and ensures patient understanding of their dental care.

Goals

The Guided and Advanced Clinical Practice goals are to:

1. Apply the principles of person-centered care in clinical practice.
2. Refine the use of effective evident based clinical decision-making.
3. Develop advanced psychomotor skills and clinical techniques.

Values

The GAP Clinical Team commits to fostering a humanistic culture and learning environment, as ***'Humanism'*** is the defining characteristic of the Adams School of Dentistry's education model. We aim to create a respectful and positive setting that is safe and inclusive, clearly communicating expectations, and supporting each learner's well-being and achievement, to provide a positive learning and working healthcare environment for every member of our clinical team and our patients.

The success of this approach depends on clear, honest, open communication and members of the dental school community meeting their responsibilities to themselves and each other. Giving feedback and addressing issues are the most valued gifts that can be given each other, the team, and the school. It is important to understand that giving feedback is sometimes as difficult as getting feedback, so viewing feedback to support each other to individually grow and achieve our goals will contribute to creating a humanistic education.

Faculty members' responsibility is to model the profession's and the Adams School of Dentistry's highest standards, and mentor learners in ways that support and motivate their learning. Learners, in turn, are expected to set high standards, meet commitments to their clinic team and patients, seek support when needed, and take personal responsibility to prepared for seminars and clinic, and for their own learning.

GAP Clinical Team

The goal of clinical team structure is to provide a consistent relationship among the faculty, care coordinators, learners, and patients to deliver high-quality, comprehensive, and collaborative care with a person-centered care approach. GAP aims to have teams of faculty working closely with students in each practice (floor) that support and mimic all elements of a general dentistry practice. More complex procedures would be referred to the specialty clinics, mirroring what happens in general dental practice.

Figure 1 delineates roles of each team member who collective support the learning experiences. Preceptors work in tandem with predoctoral program directors to ensure practice readiness. Preceptors are responsible for overseeing the comprehensive care (admissions, assessment, diagnosis, treatment planning, provision of treatment, and general management) of patients assigned to their pre-doctoral student groups and are responsible for supporting, directing, and evaluating the professional development of the pre-doctoral students assigned to their groups.

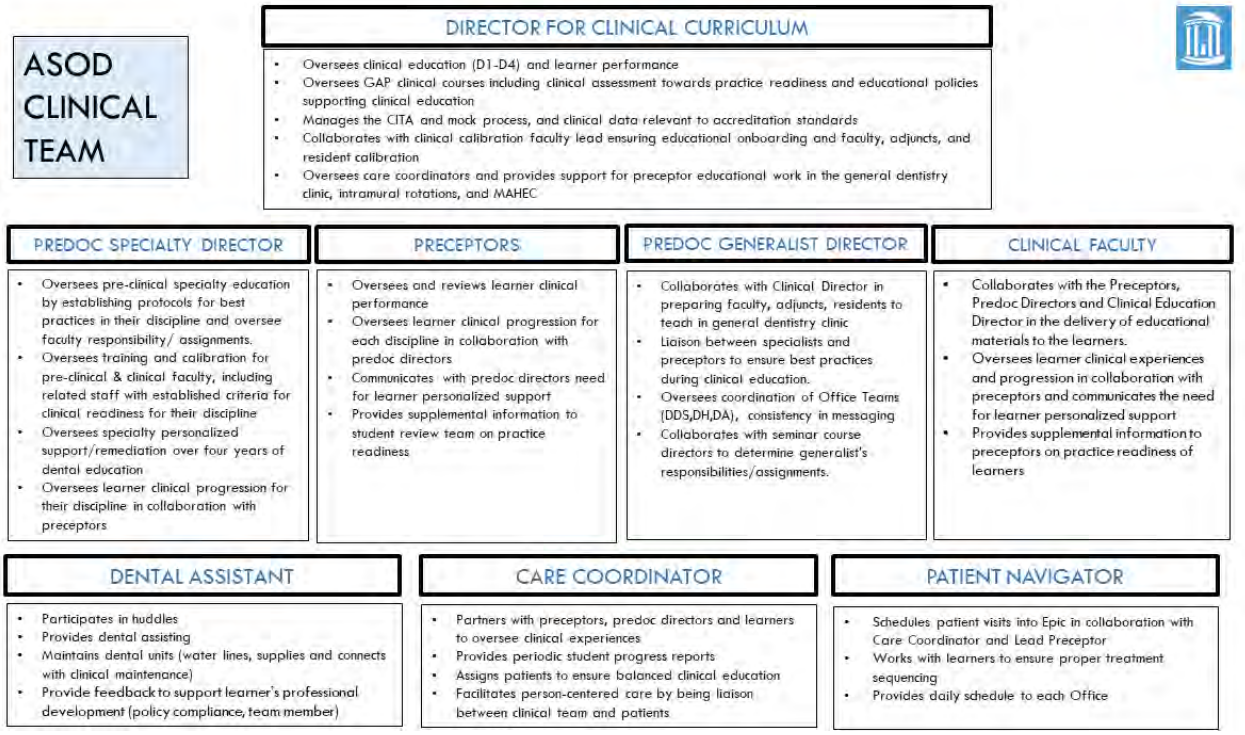


Figure 1: Clinical Team

The team concepts are evident in shared learning opportunities within the teams and aim to fit learners with the right faculty at the right time in all learning.

Read more: Curriculum Sakai Site

Team Structure

The third- and fourth-year DDS learners and first- and second-year Dental Hygiene (DH) in the GAP curriculum are divided 2 practices, each containing 3 teams each, called Offices (Figure 2).

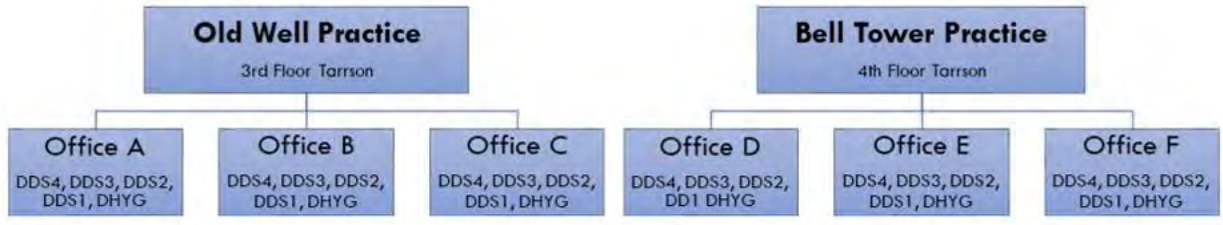


Figure 2: Schematic of Clinical Structure

Office members consist of DDS1-4, DH 1-2, 1 Lead preceptor, supporting clinical faculty, one care coordinator, one patient navigator, and one dental assistant. DDS learners are assigned in alphabetical order to an office in first year and remain with the office until graduation.

DDS 1, DDS 2, DDS 3, and DH students work together in integrated teams with each student learner being assigned patients with clinical needs and level of difficulty appropriate to their ability. DDS 1 students are exposed to early clinical experiences and will engage in formal dental assistant training. DDS 1 and DDS 2 will work hand in hand with the DDS 3 and DDS 4 clinic when appropriate.

Dental Hygiene instructors will generally be supervising and instructing students performing at this proficiency level. DDS4 students will provide routine hygiene care as quality patient care requires but will generally be more focused on patients with more extensive periodontal needs and often will work under the supervision of periodontal residents and faculty.

It is the responsibility of the learner in the GAP Clinical Team to deliver quality dental care in a courteous, timely and professional manner as the primary care provider to the student's family of patients.

Learners have the privilege of delivering care to their adult (generally 14 years or older) patients in the areas listed below. Specialties are responsible for providing training materials and, if requested or necessary, calibration training for faculty.

Read more: Adams School of Dentistry Policies

References

Starfield, B. Is patient-centered care the same as person-focused care? Perm J. 2011;15(2):63–69. https://doi.org/10.7812/TPP/10-148

Glick, M. Precision-, patient-, person-centered care, oh my. JADA, 2019:15(3):161-162. https://doi.org/10.1016/j.adaj.2019.01.008

Standards of Care

The goal of the UNC Adams School of Dentistry and Carolina Dentistry is to promote access to care for the population of North Carolina, within the scope of our educational programs and resources. These standards are guidelines for patients accepted for care and not intended to be all inclusive or inflexible.

The standards are intended to provide overall direction for the core values that individuals should possess in a dental care environment, but do not replace clinical evaluations established by individual educational programs, e.g., Graduate, Predoctoral, Dental Hygiene, located within the school.

These standards are part of the regular Continuing Quality Improvement process with indicated modifications and revisions operationalized as appropriate. These standards exist within the parameters of applicable law and ethical principles. These standards do not constitute a guarantee of any particular patient outcome.

Section 1: Patient Rights	Patients will be informed of their rights and responsibilities. In addition, patients will be treated in a professional manner.
Section 2: Examination and Diagnosis	Patients accepted for care at the Adams School of Dentistry will receive the appropriate examination designed to arrive at diagnosis.
Section 3: Treatment Plans	Based upon the results of examination and diagnosis, a treatment plan will be formulated so that patients may receive treatment that is appropriate to meet their needs.
Section 4: Quality of Care	Based upon the results of the diagnoses, patients will receive quality care to promote satisfaction, function, health, and esthetics, with such care rendered in a safe and timely manner.

Continuous Quality Improvement

Quality of Patient Care Committee

The Quality of Patient Care Committee is responsible for regularly assessing the quality of care delivered in the student patient clinics (i.e. Graduate, Predoctoral, and Undergraduate) by developing a quality assurance plan to ensure continuous quality improvement of the patient care program.

This committee collaboratively defines the school's Standards for Patient Care that are patient-centered, focused on comprehensive care, and written in a format that facilitates assessment with measurable criteria.

The committee determines the criteria upon which to evaluate all standards for patient care; sets performance targets or benchmarks; and continuously reviews established standards for patient care and revises as needed.

The designated leader designee collects, analyses, and submits the patient care data to the committee. Additionally, the committee conducts an ongoing review of a representative sample of patients and patient records to assess the appropriateness, necessity, and quality of the care provided.

The committee reviews all the outcomes data; assesses compliance with the defined standards of care across Patient clinics; utilizes mechanisms to determine the cause(s) of treatment deficiencies; and suggests corrective measures as appropriate.

The committee submits an Annual Quality of Patient Care Report of the outcomes for each standard and the recommended corrective actions for those standards that did not meet the target outcomes.

The membership of the committee is representative of faculty and students throughout the school. The committee meets monthly to monitor progress on data collection and analyses; reviews updated outcomes data; updates quality assurance assessment tools; makes interim recommendations for quality improvement and corrective actions; and monitors implementation of recommendations.

Continuous Quality Improvement Cyclical Process

We follow a plan, do, study, act (PDSA) cycle of quality improvement. This cycle continues until the desired benchmark level is achieved for all standards. Indicators are continually monitored to ensure the desired outcomes continue to meet or exceed the defined benchmarks.

Standards for Patient Care and Outcome Indicators

PATIENT RIGHTS

Patients will be informed of their rights and responsibilities. In addition, patients will be treated in a humane and professional manner.

#	Outcomes Indicators
1.1	Receipt of Patient's Bill of Rights document noted by patient (caregiver) signature
1.2	Students, faculty, and staff treat patients in a caring (humanistic) manner
1.3	Patients receive a Notice of Privacy Practices

EXAMINATION AND DIAGNOSIS

Patients accepted for care at the Adams School of Dentistry will receive the appropriate examination designed to arrive at a diagnosis.

#	Outcomes Indicators
2.1	New patients (D0101/D0190) accepted for comprehensive care receive a clinical examination and radiographic exam (D0150) within their first three visits
2.2	Patient protective equipment is utilized in the acquisition of dental radiographs

TREATMENT PLANS

Based upon the results of examination and diagnosis, a treatment plan will be formulated so that patients may receive treatment which is appropriate to meet their needs.

#	Outcomes Indicators
3.1	Oral health providers explained the treatment options to the patient
3.2	The patient's chief complaint was addressed
3.3	Comprehensive care patients, under active care, had a treatment plan in EPR that was signed by the patient

QUALITY OF CARE

Based upon the results of the diagnoses, patients will receive quality care to promote satisfaction, function, health, and esthetics, with such care rendered in a timely manner.

#	Outcomes Indicators
4.1	Care was provided in a timely manner
4.2	The annual procedure re-do rate is maintained below a reasonable percentage
4.3	Active patients are satisfied with their care
4.4	Patients in active treatment have had their medical history updated in last six months

4.5	Patients with dental emergencies were able to promptly reach a member of the Adams School of Dentistry regarding their concern
4.6	Infection control policies and procedures are followed

Patient Rights and Responsibilities

The employees and students at the UNC Adams School of Dentistry and its clinical practice, Carolina Dentistry, are committed to providing the highest quality of dental care in a professional and compassionate manner. We strive to develop a strong trusting relationship between the patient and/or the patient's parents or guardians and their oral health care provider. It is important that patients understand the condition of their oral health and the treatment to be provided to address and/or alleviate the condition.

Your Rights as a Patient	
Treating the Person	Carolina Dentistry recognizes and respects the dignity of each patient. Patients should expect to be treated with consideration and respect regardless of age, color, disability, gender, gender expression, gender identity, genetic information, national origin, race, religion, sexual orientation, veteran status, or source of payment.
Appropriate Services	Carolina Dentistry will provide services consistent with the patient's needs. Patients will be informed about what can and cannot be provided, and providers will make referrals for treatment elsewhere when necessary. When the patient's relationship with the school ends, no matter the reason, the patient will be made aware of remaining treatment needs.
Understanding the Plan of Care	Patients are entitled to a clear explanation of their dental problems, recommended treatment, treatment alternatives, risks involved, estimated costs, who will provide care and approximately how long it may take. When complications come up during treatment that might change the plan of care or affect treatment results, patients will get a full explanation.
Consent and Refusal of Treatment	Patients have the right to participate in decisions about their dental treatment and have questions answered before making decisions. Patients may refuse treatment and should expect to be informed of the possible consequences of such decisions.
Confidentiality	Patient privacy rights are protected under the Health Insurance Portability and Accountability Act (HIPAA), applicable state laws, and Adams School of Dentistry policies to which all students, faculty and staff are bound. Communications about treatment will be made in strict accordance with these laws and policies. Treatment records (including radiographs) will not be released without written permission, except as required by insurance or by law. Patients have the right to read and be informed about their dental record. Discussion of treatment with friends or family members requires the patient's verbal or written permission, or a legal Power of Attorney document.

Your Responsibilities as a Patient

As a patient or caregiver of a patient in our clinics, your responsibilities are to:

- Be considerate and respectful of other patients, students, and employees.
- Share honest and complete information about medical and dental history, previous illnesses, hospitalizations, exposure to communicable diseases, allergies, medications, and current medical care.
- Let the provider know when there are changes in the patient's general health condition, and when patients experience unusual discomfort or complications following a treatment.
- Ask questions and understand the nature of dental conditions and treatments.
- Follow the instructions given to follow up on treatment.
- Be available to make appointments during the entire treatment phase; to keep scheduled appointments; and to arrive for appointments on time.
- Consider that the school strongly encourages patients to have all dental treatment done in the student clinic to which you are admitted, except in case of emergency or when referred for specific treatments by an authorized Adams School of Dentistry provider.
- Pay for all services when received unless the Carolina Dentistry has approved other arrangements.
- Update all address and phone number changes directly with the main desk of the appropriate clinic as soon as possible.

Not meeting these responsibilities can lead to patient dismissal.

Patient's Representative

Once admitted as a patient in the Predoctoral Learner Dental Clinics, patients are assigned to a Care Coordinator (CC), who is available during regular business hours to assist with any questions, concerns, or problems concerning treatment.

Patients can reach their CC at (919) 537-3588.

Professionalism and Ethical Behavior

Introduction

The faculty, staff and students at the UNC Adams School of Dentistry are expected to adhere to high ethical and professional standards. In addition to applicable laws and regulations stipulating general codes of conduct for UNC dental students (delineated in documents detailed below), there are a number of established standards that guide our professional and ethical behavior in clinic settings.

CODA standard 2-21 reminds us that, "Graduates must be competent in the application of the principles of ethical decision making and professional responsibility." It is expected that Adams School of Dentistry students have the capacity to learn, understand and apply these principles. It is expected that ethical decision-making be guided in part by knowledge and practice of cultural humility and cultural competence as well as principles of diversity and inclusion.

Additionally, CODA 2-17 articulates that, "Graduates must be competent in managing a diverse patient population and have the interpersonal and communications skills to function successfully in a multicultural work environment."

All students are expected to demonstrate the principles, strategies and techniques to collaborate successfully with diverse colleagues and patients. Embracing a person-centered approach to care, students must be able to interact and communicate effectively and respectfully across diverse contexts and diverse patient populations and demonstrate cultural humility.

Ethical behavior requires students to establish a partnership with the patient/caregiver that is physically and psychologically safe for all parties, using person-centered and respectful verbal, non-verbal, language and syntax in all exchanges.

With regard to professionalism with colleagues, the student's verbal tone, language, non-verbal interactions and actions must reflect respect for team members' knowledge and experience (professional and lived experience).

Student ethical behavior means the student is responsive to team members' needs and reflects concern for team members' growth, success and overall well-being. The student recognizes and models the value of the team approach in providing optimal patient treatment.

Informed by CODA, the school's ACT curriculum specifies that students and program graduates must:

- Apply principles of professionalism and ethics
- Embrace diversity and inclusion
- Act compassionately
- Communicate in an effective and professional manner
- Prioritize patients' values and preferences in providing person-centered care

At the Adams School of Dentistry, we are committed to a diverse and inclusive environment for faculty, staff, students, residents, and patients. We are committed to creating and maintaining an environment that welcomes, values, and supports the personal and professional development and care of all individuals.

More Information

- Adams School of Dentistry Diversity and Inclusion
    - Internal School Resources (Onyen login required)
    - Office of Inclusive Excellence Webpage
- UNC Campus Diversity

Professional Standards

- School Policies
- ADA Principles of Ethics and Code of Professional Behavior
- American Student Dental Association: Ethics
- American College of Dentists: Ethics Handbook for Dentists
- UNC Graduate School Handbook

Learner Professionalism

- UNC-Chapel Hill Student Conduct
- Adams School of Dentistry Technical Standards
- Adams School of Dentistry Sakai

Learner Code of Conduct

- Adams School of Dentistry Policy on Student Professionalism
- Code of Professional Conduct

Faculty and Staff Responsibilities

- Adams School of Dentistry Policies

Patient Confidentiality and Social Media

- Adams School of Dentistry Policy on Social Media

HIPAA Regulations

- UNC-Chapel HIPAA Information

Personal Appearance

- Code of Professional Conduct

Professional Dress Code

- Adams School of Dentistry Professional Dress Code Policy

Clinic Privileges: Learner-Specific Criteria
• Learners must be currently enrolled and in good academic standing in the Adams School of Dentistry. • A learner must possess the proper preclinical skills and a satisfactory level of professionalism as evaluated by dental school faculty and administrators before progressing into the patient care program. • Once in the clinic, learners must strive towards competence in clinical skills and professional conduct to retain clinical privileges.

If a student does not meet these standards, the leadership has the authority to suspend the learner's clinical privileges.

Read more: Reporting Code Violations

Clinical Safety

Compliance Information

- Clinical Compliance Information

Radiation Safety

- NC Division of Radiation Protection
- The Use of Ionizing Radiation and Auxiliary Equipment

Unit Policies, Standards, and Procedures

- Adams School of Dentistry Infection Control Policy
- Violation of Compliance
- Emergency Response Manual
- Management of Medical Emergencies

Medical Emergency Team: (919) 537-

Hypertension

Questions to Ask/Necessary Information

1. Have there been any recent changes in your medications? What medicines are you currently taking? Did you take your medication(s) today?
2. Do you take your blood pressure at home? If so, what is it usually?

Risk for Medical Emergency

- Acute elevation of a patients BP (headache, SOB, chest pain) with symptoms should be avoided.
- Stress management is important to lessen the changes of endogenous release of catecholamines, therefore long or stressful appointments are best avoided for poorly controlled hypertensive patients.

Pertinent Laboratory Information: Management recommendations for BP (based on >3 BP readings)

☐ ≥130-59/85-99	Follow up with primary care provider within 60 days
☐ ≥160-179/100-109	Follow up with primary care provider within 30 days
☐ ≥180 SP or ≥110 DP	Defer elective dental treatment. Follow up with primary care provider immediately.
☐ ≥181-210/111-119 with S&S	Defer elective dental treatment. Refer to emergency department immediately.

For patients 65+ years, blood pressure control is considered 140-150/90+, depending on frailty.

Blood Pressure Categories	
Normal: less than 120 and <80	High BP Stage 2: >140 or >90
Elevated: 120-129 and <80	Hypertensive Crisis: >180 and/or >120 *Call doctor immediately*
High BP Stage 1: 130-139 or 80-89	

Considerations for Dental Treatment

Pre-operative

- Measure and record blood pressure, review health status to include all medications, and refer patient to PCP prn (listed above).
- If blood pressure reading is above normal, two additional readings must be performed – with at least one performed using a stethoscope and sphygmomanometer.
    - For patients with a BP **less than or equal to 180/110** and no evidence of target organ involvement, any dental treatment may be provided.
    - For patients with a BP **greater than 180/11**, defer elective dental care.
    - Minimize stress; consider sedative premedication in excessively anxious patients.

Operative

- Provide local anesthesia of excellent quality.
- For cardiac patients, limit epinephrine to 2 cartridges of 1:100,00 epinephrine.
- For uncontrolled hyperthyroid patients or newly diagnosed (and not completely titrated) hypothyroid patients, avoid epinephrine.
- Avoid epinephrine-containing gingival retraction cord.
- For patients with upper Stage 2 HTN, consider intraoperative monitoring of BP and terminate appointment if BP reaches 180/110.

Post-Operative

- Make slow changes in chair position to avoid orthostatic hypotension.

Ensure patient's vitals are stable prior to dismissal.

Little, Falace. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
JAMA, 2014 Feb 5;311 (5):507-20. doi: 10.1001/jama.2013.284427.2014 evidence-based guideline for the management of high blood pressure in adults: report from the panel members appointed to the Eight Joint National Committee (JNC 8)
Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults. Paul K. Welton, Robert M. Carey, et al. Journal of the American College of Cardiology Nov 2017
Benetos A, Pertrovic M; Hypertension management in older and frail older patients. Circulation Research 2019;124:1045-1060

The blood glucose target range for diabetics, according to the American Diabetes Association, should be 90-130 (mg/dL) before meals, and less than 180 mg/dL after meals (as measured by a blood glucose monitor).

Glycemic Goals for Adults		
The A_{1C} goal for many non-pregnant adults is <7%.	Providers might reasonably suggest more stringent A_{1C} goals (such as <6.5%) for selected individual patients: • Those with short duration of diabetes, long life expectancy, and no significant CVD.	Less stringent A1C goals (such as <8%): • A history of severe hypoglycemia. • Limited life expectancy. • Advanced microvascular or macrovascular complications. • Extensive comorbid conditions. • Those with long-standing diabetes in whom the general goal is difficult to attain.

Reference link for ADA Guidelines for Diabetes

Diabetes

Questions to Ask/Necessary Information

1. What type of diabetes and when were you diagnosed?
2. What was your last A_{1C} level and when was it taken?
3. Have you measured your blood glucose today? Most recent level? Normal range?
4. What medications are you taking? Dose, route, frequency and indication?
5. Have you eaten and taken your medications today?
6. Have you been hospitalized in the past year for problems related to your diabetes?

Risk for Medical Emergency: HYPOGLYCEMIA (rapid drop in blood pressure)

Signs/Symptoms

- *Early:* nausea, trembling, tachycardia, pallor, headache, sweating.
- *Late:* incoherent, uncooperative, diminished cerebral function, seizure activity, unconsciousness

Management:

- *Responsive patient:* provide source of glucose (glucose tablet, orange juice, regular soda, cake icing). Arrange for escort home.
- *Unresponsive patient:* emergency protocol should be activated. Place nothing in the patient's mouth. An IV or IM dextrose may be administered by an experienced individual. Arrange for escort home.

Pertinent Laboratory Information

- Fasting blood sugar (reflects current control, that day). (>126 mg/dL = diabetes diagnosis)
- Random plasma glucose > 200 mg/dL with symptoms = diabetes diagnosis
- HbA_{1C} (Glycosylated hemoglobin) (reflects average control over last 6-8 weeks)
    - 4-6% - excellent control
    - 7-8% - good control (≥6.5% = diabetes diagnosis)
    - ≥9% - poor control

Considerations for Dental Treatment

Pre-operative

- Determine glycemic control (HbA1C); note that although higher levels are associated with unfavorable outcomes, no evidence shows that postponing elective surgery to improve glucose level control is beneficial.
- Confirm patient has taken medications and eaten.
- Morning appointments are preferable, but not necessary: 1.5-3 hours after breakfast/insulin.
- Avoid elective dental treatment with blood glucose > 400 mg/dL.
- Have glucose source available (i.e., orange juice, cake icing, glucose tablets)

Operative

- Recognize signs and symptoms of hypoglycemia.

Post-Operative

- When appropriate, adjust insulin dose in coordination with physician according to patient's ability to maintain caloric intake.
- Avoid glucorticosteroids.
- Consider peri-operative or post-operative antibiotics for poorly controlled patients in invasive or surgical procedures.

Oral Manifestations

Xerostomia, infections (including candidiasis), poor wound healing, increased incidence and severity of caries, gingivitis and periodontal disease, periapical abscesses, burning mouth symptoms

Little, Falace. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
Patton, Glick. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.
Simha V, Shah P. Perioperative Glucose Control in Patients with Diabetes Undergoing Elective Surgery. JAMA. Published online January 7, 2019.

Management of Patients with Prosthetic Joints Undergoing Dental Procedures
Clinical Recommendation
In general for patients with prosthetic joint implants, prophylactic antibiotics are not recommended prior to dental procedures to prevent prosthetic joint infection. For patients with a history of complications associated with their joint replacement surgery who are undergoing dental procedures that include gingival manipulation or mucosal incision, prophylactic antibiotics should only be considered after consultation with the patient or orthopedic surgeon. To assess a patient's medical status, a complete health history is always recommended when making final decisions regarding the need for antibiotic prophylaxis.
Clinical Reasoning for the Recommendation
• There is evidence that dental procedures are not associated with prosthetic joint implant infections. • There is evidence that antibiotics provided before oral care do not prevent prosthetic joint implant infections. • There are potential harms of antibiotics including risk of anaphylaxis, antibiotic resistance, and opportunistic infections like Clostridium difficile. • The benefits of antibiotic prophylaxis may not exceed harms for most patients. • The individual patient's circumstances and preferences should be considered when deciding whether to prescribe prophylactic antibiotics prior to dental procedures.
 In cases where antibiotics are deemed necessary, it is most appropriate that the orthopedic surgeon recommend the appropriate antibiotic regimen and when reasonable write the prescription. *Sollecito T, Abe E, Lockhart P, et al. The use of prophylactic antibiotics prior to dental procedures in patients with prosthetic joints: Evidence-based clinical practice for dental practitioners – a report of the American Dental Association Council on Scientific Affairs, JADA, 2015 146(1) 11-16.*

The American Academy of Orthopedic Surgeons (AAOS) provides a report from an expert panel of dentists, orthopedic surgeons, and infectious disease specialists, convened by the American Dental Association (ADA) and the AAOS.

The report details the results of panel performed a thorough review of all available data to determine the need for antibiotic prophylaxis to prevent hematogenous prosthetic joint infections in dental patients who have undergone total joint arthroplasties.

The American Heart Association (AHA) provides information and resources to guide dentists on treating patients with infective endocarditis (IE). Click here for information on IE in dental patients, and for links to related resources.

If the patient has not had the prescription filled or needs an emergency procedure, antibiotics are available on site and can be appropriated for immediate patient use by the following procedure:

- A completed prescription signed by the supervising faculty instructor to be taken to the Tarrson Hall 3rd or 4th floor dispensary
- The medications will be tendered to the student dentist
- The prescribed appropriate medication (amoxicillin or clindamycin) will be dispensed
- Verification of the appropriate medication will be done by the faculty prescribing the medication before administering to the patient.
- An appropriate note indicating this transaction will be recorded in the patient record for the day.

Cardiac Conditions Associated with the Highest Risk of Adverse Outcomes from Endocarditis for Which Prophylaxis with Dental Procedures is Recommended

• Prosthtic Cardiac Valve
• Previous IE
• Congenital Heart Disease (CHD)*
  o Unrepaired cyanotic CHD, including palliative shunts and conduits
  o Completely repaired congenital heart defect with prosthetic material or device, whether placed by surgery or by catheter intervention, during the first 6 months after the procedure**
  o Repaired CHD with residual defects at site or adjacent to the site of a prosthetic patch or prosthetic device (which inhibits endothelialization)
• Cardiac transplantation recipients who develop cardiac valvulopathy

**Except for the conditions listed above, antibiotic prophylaxis is no longer recommended for any other forms of CHD.* ***Prophylaxis is recommended because endothelialization of prosthetic materials occurs within 6 months after the procedure.*

Dental Procedures for which Endocarditis Prophylaxis is Recommended for Patients
All dental procedures that involve manipulation of gingival tissue or the periapical region of teeth or perforation of the oral mucosa.* *The following procedures do not need prophylaxis: • Routine anesthetic injections through non-infected tissue • Taking dental radiographs • Placement of removable prosthodontic or orthodontic appliances • Adjustment of orthodontic appliances • Placement of orthodontic brackets • Shedding of deciduous teeth • Bleeding from trauma to the lips or oral mucosa
Except for the conditions listed above, antibiotic prophylaxis is no longer recommended for any other forms of CHD. *Prophylaxis is recommended because endothelialization of prosthetic materials occurs within 6 months after the procedure.*

Timing: An antibiotic for prophylaxis should be taken in a single dose, 30-60 minutes before procedure. If dosage is *inadvertently* missed before procedure, it may be taken up to 2 hours after procedure.

Patients Already Taking Antibiotics: If a patient is already receiving long-term antibiotic therapy with an antibiotic that is also recommended for IE prophylaxis for a dental procedure, it is prudent to select an antibiotic from a different class rather than to increase the dosage of the current antibiotic. It would also be preferable to delay a dental procedure until at least 10 days after completion of the antibiotic therapy to allow time for the usual oral flora to be re-established.

No Antibiotic Prophylaxis Needed: For patients with h/o coronary artery bypass graft surgery (CABG), cardiac stents or pacemakers.

Clindamycin should no longer be used as first-line alternative to penicillin due to its high risk of C. Diff infections.

Reference Material: ADA Antibiotic Prophylaxis Prior to Dental Procedures

Regimens for a Dental Procedure			
Situation	**Agent**	**Adults**	**Children**
Oral	Amoxicilin	2 g	50 mg/kg
Unableke oral medicati	Ampicilin **OR**	2 g IM or IV	50 mg/kg IM or IV
	Cefazolin or ceftriaxone	1 g IM or IV	50 mg/kg IM or IV
Allergicenicillins or ampicillin oral)	Cephalexin*† **OR**	2 g	50 mg/kg
	Clindamycin **OR**	600 mg	20 mg/kg
	Azithromycin or clarithromycin	500 mg	15 mg/kg
Allergicenicillins or ampicillin nd unable to take oraledication	Cefazolin or ceftriaxone † **OR**	1 g IM or IV	50 mg/kg IM or IV
	Clindamycin	600 mg IM oIV	20 mg/kg IM or IV

**Or other fist - or second-generation oral cephalosporin in equivalent adult or pediatric dosage.*
†Cephalosporns should not be used in an individual with a history of anaphylaxis, angioedema or urticarial with pencillins or ampicillin.

Questions to Ask/Necessary Information

1. When is your expected due date?
2. Are your currently receiving prenatal care?
3. Are you currently taking any medications?
4. Have there been any changes in your oral health throughout your pregnancy?

Risk for Medical Emergency

In the late stages of pregnancy, if the patient is in the supine position, there is a risk of supine hypotensive syndrome (rapid drop in BP, bradycardia, sweating, nausea, weakness, SOB). Have patient roll to their left side so weight is taking off major vessels.

Pertinent Laboratory Information

None, unless patient has gestational diabetes or anemia

Management for Dental Treatment

Oral health care, including radiographs, local anesthesia and pain medication is safe through pregnancy.

- Pre-operative: take blood pressure (elevated BP may be a sign of preeclampsia)
- Operative: avoid pacing patient in supine position during late stages of pregnancy
- Post-operative: minimize oral microbial load (consider chlorhexidine and/or fluoride)

Oral Manifestations

- Gingivitis and/or pyogenic granuloma due to hormonal changes
- Dental caries due to changes in diet (i.e., snacking, etc.)
- Erosion from vomiting (i.e., morning sickness)
    - Inform patient to avoid brushing immediately after vomiting. Instead rinse with a solution of 1 cup water and 1 tsp baking soda to neutralize the acid.

Pharmacological Considerations for Pregnant Women	
The pharmacological agents listed below are to be used for indicated medical conditions and with appropriate supervision.	
Pharmaceutical Agent	**Indications, contraindications and special conditions**
Analgesics	
Acetaminophen	May be used during pregnancy. Oral pain can often be managed with non-opioid medication. If opioids are used, prescribe the lowest dose for the shortest duration (usually less than 3 days), and avoid issuing refills to reduce risk for dependency.
Acetaminophen with Codeine, Hydrocodone, or Oxycodone	
Codeine	
Meperidine	
Morphine	
Aspirin	May be used in short duration during pregnancy; 48-72 hours. Avoid in 1st and 3rd trimesters.
Ibuprofen	
Naproxen	
Antibiotics	
Amoxicillin	May be used during pregnancy
Cephalosporins	
Clindamycin	
Metraonidazole	
Penicillin	
Ciproflaxacin	Avoid during pregnancy
Clarithromycin	
Levofloxacin	
Moxifloxacin	
Tetracycline	Never use during pregnancy
Anesthetics	***Consult with a prenatal care health professional before using intravenous sedation or general anesthesia. Limit duration of exposure to less than 3 hours in pregnant women in the 3rd trimester.***
Local anesthetics with epinephrine (e.g., Bupivacaine, Lidocaine, Mepivacaine)	May be used during pregnancy
Nitrous Oxide (30%)	May be used during pregnancy when topical or local anesthetics are inadequate. Pregnant women require lower levels of nitrous oxide to achieve sedation; consult with prenatal care health professional.
Antimicrobials	***Use alcohol-free products during pregnancy.***
Cetrylpyridinium chloride mouth rinse	May be used during pregnancy
Chlorhexidine mouth rinse	
Xylitol	

Additional Resources: ADA Pregnancy | Oral Health Pregnancy Consensus | Prenatal Oral Health

Heart Failure

Questions to Ask/Necessary Information

1. When were you diagnosed with HF?
2. When was your last medical visit? Do you have new or worsening symptoms?
3. What are names, doses and schedule of your medications?
4. Are your treatments effective in controlling symptoms? (Are you compensated?)
5. What is your most recent ejection fraction?
6. ROS pertinent positives: SOB, orthopnea, fatigue, exercise intolerance, coughing or SOB at night

Classification of HF

- Class I: no limitation of physical activity; no dyspnea, fatigue, palpitations with ordinary activity
- Class II: slight limitation of activity; has fatigue, palpitations, dyspnea with ordinary activity, comfortable at rest
- Class III: limitation of activity; less than ordinary activity results in symptoms but comfortable at rest
- Class IV: symptoms present at rest, any physical exertion exacerbates symptoms

Pertinent Laboratory Information

Ejection Fraction (EF): measurement of the percentage of blood leaving the heart each time it contracts.

EF Measurement	What it Means
55-70%	Normal
40-55%	Below Normal
Less than 40%	May confirm diagnosis of heart failure
Less than 35%	Patient may be at risk of life-threatening irregular heartbeats

Symptomatic Heart Failure (Uncompensated)

- Dental treatment should be limited to urgent/emergency care.
- The risk for medical emergency is high and routine dental care should be avoided until the patient is deemed stable.
- Patients with CHF are at risk for acute failure, fatal arrhythmia, stoke or MI so the dentist should be able to recognize and provide care for these possible symptoms.

Asymptomatic/Mild Heart Failure (Compensated)

- Any necessary dental treatment may be provided.

Considerations for Dental Treatment

Pre-operative

- Thorough health history, including most recent EF
- Measure blood pressure and consider monitoring throughout appointment
- Short, low stress appointments to minimize stress

Operative

- Semi-supine or upright chair position, depending on patient's comfort level
- Provide local anesthesia of excellent quality
- Limit use of epinephrine to 0.04 mg
- Avoid epinephrine impregnated retraction cord
- Patients in upper class II HF, consider intraoperative monitoring of BP and administration of supplemental oxygen
- Nitrous oxide sedation can be used with a minimum of 30% oxygen
- If patient is on digitalis, be mindful of potentially increased gag reflex

Post-Operative

- Slow changes in chair position to avoid orthostatic hypotension
- Ensure stable vitals before dismissing the patient, recording pre- and post-op vitals in chart
- Achieve good hemostasis and analgesia before dismissing

Little, Falace. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
Patton, Glick. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.

Anticoagulated Patient

Questions to Ask/Necessary Information

1. Why are you taking an anticoagulant ("blood thinner")?
2. What is your current dose and has that dose changed recently?
3. (Only for patients on Coumadin (warfarin)) What is your most recent INR and when was it taken?
4. (Appropriate review of systems questions: easy bruising, epistaxis, bleeds excessively after injury)

Risk for Medical Emergency

Embolic risk far exceeds the risk of interrupting anticoagulation and the potential complications associated with bleeding. Therefore, anticoagulant medications should **not** be stopped prior to dental treatment.

For patients on Coumadin (warfarin): If patient is not in therapeutic INR range, there is a high risk of bleeding from simple oral procedures.

Pertinent Laboratory Information

INR Target 2.5 (Range: 2.0-3.0)	INR Target 3.0 (Range: 2.5-3.5)
• Atrial fibrillation • Aortic valve replacement (AVR) – mechanical • VTE treatment and prophylaxis	• Thromboembolic complications at INR 2-3 • Mitral valve replacement (MVR) – mechanical

Considerations for Dental Treatment

Pre-Operative

Coumadin	Direct Acting Oral Anticoagulants
• Obtain patient's most recent INR and the date • For patients on short-term anticoagulation therapy, it might be appropriate to defer dental treatment until after cessation of therapy. **ROUTINE DENTAL PROCEDURES:** • All routine care may be safely performed without altering anticoagulation levels up to INR 3.5 • INR must be therapeutic <1 week of routine care **SURGICAL PROCEDURES:** • Confirm INR value <3.5 within 48 hours of surgery • For extensive surgical procedures, individualize treatment in consultation with PCP. • Consider subdividing extensive procedures into smaller surgeries to minimize risk of hemorrhage.	• No laboratory test currently available for monitoring peri-operative risk of bleeding. • Ensure patient is under regular care of PCP and is taking medication as prescribed. • Review pertinent ROS to help assess risk of bleeding.

Operative

Coumadin	Direct Acting Oral Anticoagulants
• Block anesthesia poses risk of excessive, difficult to control hemorrhage and needs to be done carefully or avoided. • Infiltration and periodontal ligament injections are particularly well suited for patients with deficiencies of coagulation.	

Post-Operative

Coumadin	Direct Acting Oral Anticoagulants
• Avoid ASA, NSAIDS for analgesia. Use acetaminophen for post-operative pain control. • Ensure adequate hemostasis prior to dismissal. • Give clear/complete post-operative instructions including afterhours contact information. • Consider a follow up phone call to check on the patient.	

Little, Falace. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
Patton, Glick. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.
Garcia D, Alexander JH, et al. Managemetn and clinical outcomesin pts treated with apixaben vs. warfarin undergoing procedures. Blood. 2014; 124(25):3692-2698
Wahl, Michael J. The mythology of anticoagulation therapy interruption for dental surgery. JADA, Volume 149, Issue 1, e1-e10. 2018

Chronic Obstructive Pulmonary Disease (COPD)

Quesons to Ask/Necessary Information

1. When were you diagnosed with COPD?
2. When was your last medical visit? Do you have any new or worsening symptoms?
3. What are names, doses and schedule of medications?
4. Are your treatments effective in controlling symptoms?
5. Do you require supplemental oxygen? If so, when?
6. ROS pertinent positives: dyspnea, orthopnea, shortness of breath, wheezing, productive cough
7. Have you ever had difficulty breathing during dental treatment?

Risk fr Medical Emergency

- A patient with shortness of breath at rest, a productive cough, upper respiratory infection, or an O_2 saturation of < 91% is considered unstable for elective dental care.
- Routine care can be provided to patients with stages ! to III COPD but should be avoided in patients who have stage IV COPD.

Pertinnt Laboratory Information

Stage	Pulmonary Function Test Findings	Symptoms
I: Mild	Mild airflow limitations FEV_1/FVC <70% FEV_1 ≥80% predicted	+/- chronic cough and sputum production; patient unaware of abnormal lung function
II: Mo	Worsening airflow limitations FEV_1/FVC <70% FEV_1 between 50 and 80% predicted	Dyspnea on exertion, cough, and sputum production; patient usually seeks medical care because of symptoms
III: Seve	Further worsening airflow limitations FEV_1/FVC <70% FEV_1 between 30 and 50% predicted	Increased shortness of breath, reduced exercise capacity, repeated exacerbations impact quality of life
IV: Ver Severe	Severe airflow limitations FEV_1/FVC <70% FEV_1 30% predicted or FEV_1 <50% predicted plus chronic respiratory failure	Cor pulmonale (right heart failure), quality of life impaired, life-threatening exacerbations

FEV_1: Fed expiratory volume in 1 second; FVC: forced vital capacity; FEV: forced expiratory volume
Adoptom Global Strategy for the Diagnosis, Management and Prevention of COPD , Global Initiative for Chronic Obstructive Lung Disease

Consierations for Dental Treatment

Pre-Oerative

- Short morning appointments are preferable.
- Delay elective care if medically unstable (see above).
- Avoid elective care in hot, humid weather.
- In severely anxious patients, sedative premed with benzodiazepine can be used.
- For patients on bronchodilators, consider having them use prior to starting dental care.

Opertive

- If coexisting cardiovascular disease is present, stress reduction measures should be implemented, vital signs monitored and supplemental oxygen provided pm.
- Cautious use of N2O and avoid completely in patients with severe COPD (stage III or worse).
- Avoid orthopnea with chair positioning (semi-supine or upright may be best).
- Avoid using a rubber dam in patients with severe COPD.
- Judicious use of local anesthetic with epinephrine (limit to 2 capsules 1:100K epi)
- Consider using pulse oximeter during appointment to monitor patient.

Post-Operative

- Avoid prescribing respiratory depressant drugs like barbiturates and narcotics.
- Avoid prescribing anticholinergic/antihistamine drugs that dry bronchial sections and increase risk of respiratory infection.

Little, Fal. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
Patton,ck. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.

Asthma

Quesons to Ask/Necessary Information

1. When were you diagnosed with asthma?
2. When is the last time you had an asthma attack?
3. What typically precipitates an attack? What resolves it?
4. Have you ever been hospitalized due to asthma?
5. Have you had any recent changes in your medication?
6. Do you have your inhaler with you? (If so, make sure inhaler is easily accessible.)
7. Ascertain adherence to medication use (especially in the previous 4 weeks), the type of asthma (e.g., allergic vs. non-allergic), precipitating substances, frequency and severity of attacks, times of day when attacks occur, whether asthma is a current or past problem, how attacks usually are managed, and whether the patient has received emergency treatment for an acute attack.

Risk for Medical Emergency

Risk of an Acute Asthmatic Attack

Signs

- Inability to finish sentences with one breath, ineffectiveness of bronchodilator to relieve difficulty breathing.

Management:

- Stop care, remove dental dam.
- Administer bronchodilator (Beta 2-agnoist).
- Administer oxygen (2-3L/min).
- If needed, administer subcutaneous epinephrine 1:100/0.3 to 0.5 cc subcutaneously.
- Activate EMS and repeat administration of bronchodilator every 20 minutes.

Considerations for Dental Treatment

Pre-operative

- Remind patient to bring inhaler.
- Obtain medical consult if asthma is poorly controlled.
- For moderate to severe asthmatics, consider use of inhalers prophylactically prior to appointment.

Operative

- Provide stress-free environment through establishment of rapport and openness to reduce risk of anxiety induced asthma attack. If sedation is required, use of nitrous oxide-oxygen inhalation sedation or small doses of oral diazepam (or both) is recommended.
- Avoid asthma triggers.
- Monitor vitals and recognize signs of an attack (above).

Post-Operative

- Avoid erythromycin, macrolides, and ciprofloxacin in patients taking theophylline.
- Avoid aspirin and NSAIDS – may trigger an attack.
- Avoid barbiturates and narcotics.

Oral Manifestations

Bronchodilators and corticosteroids inhalers increase risk of caries, periodontal disease and candidiasis.

Little, Falace. The dental management of the medical compromised patient. 9th edition. Mosby, 2017.
Patton, Glick. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.
Simha V, Shah P. Perioperative Glucose Control in Patients with Diabetes Undergoing Elective Surgery. JAMA. Published online January 7, 2019.

Myocardial Infarction (MI)

Questions to Ask/Necessary Information

1. When did you have an MI? How was it treated?
2. Are you currently under the care of a physician?
3. Do you have chest pain? How often? How do you treat it?

Risk for Medical Emergency

Cardiac Risk Stratification

- High Cardiac Risk: patients with symptoms of unstable angina or recent MI ≤30 days
- Intermediate Cardiac Risk: patients with a history of MI planned for extensive surgical procedures
- Low Cardiac Risk: patients with a history of MI planned for simple surgical or nonsurgical procedures

Patients with Chest Pain (acute angina) During a Procedure:

Signs/Symptoms:

- *Early:* heavy/pressure feeling in chest, sweating, trembling, nausea, jaw pain, feeling of impending doom
- *Late:* vomiting, loss of consciousness

Management

- *Responsive Patient:* provide oxygen, take blood pressure, administer nitroglycerin, active EMS
- *Unresponsive Patient:* emergency protocol should be activated. Place nothing in patient's mouth.

Considerations for Dental Treatment

For patients with an unstable angina or recent MI (≤30 days)

- Avoid elective dental care.
- If care becomes necessary, consult with cardiologist to develop a plan of care that is safest for the patient.

STABLE ANGINA	UNSTABLE ANGINA
• Predictable • Induced by exercise or exertion • Lasts for <15 minutes	• Recent onset chest pain • Not readily relieved by nitroglycerin • Precipitated by less effort than before and that occurs at rest • Pain with increasing frequency and intensity

Pre-Operative

- Determine risk stratification.
- Take vital signs.
- Have nitroglycerin available.
- Patients on anticoagulant therapy or anti-platelet therapy: do not stop medications prior to procedure

Operative

- Short appointments, morning preferable.
- Comfortable chair position.
- Reduced stress environment possibly with oral sedation (short-acting benzodiazepine) 1 hour before procedure or nitrous oxide.
- Have nitroglycerin and oxygen readily available.
- Achieve profound local anesthesia.
- Limit amount of vasoconstrictor to 2 capsules of 1:100 K epinephrine at a time (within 30-45 minutes).
- Avoid epinephrine-impregnated retraction cord
- For patients on platelet therapy, have additional hemostatic acids available for surgical procedures.

Post-Operative

- Achieve effective post-operative pain control.

Patton, Glick. The ADA Practical Guide to Patients with Medical Conditions, 2nd edition. Wiley, 2016.
Minassian C, et al: Invasive dental treatment and risk for vascular events: a self-controlled case series. Ann Intern Med 2010; 153: pp.499-506.
Skaar, D, et al: Dental procedures and risk of experiencing a second vascular event in a Medicare population. J Am Dent Assoc 2012; 143: 1190-1198.
Wahl, Michael J. The mythology of anticoagulation therapy interruption for dental surgery. JADA, Volume 149, Issue 1, e1-e10. 2018.

Patient and Provider Safety

- Blood and Body Fluid Exposure Protocol
- Procedure for Swallowed Foreign Objects
- AED and Oxygen Tank Locations
- Checking Oxygen Tank Pressure
- Protocol for Anxiety Management in the General Dental Clinics

Documentation of Medical Emergency
A Medical Emergency Record is generated each time the school's Medical Emergency Team responds to a call. The document is completed by a nurse or junior resident, signed by the school's Medical Emergency Team faculty member present at the patient emergency, and submitted to the Director of Clinical Compliance within 48 hours. The original medical emergency record is to be included in the patient record (chart) or, for non-patients, in the medical emergency file maintained by the Director of Clinical Compliance.

Documentation of an Incident
For all injuries occurring in the school facilities, an Incident Report must be generated. **When the emergency involves a Carolina Dentistry patient of record, the faculty/healthcare provider documents the emergency event in the patient's record.**

Emergency Equipment	
Automated External Defibrillators (AED)	Oxygen Equipment
Defibrillation is a medically recognized method of reversing certain potentially fatal arrhythmias. Successful resuscitation of a patient is related to the length of time between the onset of an arrhythmia (ventricular fibrillation and/or pulse less ventricular tachycardia) and defibrillation. Administration of supplemental oxygen is also crucial to the resuscitation process.	Emergency oxygen tanks and related equipment located in Brauer Hall, Tarrson Hall, First Dental Building, and Koury Oral Health Sciences Building will be checked periodically by a designated employee.

Adams School of Dentistry Emergency Evacuation Plan

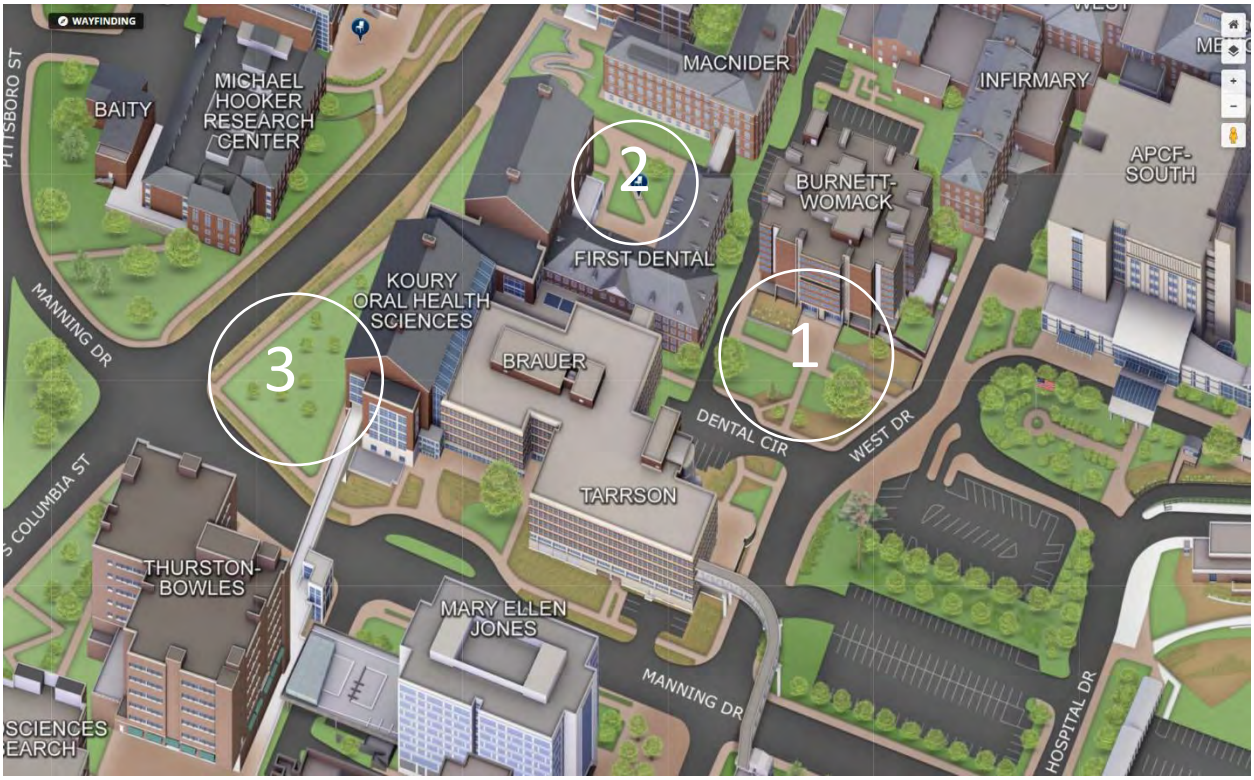
GAP Clinical Team members will assist in directing occupants and assist in relocating physically impaired occupants to the closest staging area.

Occupants in the school's facilities are to exit the building via the nearest exit and assemble at one of the following designated staging areas and remain until instructed to disperse.

1. Burnett-Womack lawn (east)
2. Adams School of Dentistry Quad (north)
3. Manning Drive/ South Columbia Street (south/west)

Occupants must proceed to the designated staging area to ensure emergency response personnel and vehicles have clear and immediate access to the site.

See the illustration below for staging areas:

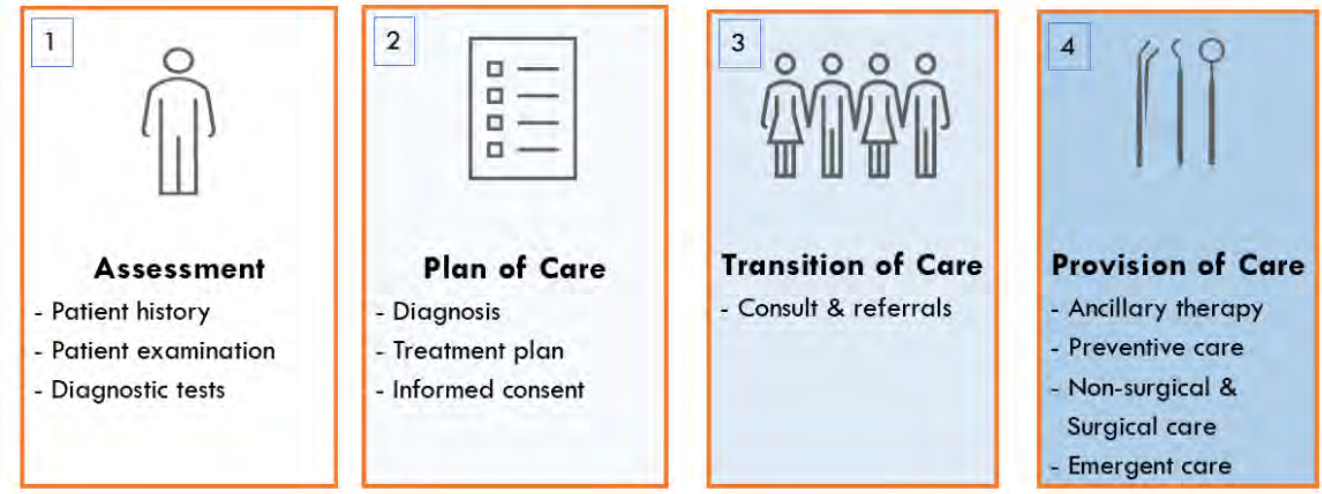


Entrustable Professional Activities (EPAs)

Introduction

At the Adams School of Dentistry, we have defined four core Entrustable Professional Activities (EPAs). EPAs comprise a series of tasks learners are expected to perform at a certain level of supervision by a specified time point, offering a bridge between competency-based frameworks and clinical practice.[1]

The goal is to have multiple assessments to evaluate practice readiness based on a series of clinical experiences, instead of a singular instance.[2] The section below outlines these four core EPAs and their subsections, defining the scope of services provided in the predoctoral clinic.



EPA 1: Assessment

Conduct a comprehensive patient assessment of oral and systemic conditions

1a) Obtain a health history

Graduates must be able to complete a thorough, accurate history (comprehensive or focused) in a prioritized, organized, and systematic manner independently. The assessment should be tailored to the clinical situation and specific encounter.

Resources	
Comprehensive Health History Note Sheet	Example (PDF)
Epic Tutorial for HHx	Instructions (PDF)
Health History Faculty Calibration	Presentation (PDF)

1b) Perform a clinical examination

Graduates must able to obtain a thorough, accurate examination (comprehensive or focused) in a prioritized, organized, and systematic manner independently. The assessment should be tailored to the clinical situation and specific encounter. The initial examination of a dentate patient must include, at a minimum, documented clinical and radiographic findings of extraoral and intraoral soft tissues, occlusion, periodontium, dentition, and restorations.

Click here for a DxT appointment checklist on Sakai under Diagnosis and Treatment Planning.

1c) Obtain diagnostic tests

Graduates must be able to select and accurately interpret common diagnostic and screening tests using evidence-based, person-centered, and cost-effective principles in various settings.

Individuals should identify which diagnostic and screening tests are warranted as part of the information gathering process—this includes being able to articulate the rationale for their selection and communicate results to individuals within their care team or other healthcare providers.

This data gathering and interaction activity serves as the basis for clinical work and as the foundation for evaluation and management. Learners need to integrate the scientific foundations of biomedical sciences with clinical reasoning skills to guide their information gathering.

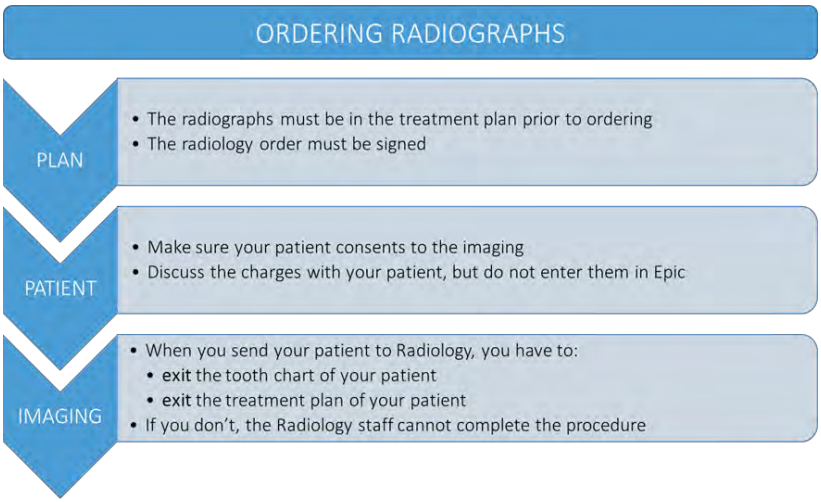
Individuals should be able to **OBTAIN/ ORDER *and* INTERPRET** the following:

- Radiographs (e.g. panoramic, periapical, bitewings, cephalometric, CBCT)
- Blood glucose
- Tooth Vitality
- Pathology studies (e.g. which tissue or cellular sample appropriate for mucosal and bone lesions)
- Salivary/oral fluids (e.g. culture and sensitivity, caries susceptibility tests)

Individuals are also expected to **INTERPRET** the following:

- Plasma/serum/blood studies (e.g. HgbA1c, CBC with differential, Liver Function Tests, Renal Function Tests, coagulation/bleeding profiles including INR)
- Microbiology reports (e.g. aerobic/anaerobic bacteria, fungal, and viral cultures and sensitivity results)
- Cardiac function tests including Ejection Fraction

Ordering Radiographs



Tip Sheet (Epic/UNC Health login required) | Video (Onyen login required)

Radiology Clinical Manual

The manual is on Sakai under Radiology.

Epic-MiPACS Instructions

Epic provides two ways to open your MIPACS images automatically. By using the local MIPACS desktop client, or through the new MIPACS web viewer.

- **MiPACS Desktop Client:** Click on the MiPACS desktop icon.
- **MiPACS Web Viewer:** Click on the MIPACS Web Viewer button.
    - The Web Viewer ONLY shows approved images. If there are any un-approved images, the web viewer does not have any indication that the unapproved images exist.
    - To have the images approved, you must secure the chart, and have a DA or clinical instructor log in and approve images.

EPA 2: Plan of Care

Develop a comprehensive diagnosis, treatment plan, and obtain consent from a patient for their plan of care.

2a) Form a comprehensive diagnosis and priority list

Graduates must be able to integrate patient data to formulate a risk assessment and develop a list of diagnoses and concerns that can be prioritized. Graduates must be able to identify necessary modifications and/or preparations required prior to care.

The list should include all general health, oral health, and behavioral/ psychosocial issues that may impact on treatment planning and delivery of oral health care for that patient. The list should facilitate referral to healthcare providers to address systemic health concerns, allied health providers to manage psychosocial issues, and dental specialists to address specific oral health problems and treatment needs that are beyond the scope or capability of the assigned learner.

View the Caries Diagnosis, Prevention and Management Manual on Sakai

2b) Develop comprehensive treatment plan

Graduates must have the ability to develop (construct and sequence) comprehensive treatment plans for patients with simple, moderate, and complex needs using principles and information taught in didactic courses.

These include, but are not limited to biomedical sciences, behavioral sciences; and specialty specific areas such as, oral medicine, oral pathology, operative dentistry, fixed prosthodontics, removable prosthodontics, endodontics, periodontics, oral and maxillofacial surgery, orthodontics, and pediatric dentistry.

The plan must be person-centered and informed by patient concerns. This is a dynamic process that first includes the ability to gather relevant information and answer key clinical questions often requiring identifying information resources, retrieving information, and evaluating evidence used to address these questions. Graduates should have basic skill in analyzing the quality of the evidence and assessing applicability to their patients and the clinical context.

The second step of the process is integrating this information with patient findings to develop and implement a treatment plan that addresses the diagnosed concerns. Graduates must be able to use clinical reasoning to create a treatment plan that is founded in evidence.

List of CTD codes and step codes within a dental treatment plan (Epic/UNC Health login required)

Click here for more information on treatment planning.

2c) Obtaining informed consent

Graduates must be able to engage patients in an open, honest, and comprehensive discussion of treatment options.

This conversation must be the basis for obtaining informed consent from patients, caregivers, and those with special circumstances for all interventions, tests, or procedures that graduates perform in clinical settings. This includes engaging in shared decision-making processes with the patient to optimize a treatment plan that is inclusive and person-centered.

Graduates should NOT conduct informed consent for procedures or tests for which they do not know the indications, contraindications, alternatives, risks, and benefits.

Click here for more information on signing treatment plans and consent in EPIC

EPA 3: Team Care

Conduct a transition of care by providing and receiving consults and referrals.

Requesting and receiving consult/referral

Graduates should be able to practice and function effectively in a care team environment. The practice of dentistry is evolving into a group practice model with care teams built around person-centered care. Conducting safe, timely- effective, efficient, person-centered, and equitable handoff communications with other healthcare providers to optimize patient care as essential qualities of the graduate.

Handover communication through referrals and transitions of care ensures that patients continue to receive high-quality and safe care from one healthcare team member or practitioner to another. Handovers are also foundational to the success of many other types of interprofessional communication, including discharge from one provider to another and from one practice setting to another.

Transitions can occur between other oral healthcare providers (e.g., dental specialties) and other healthcare professionals (e.g., medicine, pharmacy, nursing, nutrition, social work).

- Values/Ethics (IPEC Competency 1): Work with individuals of other professions to maintain a climate of mutual respect and shared values.
- Roles/Responsibilities (IPEC Competency 2): Use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of populations.
- Interprofessional Communication (IPEC Competency 3): Communicate with patients, families, communities, and professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.
- Teams and Teamwork (IPEC Competency 4): Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

All team care encounters should be **entered** under **Adjunctive Services** in the ACE form using the following codes:

- **D9310**: Consultation (by dentist or physician other than practitioner providing treatment)
  DDS student inputs this code. Include service provider as consulting specialist in Epic.
- **D9311**: Consultation with medical health care professional

Internal Referral/Consultation by Specialty

ENDODONTICS, PROSTHODONTICS, OPERATIVE DENTISTRY, AND PERIODONTICS

Consults Offered: Monday-Friday 8 a.m.-5 p.m.

Any issues in consult delays please reach out to the program's Care Coordinator.

All referrals sent to our division will be reviewed by the Care Coordinator of that specialty and assigned to the appropriate provider. Some clinics may have longer wait times than others – please allow 1-2 weeks before follow up.

DO NOT promise a patient that they will begin treatment at their next appointment. The consult is meant to determine if they patient has a need, but they will still undergo a full comprehensive exam if necessary upon assignment in our clinic.

A referral **should not be placed without a consult from that prospective specialty** on the predoctoral clinic floor in which they will discuss with the patient and DDS provider: estimated cost of treatment, time commitment, and deem appropriateness of the specialty scope of practice as outlined below.

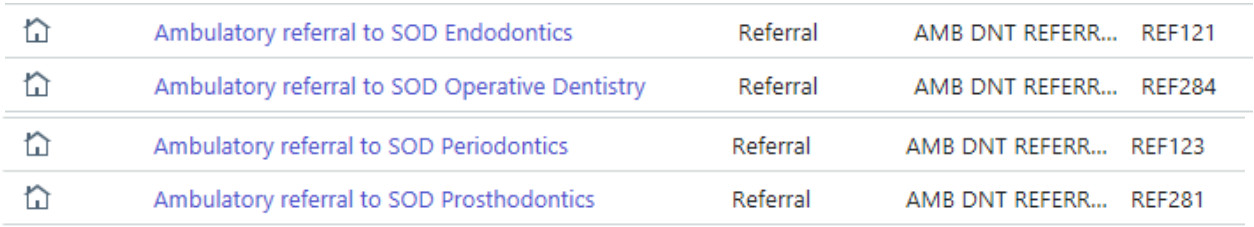
When calling for a consult, please use on-call phone number. If there is no response within 30 minutes- contact front desk.

Consulting provider should assist predoctoral students in wording of the referral and put in a documentation encounter of their own in Epic regarding the consult.

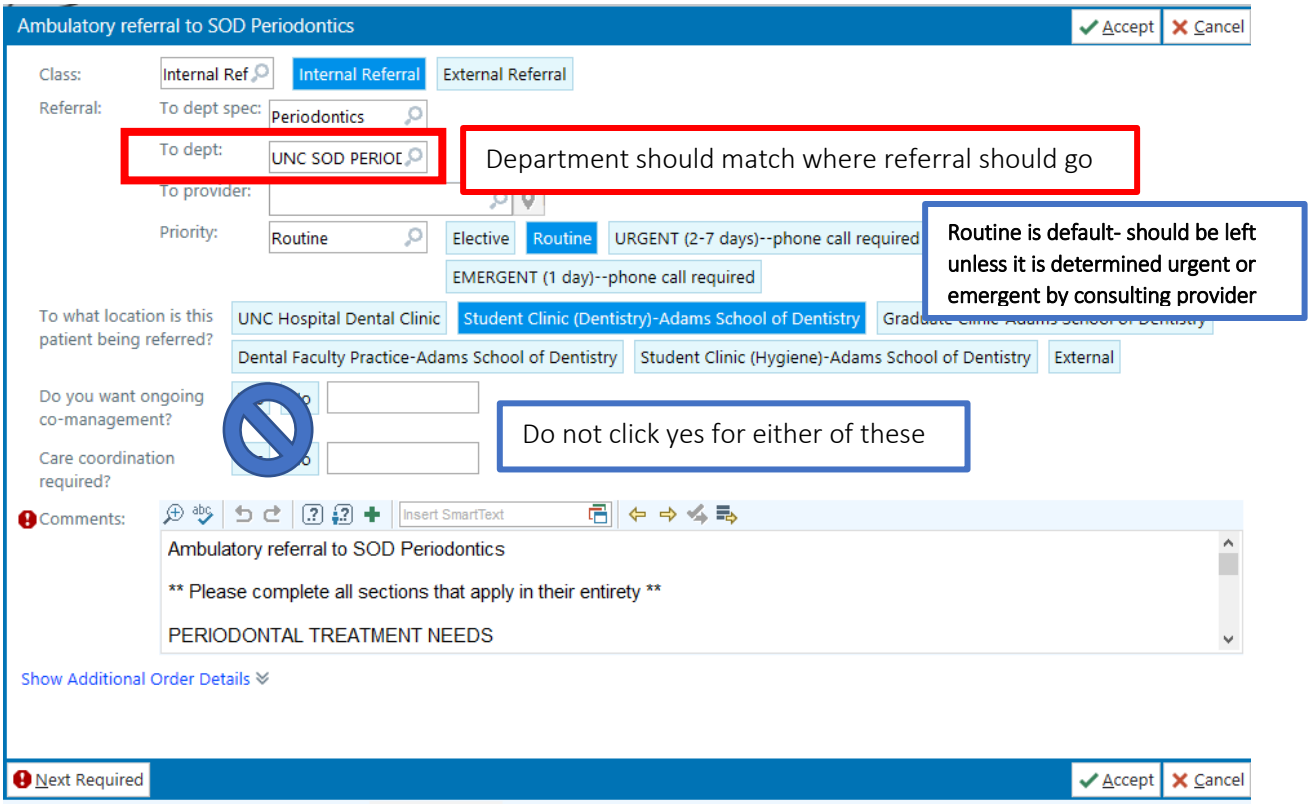
Referrals must be made in Epic:

1. Click add to order

2. Select SOD ENDODONTICS, SOD PERIODONTICS, SOD OPERATIVE, or SOD PROSTHODONTICS



3. Fill out the referral form



4. Accept and sign the order – the authorizing provider should be the person who completed the consult.
5. Finish note and sign encounter.

ENDODONTICS	Consultation/On-call pager: 919-216-4450	Front Desk: 919-537-3993

All endodontises need to have a consult on the clinic floor and be approved by endodontic faculty/residerior to scheduling or referral placement to determine appropriate level of provider.

The cases neeto be self -assessed (learner) using the AAE Difficulty Assessment Form guidelines, and if appropriate fopredoctoral skill level, the student needs to present the case to the endodontic mentor for approval.
Pulp and perial diagnosis and recent radiographs must be presented to the mentor. Once th e case is discussed anverbally approved, a referral in Epic needs to be created to SOD Endodontic clinic and submitted to thedodontic faculty/resident for official approval with the indication of the appropriate levl of provider. Once approved in Epic, patient can be scheduled in pre-doctoral or resident endodoc clinic.

All cases will beequired to have a restorative treatment planned prior to endodontic treatment.

Graduate Endotics Scope of Practice:

- Sedativ treatment of vital pulp
- Pulpotomy
- Pulpecty
- Root ca treatment
- Retreant of RCT

- Periapical microsurgery
- Extraction
- Hemi section or root amputation
- Restorations for endodontically treated teeth

OPERATIVE	Consultation/on-call phone number/front desk: 919-537-3832

The attending operative faculty on the clinic floor should be responsible for providing operative dentistry consulting as needed.

If an operative faculty is not available in the DDS clinic, the operative consult may be initiated by the student from the front desk in the reception areas on the third and fourth floors.

Graduate Operative Scope of Practice

- Direct restoration
- Tooth recontouring
- Vital tooth whitening
- Micro/macroabrasion
- Porcelain veneers
- Restoration of endodontically-treated teeth
- Ceramic and composite inlays/onlays and crowns)
- Crowns (≤3 unit FPD implants/natural teeth)

PERIODONTICS	Consultation/On call phone number: 919-216-4928	Front Desk: 919-537-3936

Consults shoulbe completed on the clinic floor prior to referral to graduate peri odontology and/or scheduled for mpletion in the predoctoral clinic. The periodontology attending faculty on the floor should first requet consults. If the scheduled attending is unavailable, the on -call pager number can be called to requet a consult.

Completed peontal charting and recent radiographs should be completed prior to requesting a consult. Once t case is discussed the periodontal attending will make a determination if the case is appropriate focompletion in the predoctoral clinic or if a referral is indicated to the graduate periodontologynic. If indicated for the predoctoral clinic, the case can be scheduled and must be discussed wi anticipated attending faculty at least 5 days in advance. If indicated for the graduate periodontologynic, a referral in Epic needs to be created to SOD Graduate Periodontology clinic and submitted to the riodontology faculty/resident for official approval.

Graduate Periodoogy Scope of Practice:

- Surgica therapy (flap/osseous, regenera tion)
- Laser Trapy
- Extractsite preservation
- Impla (single tooth up to full arch)
- Peri-impantitis
- Soft tisue grafting
- Guidebone regeneration (osteotome and lateral sinus lift)
- Crown lening
- Biopsy
- Canineposure
- Gingiveomy/ Frenectomy

- Sedation (oral, nitrous and IV) can be offered for other specialties if coordinated for resident to provide sedation while provider performs other procedural need, but must be coordinated ahead of time through CC.

All implants must have a restorative plan **BEFORE** the implant will be placed. See predoctoral implants section for more details.

PROSTHODONTICS	Consultation/On-call phone number: 919-347-0260	Front Desk: 919-537-3947

The purpose of therosthodontics consult is primarily to determine if:

- A tooth is rstorable
- A case shoud be referred to the graduate prosthodontic clinic

Pros consults do nprovide treatment of any kind.

If time remains durng your DXT, obtain the diagnostic casts so that you have them for mounting at the next visit. Clinical fculty at your initial DXT should be able to treatment plan most restorative procedures.

If a prosthodonticsnsult is indicated, the following are required:

- DXT mus completed
- Diagnostists must be mounted
- Relevant rdiographs must be updated

Assuming all of thee have been completed, please ask for a prosthodontic consult from the prosthodontic facy on the clinic floor. If they are unable to complete the consult in a timely manner, or if there is not a osthodontic faculty member on the clinic floor, then ask the front desk to call for a prosthodontic conult.

Patients may be refrred to the Graduate Prosthodontic Clin ic for various dental needs, and the following list is inteed to serve as a guide when deciding if a patient's needs are too complex and a referral may be nessary.

- Severe dentl anxiety
- Vertical Diion of Occlusion (VDO) issues (not complete dentur es)
- More thaeight units of fixed prosthodontic units
- Complex cal history
- Ceramic onays and/or veneers except in certain situations approved by preceptor and clinical faculty.
- Anterior ntal implants
- More thafive dental implants
- Occlusal pane discrepancy requiring extensive rehabilitation with fixed dental restorations.
- Severely rsorbed residual ridge
- Maxillary ilant retained overdenture
- Maxillary mandibular implant supported fixed dentures or bar supported overdentures

SAME DAY CROWN CLINIC

Prime scan technology from Dentsply Sirona allows the providers to be able to fabricate a final restoration chairside that can be delivered same day. On a single appointment learners will be able to:

- Prepare a tooth for a full or partial coverage restoration

- Scan- digital impression
- Design a restoration chairside
- Mill and characterize restoration
- Deliver- bond restoration same day.

The same day crown clinic is Tuesday and Thursday from 8 a.m. -5 p.m. in the Graduate Operative Clinic (days and time subject to changer per semester).

To schedule predoctoral patients:
Complete an operative dentistry consult to deem if a case is appropriate for a same day crown. This will allow for quicker scheduling.

The case will be reviewed with the preceptor and communication via email will be completed with Anthony Gregory to schedule the appointment.

The day of the appointment, the patient will check-in and pay for the treatment, in the Operative Dentistry suite on Brauer Hall, 4th floor.

The following is a description of the type of cases that are best suitable to be scheduled in this clinic:

- Single unit anterior and posterior restorations (Crowns, inlays, onlays)
- All restorations will be fabricated using lithium disilicate- Emax. This material requires 1.5 min of occlusal reduction.
- No survey crowns or multi-unit FPDs

Pre-requisite:

- There are no prerequisites, but if a student has less than three crown experiences, they should schedule the patient for the morning and afternoon session to allow for extra time.

PREDOCTORAL DENTAL IMPLANTS

The following describes the steps required to refer and assign cases for surgical implant placement. All implant cases require to be approved by the implant team director or a member of the implant assigning team.

The provider will contact Karen Grote directly by email to schedule a meeting with one of the members of the team. The requirements for implant assignment are included in the UNC Predoc Dental Implant Surgical assignment form.

The description of the workflow:

- Obtain diagnostic models and CBCT using radiographic guide, or a digital file of a diagnostic wax up that can be merged with the DICOM file from the CBCT study.
- Treatment plan approved and signed in Epic by group preceptor or covering faculty.
- Complete the UNC Predoc Dental Implant Surgical assignment form and schedule meeting with implant team.
- The implant team will refer the case to one of the graduate programs placing dental implants (oral maxillofacial surgery, periodontics, and prosthodontics) and the CC or implant chief (oral surgery) will assign the case to a resident.
- Resident will work with student and use the software of choice to plan the case digitally.
- Prior to scheduling surgery, the resident and patient will meet for a consult/exam.

- The resident will do the surgical placement. The learner is encouraged to attend and assist during the procedure. The Periodontics front desk will coordinate.
- Each learner is required to have certain number of implant surgical assisting experiences, which will primarily take place during periodontics/prosthodontics rotations, but may be required outside rotation if experience is not achieved during that time.

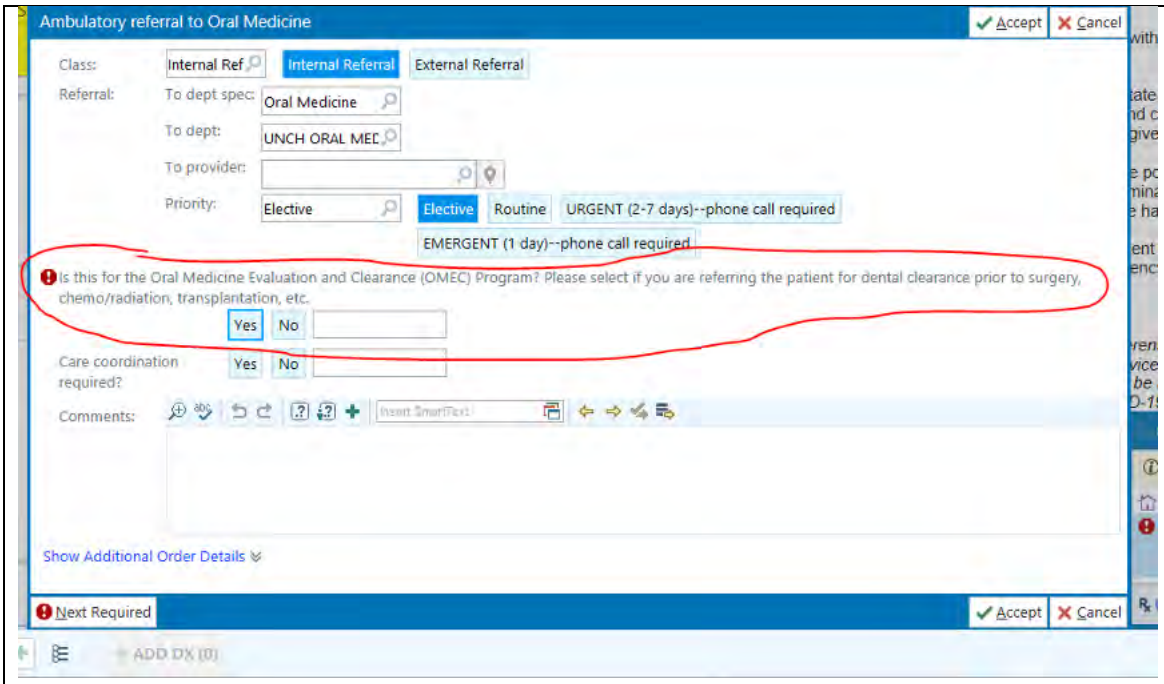
Full digital planning is no longer required as this step prior assignment. Digital planning will be done once you are working one on one with the assigned resident.

- Once implant has been determined is ready for restoration by the resident who placed the implant; impression parts will be ordered.
- Each clinic desktop has the icon "Implant Center Ordering." Click on the icon to submit your order. At the end of the form, a faculty signature and submission click is required.
- The order will be sent directly to the implant center for dispensing followed by a copy of the order in your email.
- The Implant Center Coordinator will coordinate with you to deliver the order.

GERIATRICS	Consultation/On-call pager: 919-537-3866
A referral to the geriatric clinic can be completed through the Epic referral pathway. The reason for referral may be an aged patient, patients with various cognitive/motor/psychological diagnoses and/or those with compromised dentitions, polypharmacy, complex histories, medically compromised etc. In addition, community dwelling older adults can be referred. Please communicate with the patient or their representative and have them call our service for a new patient examination.	

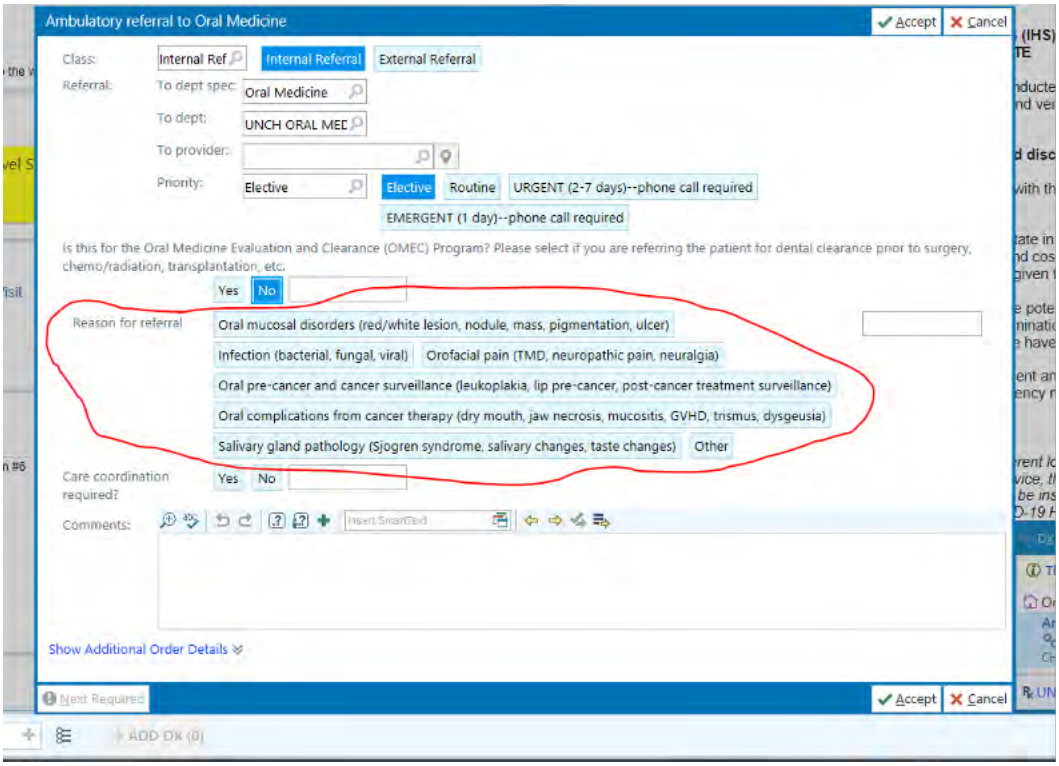
ORAL AND MAXILLOFACIAL SURGERY	For non-referral questions, contact the front desk at 919-537-3565 or the resident on call
Referrals to oral and maxillofacial surgery should be done via the Epic using the “UNC SOD Oral and Maxillofacial Surgery” work queue. The referral should be descriptive, concise, accurate, and explain why the treatment is beyond the scope of the dental student provider. The acuity of the patient should be realistic. Real emergencies such as difficulty swallowing, difficulty breathing, uncontrollable bleeding, infections into fascial spaces, etc. should be referred person-to-person with one of the oral and maxillofacial surgery faculty or residents.	

ORAL MEDICINE	Consultation/On-call pager: 984-215-6810	Fax: 984-974-0355
Refer a patient to al medicine clinic and enter order in Epic in the orders section lower left screen.  It will pull up asmbulatory Referral to Oral Medicine. Select “yes” or “no,” to answer whether it is a referral for a clerance prior to bone marrow transplant, head and neck radiation, or some other reason.		



If not for clearance, then a reason for referral section will appear.

Please select the reason that is most appropriate, or click other and add comments about why exactly the patient is being referred.



Click accept and sign the order after associating it with the proper diagnosis for the day.
Once the referral goes through, the oral medicine coordinator will reach out to the patient and schedule the appointment with an oral medicine provider.

The oral medicine clinic accepts all of the most common medical insurance plans, so patient visits are covered.

An oral medicine specialist routinely treats symptoms related to salivary gland dysfunction such as dry mouth; viral, bacterial, and fungal infections of the oral cavity; soft and hard tissue lesions of the oral cavity; oral mucosal diseases; oral changes related to systemic disease; headache disorders; maxillofacial sensory or movement disorders; burning mouth disorders; orofacial pain disorders including trigeminal and other neuralgias and temporomandibular disorders; and oral complications from cancer and/or radiation therapy.

Oral Medicine Specialists very often perform excisional and incisional tissue biopsies of the oral cavity and procedures such as trigger point injections and nerve blocks to treat TMD and facial pain syndromes, as well as oral smears to confirm a diagnosis of candidiasis; however, the majority of the oral medicine practice consists of non-surgical methods of treatment.

Other services performed by the Oral Medicine Specialist include fabricating occlusal splints to treat TMD, soft medicine trays for application of topical steroids for conditions such as lichen planus and mucous membrane pemphigoid, and fluoride trays.

Please see oral medicine website for additional details on conditions they manage.

ORAL AND MAXILLOFACIAL PATHOLOGY	Consultation/On-call pager: 919-537-3162

To request a consult on the clinic floor, please call the consultation/on-call pager at (919) 537-3162. If it is a radiograph, it needs to be a "radiology" consult which can be requested via Epic.

Oral pathology faculty asks learners to be ready to present the case and be present during the consultation.

If there is a need for a referral for biopsy, the learner is responsible for coordinating that with the faculty on the floor cosigning the referral (Epic).

OROFACIAL PAIN	Consultation/On call phone number: 919-445-4143	peifing_lim@unc.edu

Orofacial pain mana es chronic musculoskeletal pain, also known as Temporomandibular Disorders; neuropathic pain, such as trigeminal neuralgia; neurovascular pain, such as migraine headaches; and the managementf sleep apnea with oral appliances .

ORTHODONTICS	Consultation/On-call pager: 919-537-3942

To request an orthodontic consultation, call the consultation/on-call pager at (919) 537-3942. This will result in one of two possibilities:
1. The patient will be seen **on site** by the faculty on-call in the graduate orthodontic clinic or in the student clinics.
2. The patient may **be scheduled** by the referring student reporting to the orthodontic clinic front desk and providing demographic information so that a screening appointment will be scheduled exclusively for the patient. Screening appointments are **NOT scheduled in Epic**.

To sign-up for a screening appointment in the graduate orthodontic clinic:

- Contact **both** Mr. JC Underwood and Mr. John Whitley, and provide the patient name (and demographic information) as well as the student name. The orthodontics team will contact the patient for an initial appointment.
- If the patient is already in the building for another dental visit, you may initiate the screening request in-person, subject to staff availability.
- If the patient is scheduled in advance (through Mr. Underwood and Whitley) for a screening, they will also be informed of the option to have complete initial records for a fee that will be disclosed during their initial health.
- The patient will be designated to an appropriate clinic according to the case difficulty for the graduate or integrated clinic.

PEDIATRIC DENTISTRY	Consultation/On call phone number: 919-537-3956	After Hours/Weekends: 1-984-974-1000 and ask to speak to the pediatric dental resident on call

The purpose of the petric dentistry consult is primarily:

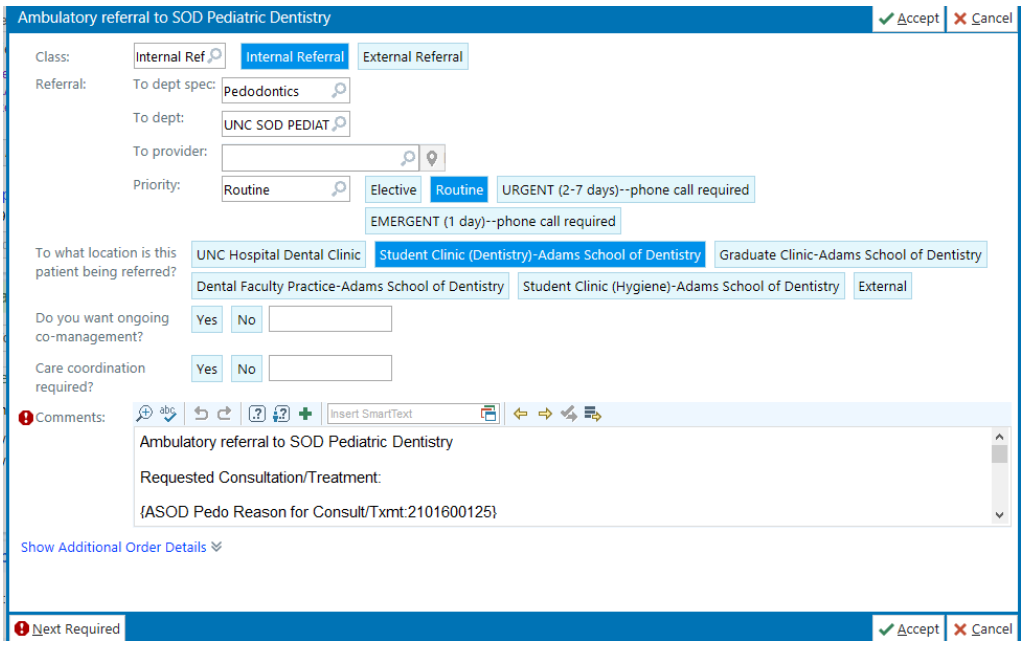
- To provide a coultation in management of child patient behaviors
- To determine a child patient should be referred to the graduate pediatric dentistry clinic, hospital denta clinic of the UNCH operating room.

The initial consultation sually **does not provide direct treatment at the time**, but will assist in determining the best stting for the child patient to access care. Referrals can be made in Epic:

1. Click "Add Order"

2. Select "SOD PediatriDentistry "

3. Fill out referral form



4. Accept and order

5. Finish note and sign encounter

RADIOLOGY	Consultation/On-call pager: 919-537-3162

To request a radiology consult:

- Open Epic
  - Find your recent encounter
  - Open the encounter
- Go to the Wrap Up tab
- Go to Follow Up (click on expand)
  - In "Send Chart Upon Closing Workspace," under "Recipient"
    - Type "P UNC SOD RAD" and hit tab or enter
    - Select "UNC SOD RADIOLOGY CHAPEL HILL RESIDENT"
  - In "Comments," type:
    - Image (pan, bw, pa)
    - Image date (acquisition)
    - Region of interest
    - Your question
  - Click "Send Now"

PHARMACY	Consultation/On call phone number: 919-843-5119	Not on-call. Preferred method of referral is via Epic, but learners may contact via phone for availability.

Warm Handff Guidance for Pharmacy Consult

If a patient identifies a concern while completing the medication history section in Epic or screens positive forollow -up consultation, prepare them for the pharmacy team by saying in a positive tone, *"Thank you or sharing that wi th me. We have a pharmacy team member who can help you with that. Would youe interested in them reaching out to you by phone so you can discuss this further?"*

If the patieeplies "yes," follow the steps below to send a secure in-basket staff message to the pharmacy am in the patient's Epic chart. This can be used if the patient is interested in phone follow-up wi a pharmacist , or if the student provider wants to send a referral at a later time for provider coultation.

The Clinicalharm acist/Pharmacy Team aims to provide consultation regarding comprehensive medication gement and assistance with referrals for primary care and medication access.

To request aatient or provider consult , send a secure in-basket staff message to the pharmacy team in the paties Epic chart.

- In "To" box, type "P ASOD Clinical Pharmacy." If you cannot find it, search for "ASOD Clil Pharmacy" under "pools."
  - Subject Line: Pharmacy Consult Request #1-6 (see below, whichever number corresponds to consult type)
  - Patient: Tag designated patient so that chart is linked to message

In the messge, provide a brief description of the reason for the referral and the information the patient spefically need s clarified.

The Pharmacy Team Follow-up consults appropriate for our service include, but are not limited to:

1. **Oral Health Impact Medication Review:** provides student provider and/or patient with in-depth review of patient's medication list for impact on oral health and future oral care
2. **Medication History Verification:** patient is on complex regimen and/or patient has unknown medication list and needs to be verified via retail pharmacy
3. **High Risk Medication on Medication List:** provides student provider with considerations for treatment if patient is on an anticoagulant (Warfarin, Apixaban, Rivaroxaban, Dabigatran), antiplatelet (Clopidogrel, Plavix), or insulin for diabetes
4. **Chronic Disease State Management Patient Education:** provides patient with review medical condition education for conditions such as diabetes, hypertension, smoking cessation, asthma, COPD, etc.
5. **General Medication Education:** patient has question regarding their medication regimen
6. **Drug Information Request:** provider/student provider has question regarding patient's medications

See Appendix 3 for a Pharmacy Consult Decision Table.

Most importantly, verify the patient's contact information and any special needs or accommodations (like interpretation services) prior to sending the referral.

What to Expect: Pharmacy Consult Response and Telephone Encounter

The Pharmacy Team will manage follow-up consults utilizing self-scheduling and will provide detailed documentation following a visit. All patient consults will be primarily via telephone. All student provider/faculty provider consults will be done primarily via in-basket messaging.

The pharmacy team will monitor their Epic in-basket and will attempt to contact patient within 48-72 business hours of referral. The pharmacy team will document any unsuccessful attempt to reach the patient via telephone. After 2 attempts, the pharmacy team will send a secure in-basket message to the consulting provider to inform of inability to reach the patient. The consulting provider will be responsible for action items related to outreach.

SOCIAL WORK	Consultation/On-call pager: 919-445-2748 (social worker is not on-call, but learners may contact them for availability)

To request a patient or provider consult with Social Work, send a secure message to the social work team in the patient's Epic chart.

- Click the "open additional activity" icon in the patient's chart
- At the end of the activity list, select "send message", then "staff"
- In the "To" box, type "ASOD Social Work". If you can't find it, hit the "search" button (looks like a magnifying glass) and search for "ASOD Social Work" under "pools". Once you have selected this, you should be able to type it in next time and it will populate for you.

In the message, please provide a brief description of the reason for referral.

EPA 4: Provision of Care

Provide dental care to prevent, establish, preserve, and restore oral health and function, including ancillary therapy, preventive care, non-surgical and surgical care, and emergent care.

(4a) Ancillary Therapy

Anesthesia: Graduates should be able to deliver pain free dental care by effectively using materials and skills in the proper administration of topical anesthetic and local anesthetic injections and nerve blocks.

Prescription Writing: Graduates should be able to generate prescriptions for medications and lab orders for therapies or interventions that are beneficial to patients (e.g. autoimmune, infection, pain, prophylactic care prior to dental procedures, and post-operative medications).

Graduates must also recognize their limitations and seek review for any orders and prescriptions they are expected to provide but for which they do not understand the rationale.

- Understand U.S. and North Carolina regulations governing prescription-writing practices and DEA regulations regarding controlled substances prescriptions.
- Compose orders and prescriptions efficiently and effectively.
- Compose orders and prescriptions in verbal, written, and electronic formats that are compliant with the scope of practice as well as state and federal laws and regulations.
- Recognize and avoid errors by using safety alerts (e.g., drug-drug interactions) and information resources to place the correct order and prescriptions that maximize therapeutic benefit and safety for patients.
- Consider and adjust for patient-specific factors such as age, weight, allergies, pharmacogenetics, and co-morbid conditions when creating orders and prescriptions.
- Discuss the planned orders and prescriptions (e.g., indications, risks, administration, adverse side effects) with others and use a nonjudgmental approach to elicit health beliefs that may influence the patient's comfort with orders and prescriptions.

(4b) Preventive Care

Graduates should be able to provide a continuum of care for patients and social systems that promotes overall health. This includes an emphasis on prevention to minimize the development of disease and maintenance care to minimize complications and reduce progression of disease. In addition, individuals should be able to conduct appropriate follow-up to build a long-term relationship with patients and their caregivers.

Oral Health Sustainability Program (OHSP)

The school has developed an Oral Health Sustainability Program (OHSP), which was previously known as the Preventive Recall Program.

The goal of the OHSP is to provide an opportunity for DDS learners to work with dental hygiene learners and simulate a clinical practice running multiple chairs. A few key points to keep in mind during this experience:

- Learners (working with their CC) should schedule appropriate procedures as they are introduced to managing "two columns" of patients. Guidance on this can be provided by your preceptor.
- Learners should come to clinic and cover HYG (if they are assigned) even if they have a cancelation or no-show.
- Learners should NOT schedule procedures in other clinic areas (i.e. endo, oral surgery) if they are assigned to OHSP to cover HYG.
- Learners are responsible to find a replacement in their office to cover HYG if they are going to be absent on their scheduled day/time and to let their Preceptor, CC, and PN know so Epic can be updated.
- HYG depends on DDS learners to be present to cover HYG exams, provide consults when needed, review radiographs, and administer anesthesia, etc. If a learner is assigned to HYG, begin present is imperative.

- Learners assigned to HYG should complete a separate ACE form when they perform a periodic exam, administer anesthesia, etc for a HYG learner.
- Note that despite the assignment, there will be times that there may be a patient cancellation or no show, patient is present and does not require anesthesia for SRP, or an exams, consistent with practice after graduation.
- We encourage learners to take responsibility for their education. There is a lot of value in learning to work with HYG. All learners must be practice-ready general dentists before they can be specialists and learning to cover HYG in addition to their own patients is part of this experience.
- Attending faculty will be responsible for covering OHSP (HYG Checks) when the learner is assigned to the two columns.

Please refer to the Clinic Education Manual (pg. 45-50) for more information.

The program focuses on preventive oral health services for our patients and interprofessional care that mimics the processes within clinical practice. The program's rotation provides learners the opportunity to experience collaboration of care between dental student and dental hygiene student to encourage professional growth and practice-readiness.

By working together, learners will gain a better understanding of team-based, person-centered care, and overall functionality of the periodic oral evaluation and co-discovery.

Once active treatment has been completed, all patients become part of the OHSP. Patients will remain assigned to the same provider(s) for maintenance until graduation unless the patient has indicated they do not want to participate.

Upon completion of the periodontal phase of therapy (perio re-evaluation), endodontic therapy, and/or the last appointment in the restorative phase, the student dentist, in consultation with the supervising faculty, will make recommendations for restorative and periodontal maintenance intervals. The maintenance type and date will be entered in wrap-up section of Epic.

Providers are expected to check the Maintenance Report on a periodic basis and contact patients with upcoming maintenance needs to schedule an appointment. The assigned Care Coordinator will discuss overdue patients without proper documentation of the reason for maintenance delay with the learner.

Click here for more information in the Dental Hygiene Clinic Manual

**If there are no further treatment needs for up to 3 years, then the patient will be encouraged to seek care in a private practice or community practice setting.*

Scheduling

Scheduling of the OHSP program will be included as a function of the intramural rotations in the curriculum.

Senior dental students will be assigned to OHSP rotation at various times throughout the year. Two D4 students will be assigned to OHSP rotation on half-day intervals throughout the year.

If an absence request is on file, it is the learner's responsibility to find a replacement, and let their office Preceptor and Care Coordinator know who will be covering their patient care. It will also be the learner's responsibility to coordinate making up missed OHSP sessions.

The D4 learner's clinic schedule should be planned out ahead of time individually and/or with the Care Coordinator to keep patient care limited to exams, preventive care, direct restorative procedures, delivery of appliances, and post-op visits.

This will provide opportunities for D4 learners to manage hygiene in their office, in addition to managing their own patients for the day, much like practice after graduation. Hygiene management includes (but is not limited to):

- Prescribing and reviewing radiographs alongside attending faculty
- Performing periodic oral evaluations
- Administering anesthesia for scaling and root planning
- Consulting with dental hygiene students regarding health history and medications
- Participating in the co-discovery process alongside dental hygiene students

The D4 learners assigned to OHSP rotation will also be responsible for facilitating the morning and afternoon pre-clinic huddles for their office. This will provide opportunities for learners to develop leadership skills that are vital to their success after graduation, whether as an associate dentist or practice owner.

At the conclusion of each clinic session, the D4 learner will also be responsible for completing a daily ACE assessment for their participation in the OHSP rotation.

It will be the responsibility of the D4 learners to meet with the dental hygiene learners prior to the clinic session to discuss the appointments for these patients. Some items that may be discussed in these meetings or "mini-huddles" include radiographs, anesthesia needs, pending treatment, and prescription products.

The dental hygiene patients should also be assigned in Epic to the learners participating in the OHSP rotation for the week to facilitate seamless integration of treatment plans, clinical notes, documentation, and scheduling treatment.

The Periodic Oral Evaluation (D0120)

The periodic oral evaluation code is a frequently used examination code in dental practice. This code applies and should only be used to report a diagnostic treatment plan and evaluation assessment performed on a patient to gather any new changes since the patient's last visit. This code is to be billed only for established patients.

The vertical integration model provides an opportunity for dental and dental hygiene student providers to learn and work collaboratively as a team to promote improved oral health care for our patients. This model mimics various practice environments learners may experience upon graduation. The periodic oral evaluation is an opportunity for student providers to continue developing their communication skills with patients, each other, and attending faculty. This patient visit also allows learners to build rapport with their patients and provide continuity of care to increase the likelihood of continued care for the patient.

What components of the appointment must already be completed prior to the periodic oral evaluation?

1. Updated health history
2. Identify chief complaint (if there is one)
    a. Retrieve appropriate instruments and supplies for student dentist to address chief complaint during periodic oral evaluation. Take appropriate PA radiographs as indicated.

Examples include un-cemented crowns, occlusal adjustments, partial denture adjustments, etc.

3. Complete head and neck evaluation, oral cancer screening, and other assessments
4. Complete periodontal charting at appropriate intervals
    a. Once every 12 months for D1110
    b. Every visit for D4910
5. Obtain radiographs at start of appointment. This allows the DDS student to come at any time to perform exam.
6. Obtain intraoral photographs with intraoral camera, when indicated
7. Tour of the mouth
    a. Intraoral photographs of pertinent findings (completed by DH student)
    b. Discussion of pertinent findings and patient education with intraoral photographs (completed by DH student)
        i. Important to note that DH student is not making a diagnosis, but is pointing out areas of concern that the DDS student will confirm and recommend any treatment if indicated

What are the components of the periodic oral evaluation?

Dental Hygiene to Dental:

1. Identify the chief concern (if there is one)
2. Review patient's health history
3. Review recent dental work completed, pending referrals, outstanding treatment needs, etc.
4. Provide overview of periodontal health
5. Discuss pertinent findings and patient education with intraoral photographs
6. Take notes while DDS student is performing examination

Dental:

1. Review radiographs
2. Complete thorough head and neck evaluation and oral cancer screening (completed by both DDS and DH student providers)
3. Answer any questions the patient may have regarding areas of concern, recommended treatment, outstanding treatment, etc.
4. Discuss pertinent findings and patient education with intraoral photographs
5. Obtain referrals or consults, when indicated
6. Re-appoint for D0150 PLAN if treatment needs are extensive and additional time is needed to discuss treatment options, obtain consults, and/or answer questions

Following the completion of the periodic oral evaluation, the DH student should continue the prophylaxis, periodontal maintenance, or nonsurgical periodontal therapy.

The DH student will provide oral hygiene education, place in Epic the patient's next recall visit and treatment with the DDS student and continue to discuss with patient next steps.

Hygiene Handoff (Dental Hygienist – Dentist)

1. Patient Intro
    a. Name
    b. Pertinent MHx

    c. Visit type – prophy, perio maintenance, SRP
    d. Chief complaint (if applicable)
2. Radiographs obtained today (if applicable)
    a. If no radiographs taken, mention why
3. Intraoral photos obtained today (if applicable)
4. Perio charting
    a. Probing depths
    b. BOP/Exudate
    c. Recession
    d. Furcation
    e. Mobility
    f. Plaque/Calculus
5. Home care
    a. Excellent, good, fair, poor
    b. Manual/electric toothbrush
    c. Flossing, threaders, Waterpik
6. Pertinent findings today w/ intraoral photos
    a. Caries, fractured teeth or fillings, pain
    b. Are sealants needed?
    c. Opportunity to discuss treatment needs and educate patient
    d. Discuss whitening, occlusal guards, orthodontics, etc. if no other treatment needs

Workflow of OHSP Rotation Schedule

1. Huddle: The D4 student assigned to OHSP rotation conducts the clinic huddle. Exam, radiographic, and anesthesia needs are reviewed at this time. Each D4 learner identifies which hygiene patients they will be responsible for during the clinic session.
2. At start of the appointment, have DDS attending faculty approve any radiographs to be taken for dental hygiene. Radiographic needs should be reviewed during the clinic huddle and should be consistent with ADA Guidelines. Use this as a learning opportunity for DDS faculty and DDS students to teach DH students what radiographs are prescribed and when. If radiographs are to be taken in the radiology clinic, DH students are to generate the order to be sign by DDS faculty and DDS faculty are to place radiographs needed in the treatment plan. It is important to make every attempt to take necessary radiographs on the clinic floor to mimic private practice as much as possible.
3. Have hygiene take necessary radiographs at the beginning of the appointment. Patient health history, periodontal assessment and charting, and intraoral photos should all be completed prior to the exam.
4. Once the above items are completed, the DDS attending faculty and DDS student provider complete the periodic exam when they are available to do so. Have the DH student alert the DDS attending faculty and DDS student they are ready for the exam whenever is convenient.
5. The DH student should take down notes to discuss for the hygiene handoff when the DDS faculty and DDS student come in the operatory to complete the exam. The hygiene faculty should approve the note, ensuring the DDS billing provider for the exam is correct, and that the note reflects the DDS student provider and DDS attending faculty who completed the exam.
6. Any treatment diagnosed during the periodic exam should be scheduled with a DDS student provider in the office unless the patient is already assigned to a student provider. The DH student should generate a referral to assign the patient to the office if the patient is not already assigned to the office. The DH student needs to send an in-basket message to the office's scheduler and DH PCC, so the patient can be assigned to a dental student provider in the office for treatment.

7. DH student should obtain necessary signatures for prescription products and items from dispensary requiring DDS approval.
8. Dental faculty should be using the time for the periodic exam to teach our DH student learners about the information we want ready and presented to us when we come into the operatory for the exam, and as a time to teach co-diagnosis/co-discovery.
9. It is imperative the DH student learner is inquisitive, asking the patient about any concerns, and being investigative, even if the patient is not 'due' for an exam. If the DH student identifies any areas of concern that need addressed, they should be asking for a D4 learner and their attending to take a look.
10. When possible, offer same-day treatment opportunities, such as sealants, bleach tray impressions, occlusal guard impressions, and direct restorations. When applicable, these procedures may be performed by the dental hygiene student provider or delegated to another appropriate provider who is available.

Epic Note Templates and Documentation

Periodic exam completed by [insert DDS student name] and supervised by [attending faculty name].
Chief Complaint:
Oral cancer screening:
Clinical findings include:
Radiographs ordered:
Radiographic findings include:
Recommended treatment:
Alternative treatment options and discussion:
Referrals:
Next appointment:
*For scaling and root planing, indicate who administered anesthesia, what type, and how much.

Learning Opportunities

- Dental hygienist → dentist handoff
- Intraoral photos and co-discovery
    - Always look for areas of concern and treatment opportunities
    - Obtain updated intraoral photos for areas of concern and pending treatment needs
- Team-based, person-centered care

Additional preventive areas include the following:

(4c) Preventive Care

Procedure Check: Prophylaxis (Adult and Child)
• Isolation and tissue management • Plaque and calculus removal • Stain removal • Local medication delivery (if applicable)
Adult Prophylaxis (D1110/ Child Prophylaxis (D1120): Prophylaxis is the removal of plaque, calculus, and stains from the tooth structures in the permanent and transitional dentition. It is performed in the absence of bone loss.

Procedure Check: Fluoride and Interim Caries Medication
• Isolation and tissue management
*Note this includes fluorides (D1206 [varnish]/1208); and interim caries medication application per tooth (D1354)

Procedure Check: Sealant
• Isolation and tissue management • Preparation • Restoration
Faculty Calibration: Pit and Fissure Sealants

Other Codes
• Nutritional counseling for control of disease (D1310) • Tobacco counseling for the control and prevention of oral disease (D1320) • Oral Hygiene (D1330)

Non-Surgical and Surgical Care

Graduates should be able to perform core non-surgical and surgical procedures of an oral healthcare provider for essential patient care. These procedures include those within the scope of a general dentistry practice, which attends to patients in all stages of life and diverse backgrounds, including those with special health care needs. The goal is for these procedures preserve and restore the oral complex as a necessary feature to support overall health.

This section outlines the EPA categories covered as non-surgical and surgical care. Please refer to specialty handbooks for details. *Appendix 8 will link you to detailed rubrics for various procedures.*

RESTORATIVE: DENTATE DIRECT

Procedure Check Steps: Restorations	
• Isolation and tissue management • Preparation Initial • Preparation Final	• Restoration • Local Medication (if applicable)
Video Content: Operative Procedures Operative Guidelines for Posterior Composite Restorations Posterior Composite Restorations Calibration Presentation Operative Clinical Manual Direct Dentate Preparation and Restoration Rubric	

RESTORATIVE: DENTATE INDIRECT

Procedure Check Steps: Fixed Prosthetics	
• Isolation and Tissue Management • Preparation • Impression • Restoration: Provisional	• Restoration: Definitive • Cementation • Local Medication (if applicable) • Communication/ management with lab
Fixed Prosthetics Clinical Manual Faculty Calibration: Fixed Prosthodontics Indirect Dentate Crown Preparation and Restoration Rubric Indirect Dentate Pediatric Dentistry Stainless Steel Crown	

Procedure Check: Fixed Bridge and Implant Restorations
• Impression • Restoration: Provisional • Restoration: Definitive • Cementation • Local Medication (if applicable) • Communication/ management with lab
Implant Assignment Protocol: • Obtain diagnostic models and CBCT using radiographic guide. • Treatment plan approved and signed in EPIC by group preceptor or covering faculty. • Fill out UNC Pre-Doc Dental Implant Surgical assignment form and schedule meeting with implant team. • The implant team will refer the case to one of the graduate programs and PCC's or implant chief (Oral surgery) will assign the case to a resident. • Resident will work with student and use the software of choice to digitally plan the case. • A consult will be scheduled with the resident and patient prior scheduling surgery. • Surgical placement will be done by resident and student should attend and assist during the procedure.
Note: Full digital planning is no longer required as this step prior assignment. Digital planning will be done once you are working one on one with the assigned resident.
Implant Restoration Workflow: • Each clinic desktop has the icon "Implant Center Ordering." • Click on the icon to submit the implant parts needed for treatment. • At the end of the form, it will require the faculty to sign the order.

- Once the order is signed, learner can proceed to click submit.
- The order will then be sent directly to the implant center for dispensing.
- Learner will receive a copy of the order in your email.
- The Implant Center Coordinator will coordinate with the learner to deliver the order.

Click here for more information

Indirect Partial Edentulous Implant Fixed Preparation and Restoration Rubric

ENDODONTICS

Procedure Check: Endodontics
• Isolation and tissue management • Access Preparation • Work Length Determination • Root Canal Instrumentation • Root Canal Obturation • Restoration • Post Treatment Assessment
Endodontics Clinical Manual Endodontics Case Difficulty Assessment Form VIDEO: Pulp and Periapical Test Instruction Faculty Calibration: Endodontic Diagnosis Endodontics Rubric

PERIODONTICS

Procedure Check: Perio Scaling and Root Planning
• Isolation and Tissue Management • Calculus identification • Calculus removal • Stain removal • Local medication delivery (if applicable)
Scaling and Root Planning (D4341, D4342): Involves instrumentation of the crown and root surfaces of the teeth to remove plaque and calculus from these surfaces. It is indicated for patients with periodontal disease and is therapeutic, not prophylactic, in nature. Root planning is the definitive procedure designed for the removal of cementum and dentin that is rough, and/or permeated by calculus or contaminated with toxins or microorganisms. Scaling in presence of generalized moderate or severe gingival inflammation – full mouth, after oral evaluation (D4346): The removal of plaque, calculus and stains from supra- and sub-gingival tooth

surfaces when there is generalized moderate or severe gingival inflammation in the absence of periodontitis. It is indicated for patients who have swollen, inflamed gingiva, generalized suprabony pockets, and moderate to severe bleeding on probing. Should not be reported in conjunction with prophylaxis, scaling and root planning, or debridement procedures.

Full mouth debridement to enable a comprehensive evaluation and diagnosis on a subsequent visit (D4355): Full mouth debridement involves the preliminary removal of plaque and calculus that interferes with the ability of the dentist to perform a comprehensive oral evaluation. *Not to be completed on the same day as D0150, D0160 or D0170.*

Chairside Guide to Periodontitis Staging and Grading (AAP)

PERIODONTITIS: GRADING

Grading aims to indicate the rate of periodontitis progression, responsiveness to standard therapy, and potential impact on systemic health.

Clinicians should initially assume grade B disease and seek specific evidence to shift to grade A or C.
See **perio.org/2017wwdc** for additional information.

	Progression		Grade A: Slow rate	Grade B: Moderate rate	Grade C: Rapid rate
Primary criteria *Whenever available, direct evidence should be used.*	Direct evidence of progression	Radiographic bone loss or CAL	No loss over 5 years	<2 mm over 5 years	≥2 mm over 5 years
	Indirect evidence of progression	% bone loss / age	<0.25	0.25 to 1.0	>1.0
		Case phenotype	Heavy biofilm deposits with low levels of destruction	Destruction commensurate with biofilm deposits	Destruction exceeds expectations given biofilm deposits; specific clinical patterns suggestive of periods of rapid progression and/or early onset disease
Grade modifiers	Risk factors	Smoking	Non-smoker	<10 cigarettes/day	≥10 cigarettes/day
		Diabetes	Normoglycemic/no diagnosis of diabetes	HbA1c <7.0% in patients with diabetes	HbA1c ≥7.0% in patients with diabetes

The 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions was co-presented by the American Academy of Periodontology (AAP) and the European Federation of Periodontology (EFP).

Tables from Tonetti, Greenwell, Kornman. *J Periodontol* 2018;89 (Suppl 1): S159-S172.

CDT Code Flowchart

CDT and ICD Codes

Faculty Calibration: Peri-Implant Diseases

Periodontics Clinical Manual

Non-Surgical Periodontics Rubric

Periodontics During Diagnosis and Treatment Planning

Procedure Check: Perio Maintenance (D4910)
• Isolation and tissue management • Plaque and calculus removal • Stain removal

- Local medication delivery (if applicable)

Periodontal Maintenance (D4910): Periodontal Maintenance is started after completion of active periodontal therapy and continues at varying intervals for the life of the dentition or its implant replacements. The goal is to minimize the recurrence and progression of periodontal disease. Periodontal maintenance is not synonymous with a dental prophylaxis.

Protocol for Periodontal Charting

Every new patient must receive a full periodontal chart as part of the comprehensive oral evaluation if the patient is being seen in the third and fourth floor student clinics.

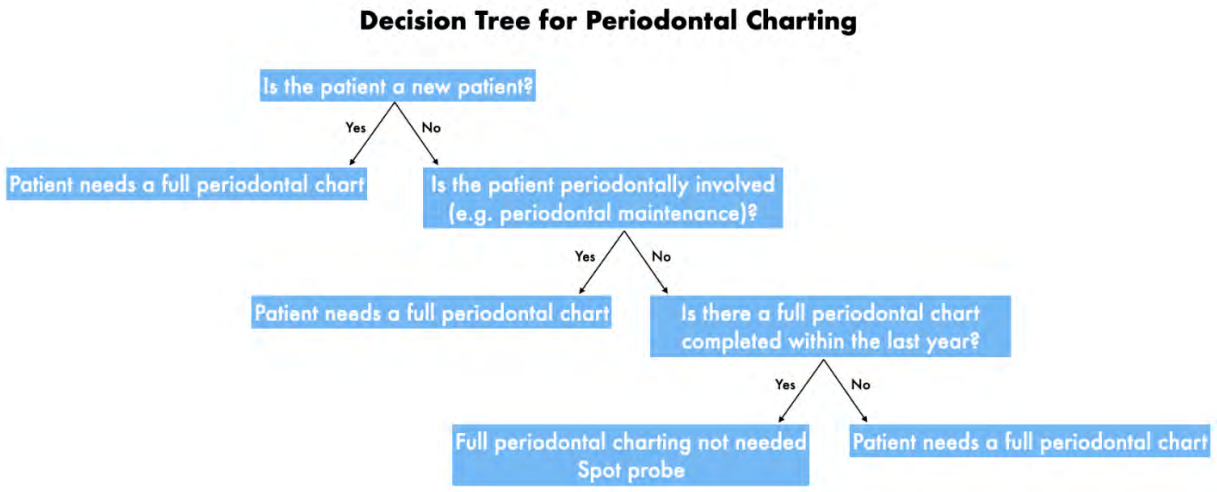
A patient who presents with a healthy periodontium or gingivitis, does not have periodontitis:

- Receives full charting once a year
- Spot probing should occur at each visit.
    - *If concerns or changes noted, it should be brought to the attention of attending faculty to review need for perio consult, change in treatment, if existing dental work is contributing to issue, etc.

Patient with periodontitis (e.g. D4910):

- Must receive full charting at each visit
    - Charting completed at each periodontal maintenance visit provides a way to longitudinally collect data to track the progression of disease deterioration, improvement, or stabilization. This then helps focus the efforts of the clinician, educates the patients, and make decisions on referrals and appropriate care for the patient.

Full charting includes: periodontal probing, recession measurements, mobility, furcation involvement



Procedure Check: Post Treatment Assessment
• Evaluation of therapy • Prognosis and risk assessment

• Plan of advanced care (if applicable) • Oral health sustainability interval
D0170 (Re-eval for limited or problem focused); D0180 (perio re-evaluation)
Post Treatment Assessment Clinical Manual

PROSTHODONTICS: PARTIAL EDENTULOUS

Procedure Check: Removable Pros
• Impressions • Maxillo-mandibular relations (MMR) • Try In • Insertion • Follow Up • Communication/ management with lab
Guidelines for RPD Design
RPD Helpful Hints PDF
Removable Prosthodontics Clinical Manual Edentulous Removable Impression Rubric Edentulous Removable Maxillo Mandibular Record Rubric Partial Edentulous Removable Prosthesis Insertion Rubric Partial Edentulous Fixed Prosthodontics Bridge Partial Edentulous Implant Fixed

PROSTHODONTICS: EDENTULOUS

Procedure Check: Removable Pros
• Impressions • Maxillo-mandibular relations (MMR) • Try In • Insertion • Follow Up • Communication/ management with lab
Complete Denture Step-by-Step Checklists
Complete Denture Calibration Review

Click here for Digital Dentures in DDS Clinics
Click here for Removable Clinical Manual Edentulous Removable Impression Rubric Edentulous Removable Maxillo Mandibular Record Rubric Partial Edentulous Removable Prosthesis Insertion Rubric Partial Edentulous Fixed Prosthodontics Bridge Partial Edentulous Implant Fixed

ORAL MAXILLOFACIAL SURGERY

Procedure Checklist: OMFS
• Sterile Field • Patient Position • Proper Instrument Use and Handling • Bleeding Control • Suturing • Post Op Instructions
Oral and Maxillofacial Surgery Rubric Click here for Oral Maxillofacial Surgery Clinic Manual

Emergent Care

Graduates should be able to promptly recognize a patient who requires emergent care, perform evaluation, initiate management, and seek help, if necessary. Early recognition and intervention provide the greatest chance for optimal outcomes in patient care. This often calls for simultaneously recognizing need and initiating a call for assistance. Graduates need to be able to manage medical emergencies within the realm of general dental practice.

Patient Services and Operations

Patient Care Operations

GAP Clinic Hours

Weeks 1-5

Office BC	Monday	Tuesday	Wednesday	Thursday	Friday
Huddle	9 a.m.	8 a.m.	Seminars	8 a.m.	9 a.m.
PatienCare Starts	9:15 a.m.	8:15		8:15	9:15
Huddle	1:30 p.m.	1:30 p.m.	1:30 p.m.	1:30 p.m.	1:30 p.m.
PatienCare Starts	1:45 p.m.	1:45 p.m.	1:45 p.m.	1:45 p.m.	1:45 p.m.

Note, lunch is from 12-12:45 p.m. and meetings from 12:45-1:30 p.m. Clinics will end at 11:30 a.m. and 4:30 p.m. to allow time for chart writing and assessment completion.

Office DEF	Monday	Tuesday	Wednesday	Thursday	Friday
Huddle	9 a.m.	8 a.m.	9 a.m.	8 a.m.	Seminars
Patient Care Starts	9:15 a.m.	8:15 a.m.	9:15 a.m.	8:15 a.m.	
Huddle	1:30 p.m.	1:30 p.m.	1:30 p.m.	1:30 p.m.	1:30 p.m.
Patient Care Starts	1:45 p.m.	1:45 p.m.	1:45 p.m.	1:45 p.m.	1:45 p.m.

Week 6 is variable depending on the block. When not in seminars, all morning clinic huddles will begin at 8 a.m. and afternoon clinics at 1:30 p.m. The exception will be when completing your Practice Reviews. Huddles will begin at 2:15.

GAP Clinic Overview

The learners of GAP Clinical Team provide their patients with person-centered care while being mentored to ensure the procedures are accomplished correctly and efficiently.

Patients in the learner clinics are a critical part of the school's education process, but they are also patients who deserve–and receive–the highest level of care.

Registration:

Individuals interested in becoming patients of Carolina Dentistry go to www.carolinadentistry.org to complete a new patient registration.

Friends and Family Admission Protocol

The learner will contact the Patient Admissions Coordinator or the Administrative Support Supervisor to schedule for a D0150 in any available (green) slot.

The appointment notes will indicate "family/friends" and the patient will be expected to pay a fee of $110.

Upon arrival, the patient must check in with the front desk on the ground floor and proceed to radiology for x-rays before heading to the third or fourth floor for their appointment.

Patient Assignment and Transfer Protocol

Care Coordinators (CC) make all **patient assignments**. Patients are assigned to learners based upon the dental needs of the patient and educational experiences needed of the learner.

Learners may request additional patients or types of cases from the Care Coordinators. Patients that will not be assigned to an undergraduate learner will be notified and referred to a specialty clinic or to private practice.

All **patient transfers** from a learner to another learner or co-assignment to two dental learners will be with the approval of the Care Coordinator and preceptor.

Assigned patients are generally not transferred between learners except when the learner providing care graduates.

However, learners are allowed to share or transfer patients to other providers to complete their clinical experiences. This is usually done on a case-by-case basis, primarily in the spring semester, and only on approval of the Preceptor and CC.

Patient Communication

Patient Introduction: When introducing the attending faculty member and the patient during each clinical experience, the student's verbal tone, language, non-verbal interactions and actions reflect respect for the knowledge and experience *all* team-members (provider and patient) bring to the encounter.

Practicing cultural humility, the student introduces the faculty and patient using each one's preferred name and, as necessary, preferred pronoun. Tone, demeanor and manner are consistent during the encounter, reflecting equal respect for all parties.

Patient Discussions: Discussion between student provider and patient is a back-and-forth exchange. In discussion of treatment options, reasonable expected outcomes, risks, benefits and costs, the student actively and authentically engages the patient in shared decision making.

As such, the student's communication with the patient reflects respect for the patient's intelligence and lived experience. Interactions such as these require the student to establish a partnership with the patient that is physically and psychologically safe for all parties, using person-centered and respectful verbal and non-verbal language and syntax in all exchanges.

In addition, it is the responsibility of the student to support the patient's language and literacy needs to enhance communication and understanding. Patient providers are expected to maintain confidentiality of patient information.

Appointment Reminders

Patients receive appointment reminders via Epic three (3) days in advance, using the contact phone number in the patient's registration record. Patients with a cell phone number receive a text message notification, and patients with a landline number receive a voice message.

Appointment reminders are also sent via MyChart fourteen (14) days before the appointment.

Late Arrival/No Show Patients

A learner should call a patient who has not arrived within 15 minutes of the scheduled start time of the appointment and determine the status of the appointment. The Patient Navigator will contact the GAP Clinic when patients arrive more than 30 minutes late.

In such cases, depending on the circumstances and on factors in the clinic, the learner might not be able to see the patient.

Late arrivals can lead to a patient being dismissed.

Learners who have no show/cancellation patients should report to their preceptor who will assign further duties to the learner.

Professional Patient Interaction

The GAP Clinic is a dental treatment area. The dental treatment operatories and the immediate surrounding clinical areas are restricted to clinical team members and patient being treated ONLY. No other person should be in the dental treatment area. If for some reason an exception is required (e.g. a legal guardian is required), permission must be granted by the Preceptor or another supervisor.

Adult patients who are accompanied by children under 14 years of age must bring a responsible adult to care for the children in the waiting area during the dental visit. Children are not permitted to accompany the patient to the dental operatory. Legally children cannot perform the role of the primary interpreter between the patient and the provider.

All members of the GAP clinical team must wear name badges in clinic.

Daily Dental Treatment Assignment

The daily assignment is created a week in advance by the Clinic Manager. Changes are made throughout the week to reflect cancellations or rescheduling. Operatory assignments are accessible here.

Preceptors can work directly with the Clinical Manager if there are specific changes they would like to see within their Office.

Personal Items in Dental Treatment Areas

Dental treatment areas **must not** contain personal items. Personal items can interfere with the flow of patient, provider and attending faculty access and egress, thus creating a safety concern for tripping or falls as well as potential contamination of personal effects.

Personal items also collect dust and spatter, creating surfaces that cannot be appropriately disinfected. This includes backpacks, purses, pictures (except for the display of current dental or dental hygiene license), or other items that are not related to treatment.

Except for language interpretation, meditation apps or music to calm a patient, or medical emergencies, learners and educators **must not** answer cell phones.

Personal calls or texts are prohibited. Using a cell phone for personal business can lead to potential contamination.

Cell phones **must** be out of the spatter zone (three feet) or in a drawer. Before touching a phone, you **must** remove gloves, and wash your hands or use hand sanitizer.

Periodic disinfection of cells phones is recommended.

Interpretation Services

A tablet is assigned to each Office for virtual language interpretation. The tablet must be requested at the dispensary.

The protocol to contact Spanish Interpreter, Natalie Cruz, is on the back of the tablet. For other languages, use the OPI system.

The use of personal phones for interpretation is not appropriate.

American Sign Language (ASL) and Interpretation Protocol

Free aids and services are provided to patients needing American Sign Language (ASL) interpretation.

For patients who are hearing-impaired, a certified American Sign Language (ASL) interpreter can be requested in advance by emailing the school's Spanish Interpreter at ncruz@email.unc.edu with at least 48 hours' notice. When possible, requests should be made as soon as the appointment is scheduled.

Protocol:

1. ASL patient appointment scheduled with the school.
2. Appointment details sent to the school's interpreter, Natalie Cruz ().
3. Check out the laptop located in room 1007A Tarrson Hall.
4. Take brief overview lesson on how to request the VRI on the application.
5. Use VRI at the throughout the appointment as needed.
6. Log-in information:
    a. Username: LibertyLanguage
    b. Password: ccgvri
7. Click on "Settings" in the lower left of the screen.
8. Select audio and then run the tests for speakers and ringing. Ensure "Logitech USB Headset" is selected where indicated.
9. Call by hovering over "Dispatch" and clicking "Call."
10. Note the use of VRI in the patient's record, including the name and ID if available.

GAP Clinic Structure

General Dentistry Clinic: Learner-led clinic organized by practices under the supervision of the office and deputy preceptors assigned to the office. This includes the Oral Health Sustainability Program (OHSP) and the Mountain Area Health Education Center (MAHEC); the latter considered a core school site.

Intramural Rotations: Internal clinics under the supervision of specialty faculty and staff.

Extramural Rotations: Please refer to the Dentistry in Service to Communities (DISC) section on the clinical Sakai site. Additional extramural rotations can be requested as part of Individualization and in coordination with Extramural Site Coordinator.

Comprehensive Care Service

Patients accepted for general admission to the predoctoral clinics at Carolina Dentistry will be given the opportunity to receive a full range of dental services (i.e., comprehensive dental care).

All comprehensive care patients will be assigned to a dental learner and to one of six offices in the DDS predoctoral clinical program.

If any portion of the patient's plan of care is deemed inappropriate for the assigned learner to perform at that stage of their education, the patient may be referred to another learner within the same office, or a resident, for that portion of the treatment.

Patients who cannot be accepted for general care in the pre-doctoral clinics are referred to an appropriate intramural residency or faculty program, or to an extramural private practitioner.

Each of these individuals is informed of the referral and is given appropriate information relative to the service or practitioner to whom the referral was made.

Limited Care Service

Limited care patients come from several sources. Those who:

- Present for urgent care
- Have been referred to the school by an external dentist or health care provider for attention to a specific dental problem only
- Are referred from Oral Health Sustainability Program (OHSP)

Although a treatment plan must be formulated for these patients, it will be limited to a specific problem, e.g., extraction for relief of pain or root canal therapy only per prescription of referring dentist.

Patients who are referred for a specific dental problem, a notation must be made in the record to document the referral, treatment to be performed, and plans for follow-up.

If there are further needs that exceed the limited care that they were originally referred for, Clinical Operations should be notified by submitting a referral to the Learner Clinics and communicating via in-basket with the Care Coordinator. ***Referral codes should be entered as part of your ACE form.***

If the patient originated from OHSP Program:

Any treatment diagnosed during the periodic exam should be scheduled with a DDS learner provider in the office unless the patient is already assigned to a learner provider. The DH learner should generate a referral to assign the patient to the office if the patient is not already assigned to the office. The DH learner needs to send an in-basket message to the office's scheduler and DH CC, so the patient can be assigned to a dental learner provider in the office for treatment.

Patients remain within their respective offices throughout their treatment for continuity of care.

Scope of Service

Learners complete a broad variety of services of varying complexities within the scope of the general dentist. All experiences are under direct supervision of the faculty of the ASOD. Learners in the general dentistry office are expected to deliver care in the following areas that fall within the Entrustable Professional Activities (EPAs).

1. Diagnosis and treatment planning including referral and follow-up of patients.
2. Preventive procedures
3. Periodontal procedures: conservative, surgical treatment of disease and procedures to facilitate completion of dental procedures.
4. All direct operative procedures
5. Endodontic procedures to include vital pulp therapy, indirect pulp caps.
6. All indirect restorative dental procedures to include veneers, crowns, fixed partial dentures and implant restorations where the vertical dimension of the patient's dentition is not altered.
7. All removable prosthodontic procedures
8. All emergency/urgent care dental procedures that can be safely diagnosed and treated within the scope of the general dentist.
9. Soft tissue biopsies where the procedure does not potentially impair the functional or esthetic structure of the oral cavity.

Start of Patient Service

Expectations from Learners

- **Be consistent:** start and finish a case with the same faculty
- **Be on time**
- **Be compliant** with infection control and dress code policy.
- **Be prepared:** Be knowledgeable about procedures performed, review patient chart before arrival, address questions about case in huddle
- **Engage in person-centered care:** Consider patient's dental needs and treatment options in the wider context of patient's life and preferences and embrace cultural humility.
- **Complete on time.**

Pre-Clinic Huddle

To organize and streamline person-centered clinical care, a Pre-Clinic Huddle will take place at the start of each clinic session. Each huddle will consist of two teams (approx. 10 providers including Dental Hygiene) and last ~ 15 -20 minutes.

Preceptors may designate a huddle leader from DDS4 learner and have them rotate weekly.

The learning objectives are.

1. Provide an overview of the patient with attention to the multiple factors (e.g..physical, social, psychological) that impact diagnosis, care plan and outcome; person centered care for the clinical session.
2. Ascertain learner preparedness to provide patient person-centered, culturally responsive care.
3. Align and motivate the team to provide optimum person-centered care.

Current Definitions and ASA-Approved Examples

ASA PS Classification	Definition	Adult Examples, including by not limited to	Pediatric Examples, including but not limited to	Obstetric Examples, including but not limited to
ASA I	A normal healthy patient	Healthy, non-smoking, no or minimal alcohol use	Healthy (no acute or chronic disease), normal BMI percentile for age	
ASA II	A patient with mild systemic disease	Mild diseases only without substantive functional limitations. Current smoker, social alcohol drinker, pregnancy, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease	Asymptomatic congenital cardiac disease, well controlled dysrhythmias, asthma without exacerbation, well controlled epilepsy, non-insulin dependent diabetes mellitus, abnormal BMI percentile for age, mild/moderate OSA, oncologic state in remission, autism with mild limitations	Normal pregnancy*, well controlled gestational HTN, controlled preeclampsia without severe features, diet-controlled gestational DM.
ASA III	A patient with severe systemic disease	Substantive functional limitations; One or more moderate to severe diseases. Poorly controlled DM or HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, implanted pacemaker, moderate reduction of ejection fraction, ESRD undergoing regularly scheduled dialysis, history (>3 months) of MI, CVA, TIA, or CAD/stents.	Uncorrected stable congenital cardiac abnormality, asthma with exacerbation, poorly controlled epilepsy, insulin dependent diabetes mellitus, morbid obesity, malnutrition, severe OSA, oncologic state, renal failure, muscular dystrophy, cystic fibrosis, history of organ transplantation, brain/spinal cord malformation, symptomatic hydrocephalus, premature infant PCA <60 weeks, autism with severe limitations, metabolic disease, difficult airway, long term parenteral nutrition. Full term infants <6 weeks of age.	Preeclampsia with severe features, gestational DM with complications or high insulin requirements, a thrombophilic disease requiring anticoagulation.
ASA IV	A patient with severe systemic disease that is a constant threat to life	Recent (<3 months) MI, CVA, TIA or CAD/stents, ongoing cardiac ischemia or severe valve dysfunction, severe reduction of ejection fraction, shock, sepsis, DIC, ARD or ESRD not undergoing regularly scheduled dialysis	Symptomatic congenital cardiac abnormality, congestive heart failure, active sequelae of prematurity, acute hypoxic-ischemic encephalopathy, shock, sepsis, disseminated intravascular coagulation, automatic implantable cardioverter-defibrillator, ventilator dependence, endocrinopathy, severe trauma, severe respiratory distress, advanced oncologic state.	Preeclampsia with severe features complicated by HELLP or other adverse event, peripartum cardiomyopathy with EF <40, uncorrected/decompensated heart disease, acquired or congenital.

ASA V	A moribund patient who is not expected to survive without the operation	Ruptured abdominal/thoracic aneurysm, massive trauma, intracranial bleed with mass effect, ischemic bowel in the face of significant cardiac pathology or multiple organ/system dysfunction	Massive trauma, intracranial hemorrhage with mass effect, patient requiring ECMO, respiratory failure or arrest, malignant hypertension, decompensated congestive heart failure, hepatic encephalopathy, ischemic bowel or multiple organ/system dysfunction.	Uterine rupture.
ASA VI	A declared brain-dead patient whose organs are being removed for donor purposes			

* Although pregnancy is not a disease, the parturient's physiologic state is significantly altered from when the woman is not pregnant, hence the assignment of ASA 2 for a woman with uncomplicated pregnancy.

**The addition of "E" denotes Emergency surgery: (An emergency is defined as existing when delay in treatment of the patient would lead to a significant increase in the threat to life or body part).

INITIATE THE ASSESSMENT OF CLINICAL ENCOUNTER (ACE) FORM UPON PATIENT ARRIVAL AND BEFORE PROCEDURE BEGINS.

As you begin your clinic, keep in mind that procedures are to be completed by 11:30 a.m. for morning clinic, and by 4:30 p.m. for afternoon clinic to give the remaining 30 minutes for checking the patient out, entering notes in Epic, and completing the indicated assessment (ACE).

During Patient Service

Before Patient Leaves

The patient must not be dismissed until a final faculty check.

Learner provider must make proper entries in the Progress and Treatment Notes before attending faculty will sign Epic progress notes.

Information should include type and amount of anesthetic used, including vasoconstrictors, bases and/or liners used, and brand of restorative material, information relating to patient relations and reactions, follow-up instructions for the patient, plan for the next visit and any other information pertinent to treatment of the patient.

Whenever possible, students must use Epic progress note templates note templates.

Providers must close the encounter promptly and associate a clinical diagnosis for the charges to completely drop in the patient's account.

Learner-providers must enter faculty name covering the clinic session as billing provider.

For fee discrepancies, learner–provider should communicate with Patient Business Services Manager by in basket message.

Fee Adjustment Requests

Enter the ADJ modifier in charge capture next to the charge (s) you are requesting for the fee to be adjusted. Enter a justification in comment box every time the modifier is used.

The Fee Adjustment Review Board will review requests for final decisions, and the Care Coordinator will communicate a final decision to the requester.

Dental Codes

Multi-steps procedures require step-codes to be entered in Epic.

The D code is only entered when the procedure is complete. After this is done, the charge will drop in the patient accounts and will be processed by Patient Business Services (PBS).

List of approved step codes for the Student Clinics is located here.

Billing Modifiers

The preceptor or deputy preceptor is the only authorized personnel to enter the 20 percent discount (D020) and Do Not Bill (DNB) modifiers.

For dental implant codes and implant package for removable overdenture codes an (IMP) billing modifier should be entered when the procedure is completed for the fee adjustment to be approved by Patient Business Services (PBS).

Students are not authorized to enter this specific modifier without approval.

When entering the modifier, learner-provider must add a justification. PBS will not process modifiers without a justification.

Learners should add the faculty name in the justification in the event that PBS has any questions.

The workflow for Initial Placement/Replacement modifiers will change (on August 17th). Instead of entering the modifier in the charge capture section, there is a requirement on the D-code for a Procedure Note be completed when treatment is marked as complete.

The initial (INIT) and replacement (REPL) modifiers must be entered for the following dental codes.

Modifier	Name	Description
DNB	Do Not Bill	Used when charge should be $0 for any reason (courtesy, remake/correction, etc.). *All DNB/fee adjustments will go to the work queue for the billing office to review and approve/deny.*
MAT	Precious Metal	Used with D-codes where the standard metal is typical to increase the price to cover the cost of more expensive/precious metal.
OVR	Overdenture	Applied to all charges as part of the overdenture package to ensure each is adjusted to the package fee.
DO20	20 Percent Discount	A maximum of 20% discount will be allowed for any services. *All D020/fee adjustments will go to the work queue for the billing office to review and approve/deny.*
INIT	Initial Placement	Due to billing, some codes require it to be submitted that this is an **initial placement**.
REPL	Replacement	Due to billing, some codes require it to be submitted that this is a **replacement**.
IMP	Implant Package	Applied to all charges as part of the implant package to ensure each is adjusted to the package fee.
ADJ	Fee Adjustment	Applied to one or more charges where the provider is requesting a fee adjustment for the patient. The providers must enter a comment with the justification. The Fee Adjustment Review Board will review the request for a final decision.

Appointment Scheduling

Learners should schedule the next appointment(s) for their patients in Epic before the patient leaves the appointment as often as possible.

It is the learner's responsibility to arrange a date and time for their patient's appointments, and communicate that information to the Patient Navigator for scheduling in Epic.

The learner's schedule of appointments will be monitored by the Care Coordinator and it is their responsibility to assure that the learner is exercising efficient scheduling and maintaining full schedule of appointments.

Student Dos and Don'ts When Communicating with Patients

Do		Don't
Discuss	Discuss scheduling appointment – identify date/time	Give medical/dental advice without a known diagnosis
Provide	Provide post-appointment instructions already shared during last appointment	Promise fee waivers
		Quote a fee without a diagnosis or treatment plan
		Discuss personal health information (PHI) via non-secure email
Receiv	Receive concerns and forward them to your Care Coordinator	Do not subject yourself to harassing language (profanity, yelling, etc.)

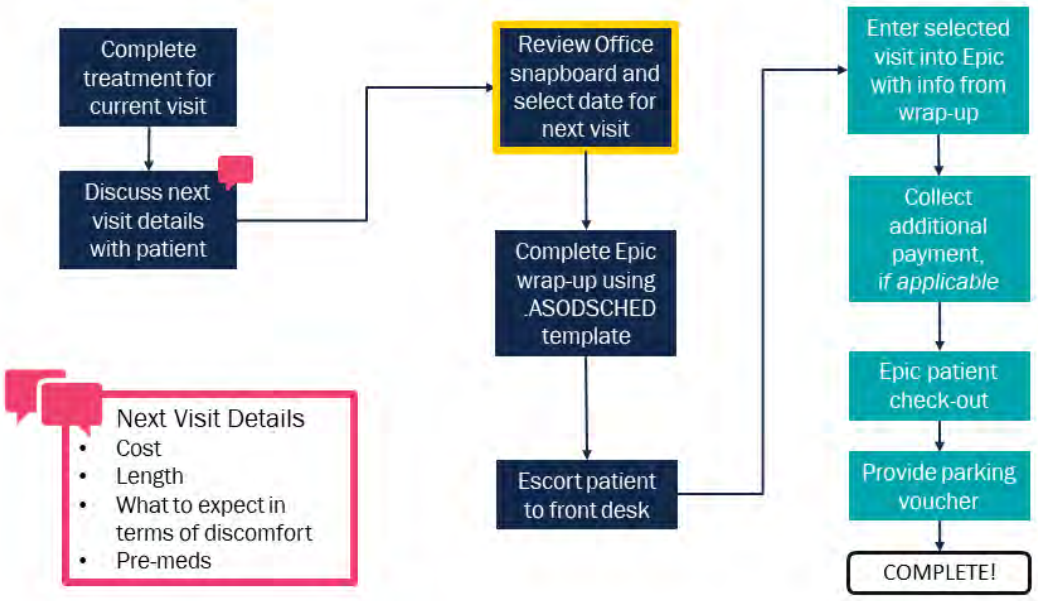
Best Modes for Student Communication

In-Person By Phone MyChart	• Demonstrate confidence and commitment by preparing for the appointment and knowing the plan for the current and next appointment. • Minimize confusion. Be clear and succinct. • Acknowledge any concerns shared with intent to address at next appointment or to share with appropriate faculty or staff. • Document in the chart what was shared/discussed.

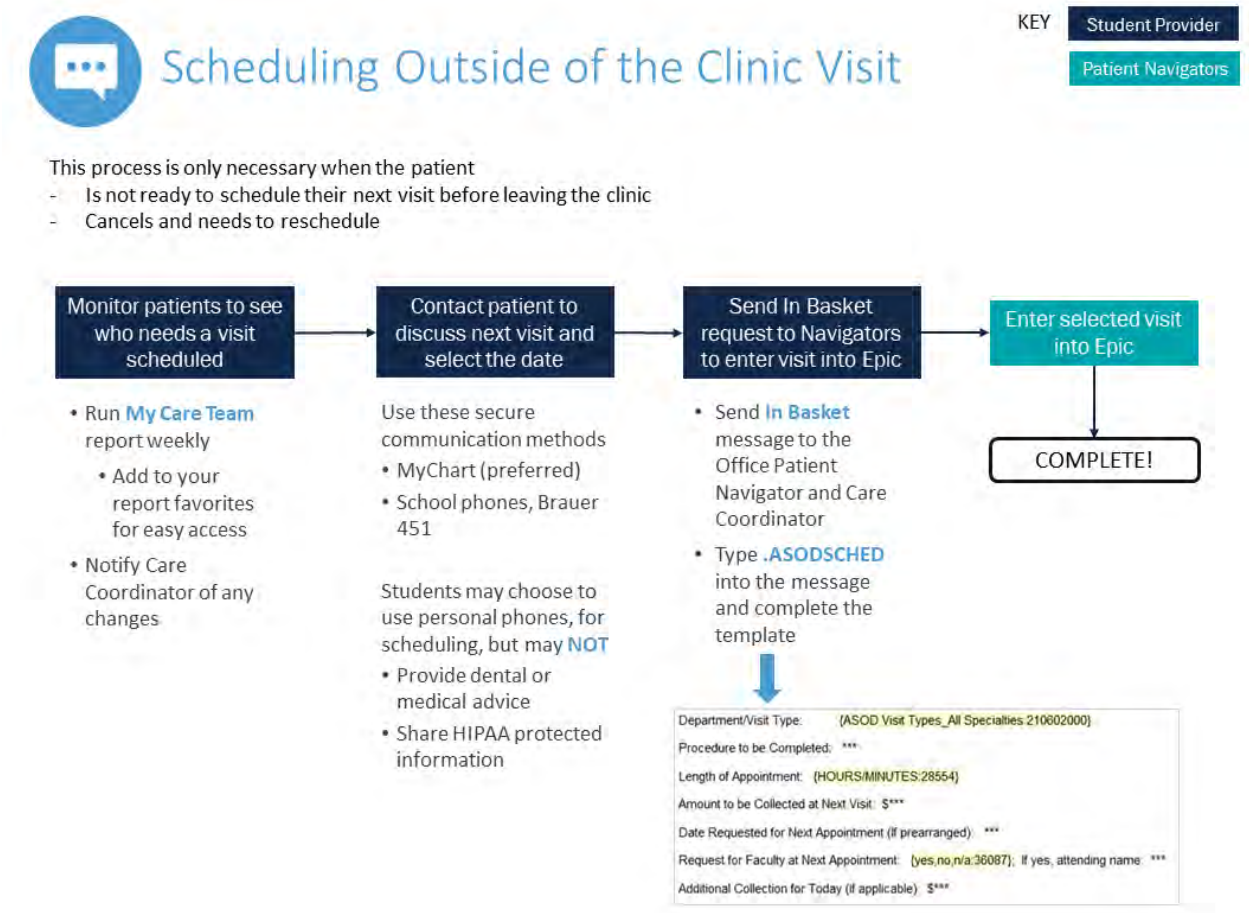
Below are guides to scheduling the next patient visit and checkout.

Next Visit & Checkout

KEY
- Student Provider
- Patient Navigator



Below is a diagram of scheduling outside of the patient visit.



Payment Collections

For **self-pay patients** (those without Medicaid coverage), payment is due at the time of service for most procedures.

Procedures that require outside lab work, such as crowns and dentures, payment is due at the time of final impressions. Nothing should be sent to the lab without this prepayment, and likewise nothing should be delivered without the payment.

We accept cash, check, Visa, MasterCard, and American Express. Payment can be made in person, by mail, over the phone, or through MyChart.

Front desk staff should collect any previous balance when checking-in a patient as well as expected charges for the day. Service should not be rendered on patients who do not pay at check-in unless the procedure is deemed medically necessary. Medically necessary procedures are generally limited to emergency extractions or root canals.

Payment plans on procedures done in the pre-doctoral clinics are not allowed at this time. The graduate student/resident clinics will allow six-month payment plans for procedures or treatment plans over $500. Those payment plans require a down payment of 50 percent of the expected treatment cost that collected at the start of treatment. The payment plans are set up with the clinic's care coordinator.

Providers should discuss treatment plan costs with their patients and explain that payment is due at the time of service (with the noted exception for required pre-payments). However, providers should not discuss payment options or make any financial agreements with the patient. Providers should direct patients to the Patient Business Services (PBS) office for those discussions.

The PBS office does not file claims on behalf of patients of the Student Dental Clinics at this time. We can and do provide paperwork to the patient in order for the patient to file for reimbursement. We also assist patients with questions about their insurance and provide additional information to the carrier as requested.

End of Patient Services

Patient care must be completed by 11:30 a.m. for morning clinics and by 4:30 p.m. for afternoon clinics.

Progress Notes Protocol

Learner-provider must make proper entries in the Progress and Treatment Notes before attending faculty will sign the Epic progress notes.

Information should include type and amount of anesthetic used, including vasoconstrictors, bases and/or liners used, and brand of restorative material, information relating to patient relations and reactions, follow-up instructions for the patient, plan for the next visit and any other information pertinent to treatment of the patient.

Whenever possible, learners must use progress note templates found in the Epic system.

Assessment of Clinical Encounter (ACE)

Learner progression towards practice-readiness is assessed in multiple ways, though frequent and meaningful assessments. Assessment modes are varied, occur in multiple settings, and are observed by multiple faculty members. Further, both formative and summative assessment occur at regular intervals throughout the clinical years to provide meaningful data on progression. Each learner's level of independence is monitored through this trajectory with the goal of increasing autonomy and competency over time. This structure allows faculty to identify learners requiring additional support as early as possible to maximize their success through the program.

Domains	Description
Case Description	Patient demographics, visit difficulty, patient circumstances, etc.
Quality of Care	Entrustable Professional Activities (EPA) and CODA Standards
Critical Error	Under the domains of Advocate (e.g., professionalism), Clinician (e.g., technical, safety, privacy), and Thinker (e.g., critical thinking).
Independence	Supervision Scale "O" Score: a five-item scale ranging from "I had to do it," to "I did not need to be there."
Reflection	Comments describing what went well and areas for improvement (start/stop/continue).

GAP Clinic:

Assessed using the ACE at the end of each patient encounter.

If engaged in the care, you are the secondary provider. Complete the ACE and use the assisting/secondary provider code.

Intramural and Extramural Rotations:

Weekly assessments will be used for intramural rotations, and one assessment will be conducted at the end of each five-week DISC rotation.

The ACE should be used in intramural rotations where direct patient care occurs (primary provider), and during your radiology/orthodontic rotations that will take place in half day sessions.

Learners will receive summary data periodically to assess whether their metrics meet specific targets for progression. These data will inform the learner self-assessment.

On week five of each block, the learner will receive a report of their performance from the care coordinator that includes clinic encounter data, practice management metrics, case exposure (type)/diversity. The learner completes a self-assessment to evaluate their performance and reflect on their ability related to designated professional activities specific to the ACT framework and CODA Standards. Learners set goals for their following block and/or semester.

The learner's office preceptor and/or deputy preceptor evaluate and confirm that the learner meets all targets. If targets are not met, the faculty completes a performance Improvement Plan identifying desired outcomes, necessary support, and a specific action plan to address specific changes expected within the coming block or semester. This information is sent to the GAP Phase Team, which approves and provides additional support as needed. This team is comprised of the individual who manages the phase, deans associated with education/curriculum, specific individuals who teach within the seminar, the office preceptor and pre-doctoral directors who are responsible for specific specialty areas.

DDS4 Learners: Independent Assessment forms and Protocols Links

To maximize ease of transition in the ACT curriculum, DDS4 learners will complete the independent assessments for graduation. The incoming third year class will be part of the new ongoing assessment framework and will not be asked to complete the independent assessments, as every day will be an assessment and the collection of this, and other data will determine practice readiness.

The following independent assessments are needed for graduation for the DDS4 learners:

COMPETENCY ASSESSMENT INFORMATION
(See document in file name "2022 Number of Procedures to challenge independent assessment")

The above link provides who to contact about the assessment, what forms are required, when is the assessment or competency due.

Diagnosis and Treatment Planning	Operative	Periodontology	Prosthodontics - Fixed	Prosthodontics - Removable
Evaluation Critia for Year 2-3 Adult Patient Ex and Diagnosi 2-3 Evaluation Critia for Year 3-4 Adult Patient Ex and Diagnosi 3-4	Daily ACE form Class II Independent Assessment Class III-IV Independent Assessment	Perio Exam Diagnosis Referral Tx Planning Periodontal Examination, Diagnosis, Referral, and Tx Planning Form Perio Scaling Root Planing Periodontal Scaling and Root Planning Assessment Form Periodontal Maintenance	FPD Simulation assessment (Mock Board) Implant Simulation assessment Natural Crown Preparation (STAR) Natural Tooth Crown Restoration-(STAR) Implant Restoration (experience)	Impression Tray Final Impression Maxillomandibular Relations RP Insertion RP Post-Insertion

		Periodontal Maintenance Assessment Form Reevaluation Initial Periodontal Therapy Reevaluation of Initial Periodontal Therapy Assessment Form		

Special Circumstance Protocols

Special Cost Packages

Single Unit Implant Package

Implant packages are comprised of the first two procedures (D0367 and D6010), AND one of the abutment procedures (D6056 or D6057), AND one of the crowns or one of the retainer procedures. When used with the IMP modifier, any combination of the four procedures will total $1,200 when priced from the PB ASOD STUDENT UNDERGRAD DEFAULT fee schedule.

Billing Modifiers

CDT	Procedure Description	Original Fee	Reduced Fee
D037	CBCT	$218	$218
D600	SURG PLCMT IMPL BODY:ENDOSTEAL	$935	$530
D606	PREFAB ABUTMENT-INCL MOD AND PLCMNT	$198	$200
D607	CUSTOM FAB ABUTMENT-INCL PLCMNT	$570	$200
D608	ABUT SUPP PROCLN/CERAMIC CROWN	$570	$350
D601	ABUT PORCLN TO MTL CROWN NOBLE MTL	$627	$350
D608	ABUT SUPP RETAIN PORCLN/CERAMIC FPD	$548	$350
D601	ABUT SUPP RETAIN PORCLN FUSD MTL FPD	$627	$350

DO NOT PRINT OR SHARE THIS TABLE WITH PATIENTS.

This package does not include bone grafting, sinus lifting, temporization; additional CBCT; tooth extraction; and occlusal splint.

Overdenture Package

The implant overdenture package (Package Total = $2500) includes upper and lower final dentures, the surgical stent, surgical placement of two implants, second stage uncovering of the implants, the two implant abutments, and pickup of the attachments into the lower denture. It does not include the extractions, alveoloplasties, tori removal, or any additional surgical procedures other than placement of the two implants and second stage surgery for uncovering of the implants. These non-included surgical codes may change due to degree of difficulty. It does not include any interim dentures, nor does it include a laboratory hard reline if needed. Use with the OVR modifier.

CDT	Procedure Description	Tooth	Original Fee	Reduced Fee
D0367	CBCT-CAPTURE AND INTERP.		$218	$218
D6190	RADIOGR/SURG IMPLANT INDEX		$144	$57

D5110	COMPLETE DENTURE – MAXILLARY		$375	$375
D5865	OVERDENTURE – COMPLETE MAND		$825	$400
D6010	SURG PLACE IMPLANT: ENDOSTEAL	22	$935	$600
D6010	SURG PLACE IMPLANT: ENDOSTEAL	27	$935	$600
D6052	SEMI-PRECISION ABUTMENT	22	$297	$125
D6052	SEMI-PRECISION ABUTMENT	27	$297	$125
Estimate Total			$4026	$2500

DO NOT PRINT OR SHARE THIS TABLE WITH PATIENTS.

Medicaid

Learner will use the Medicaid References to assist during treatment planning. If a recommended treatment needs prior approval, providers must contact Elizabeth Rocafuerte via Epic In-basket to initiate the process. Make sure to include the subject line: "MEDICAID APPROVAL REQUEST." If the learner needs additional assistance, they should contact Ms. Rocafuerte at 919-537-3940.

Patient Navigators must enter and verify Medicaid insurance. Also, we must review the response in EPIC to determine the category of coverage and if the patient has another primary dental above Medicaid. If they have a primary dental, then that insurance information needs to be entered into EPIC as well.

More information on Medicaid is available on the Clinical Operations SharePoint (Onyen required)

Contract Vendor Lab (CVL)

CVL is a secure location where student dental lab cases are processed, and implant parts are retrieved. (Only authorized or escorted personnel/vendors may be allowed to enter the CVL.) The CVL is committed to assisting School of Dentistry students in obtaining the highest standard of laboratory services for our patients.

Contract Vendor Lab Contact Information

Location: Tarrson Hall

Hours of Operation:
Monday-Friday: 8 a.m. – 5:15 p.m.

Phone Number: (919) 537-3836

Lab Scripts

Scripts MUST include the following information for the CVL to accept the case:

- Provider's name and number
- Patient's name and chart number
- Provider's signature
- Instructor's signature
- Rx instructions
- Materials included in the scripts (examples: articulator or case) optional

Payment Verification

The CVL staff is prohibited to accept lab cases in the following situations:

- If the patient payment cannot be verified in Epic
- If a Medicaid patient's approval documentation cannot be verified

- If a fee adjustment does not equal the script request
- If the fee adjustment has not been approved and received at the CVL
- If clerk in Patient Accounts has not given clearance for Medicaid cases

Dental Tracking System (DTS)

Once the patient finances have been verified and approved the patient lab case will be entered into the DTS (Dental Tracking System). The DTS will be queried for past work performance for the patient. If prior work was completed, use of the prior lab is recommended.

The DTS will maintain record of:

- Provider name and number
- Instructor name and number
- Patient name and chart number
- The expected return dates.
- The pan number assigned to the case

The type of work to be completed and the process:				
Crowns Metal, PFM, Porcelain (Noble) Die, Framework (for Bridges), Complete	**Complete Denture (Acrylic) Conventional or Digital** Bite-rims/ Occlusal rims Tooth set-up or try-in Complete/Process Reline	**Partial Denture (Metal, Acrylic)** Framework Bite Rims/ Occlusal rims Tooth set-up or try-in Complete/Process	**RPD-Acrylic** Acrylic RPD with clasps Acrylic RPD without clasps Night guard/Occlusal guard	**Crowns-Implants** Metal, PFM, Porcelain Die, Framework (for Bridges), Complete Abutments Standard or Custom Repairs – Notation in Remake Section and Note Section

Lab Selection for Case Processing

Choose the lab to which the case will be sent. CVL staff uses a rotation method to send lab work out if the patient has not already utilized a lab.

CVL staff will record the lab name on the top left section of the script and record the assigned pan number on the top right section of the script.

The case will be set aside for packaging. Models are bubble wrapped and sealed.

The wrapped models along with all items from the student/provider will be put into a “Lab-loc Specimen” bag.

Top white copy of the script is put in the outside pocket of the “Lab-loc Specimen” bag.

Once packaged, it will be placed in the vendor lab bucket located in the vendor lab corner awaiting lab pickup.

Clinic Wet Lab: Learner Use and Responsibilities

Learners are responsible for cleaning the lab after each use. The lab area should be left clean of extra stone, counters cleaned, used supplies discarded. Failure to do this can result in suspension of privileges to use the lab.

Learner Responsibilities:

- Only the wet labs behind the front desk may be used at this time.
- Anything that is taken into the lab should be disinfected and bagged.
- Keep your gown, mask, and hat but remove your gloves and perform hand hygiene prior to heading to the lab.
- Don a new pair of gloves before starting any work in the lab.
- Disinfect everything that you have touched/used
- Discard your gloves and perform hand hygiene prior to exiting the space.

Appendices

References

1. ten Cate O. A primer on entrustable professional activities. Korean J Med Educ 2018;30(1):1-10.
2. ten Cate O. Entrustability of professional activities and competency-based training. Med Educ 2005;39(12):1176-7.

Appendix 1: Huddle Pre-Clinic Presentation

HUDDLE: PRE-CLINICAL PRESENTATION	
Visit Purpose	
Demographics	Social History
Medical History ASA Classification I II III IV	Dental History
Plan of Care Diagnosis TxT	
Transition of Care *(consult/referral needed)* ☐ Dx ☐ Dn *[D9310 consult DDS | D9311 consult medical]*	
Provision of Care Ancillary Therapy Prevention Non-Surgical/Surgical Care	
Challenges	
Upon patient sitting, obtain vitals, update medical history and report to attending. Begin ACE form.	

Appendix 2: Medical Consultation Request

Date:			
Patient's Name:			Chart #:
DOB:	Address:		
City:		State:	Zi Code:
To: Physician		Fax:	Phne:
From: Dr.			
Student:		SID:	
The above mutual patient presents to Carolina Dentistry for:			
BP:	HR:	Glucose:	O_2 Sat:
PMH:			
Meds:			
In order to be fully aware of the patient's medical history and rovide safe treatment, we require additional information as follows:			
Please fax encounter notes and specialty notes:		☐ PCP	☐ Cardiac ☐ Neurology
☐ Endocrine	☐ Pulmonary	☐ Heme/Onc	☐ Gastroenterology
☐ Transplant team/surgeon		☐	
Please include:			
☐ Active Problems	☐ PMH	☐ Surgical History	☐ Allergies
☐ Meds/Dosages	☐ CBC w/diff	☐ CMP	☐ LFT
☐ HgbA1c	☐ INR	☐ Coags	☐ Thyroid Panel
☐ PFTs	☐ CD4	☐ CD8	☐ ANC
☐ HIV load	☐ ANA	☐ SSAB	
☐			
☐ EKG	☐ ECHO	☐ EF %	☐ Stress Test
☐			
☐ CXR	☐ DXA	☐ CT	☐ MRI
☐			

Dr. _____ Faculty ID: _____ Date: _____

I, _____ hereby consent to the release of my medical/dental records to Carolina Dentistry and the Adams School of Dentistry.

_____

Signature of Patient, Parent or Guardian Date

Appendix 3: Pharmacy Consultation Decision Table

TYPE		DESCRIPTION	WHAT QUESTIONS DO I NEED TO ASK?	PHARMACY TEAM ACTIVITIES
1	Oral Health Impact and Medication Review	Provides in-depth review of patient medication list for impact on oral health and future oral care. • Antichloinergic, Anti-depressants • Bisphosphates (e.g., alendronate, risedronate, ibandronate) • GERD/GI Meds (e.g., omeprazole, esomeprazole, pantoprazole) • Anti-infectives (e.g., amoxicillin, cephalexin, clindamycin) • Neurological/antipsychotic (e.g., diazepam, triazolam, lorazepam)	• Am I aware of the medication-specific effects for the medications the patient is taking? • Is patient currently taking one of these types of therapy? (Antidepressants, bisphosphates, GERD medications, anti-infectives, antipsychotics, anti-neoplastics, and radiation) • How are they taking them?	• Full medication review and/or thorough assessment of medications and oral health implications prior to follow up • May include impact on oral health including xerostomia, bleeding risk, side effects that may influence treatment, and co-morbidities • Provide patient education/counseling on diet/lifestyle and medication • Indicate referral to PCP/specialist if needed
2	Medication History Verification	Patient is on complex regimen and/or has unknown medication list, and needs to be verified via retail pharmacy after attempt by provider.	• Did patient bring complete medication list? • Who is patient's PCP? • Does patient take any herbal supplements or OTC products? What kind? • Are there medications I do not recognize?	• Full medication review and/or thorough assessment of medications and oral health implications prior to follow up • Patient education/counseling • Determine PCP info for follow up if possible
3	High Risk Medications	Provides considerations for treatment if patient is on anticoagulant (Warfarin, Apixaban, Rivaroxaban, Dabigatran), antiplatelet (Clopidogrel, Plavix) or insulin for diabetes.	• Is patient on anticoagulant therapy? • How are they taking them? • Patients on warfarin: when was last INR? INR value?	• Anticoagulants: discuss indication, last dose taken** • Discuss implications on planned treatment with patient and provider
4	Chronic Disease States and Patient Medication	Review medical condition education for conditions such as diabetes, hypertension, smoking cessation, asthma, COPD, etc. **Hypertension** • >140 systolic and/or >90 diastolic • Patient taking ≥2 BP medications **Diabetes** • Pre-op blood glucose>180 or <80 OR HA1c >8 **Respiratory (asthma/COPD)** • Patient using ≥2 inhalers Smoking Cessation	• Has patient taken their medications prior to this appointment (esp. HTN and diabetes)? • If a patient has diabetes, have they eaten before their appointment? • What did they eat? • Have they taken their BG recently? • If not, what was their pre-op BG?	• Educate patient/learner on monitoring and medication information (e.g., managing hypoglycemia) • Handouts provided if applicable (e.g., tobacco cessation products, drug information, etc.) • Discuss inhaler regimen and control; provide inhaler technique education for uncontrolled patients • Indicate referral to PCP/specialist if needed
5	Prescribing New Meds/Medication Education	Patient has a question regarding their medication regimen. May include: antibiotics, analgesics, anesthetics, saliva modifiers, anxiolytics	• Has patient tried this therapy before? • Reason for prescribing this drug? Diagnosis? • Barriers to affording this medication (insurance coverage)?	• Medication education counseling (e.g., adverse side effects, dosing instructions, drug interactions) • Evaluates how new medication could impact current treatment
6	Drug Information (DI) Request	Provider has question about patient medications		Provide verbal/written resource to patient or learner. Indicate referral to PCP/specialist if necessary.

***Anticoagulants: generally not recommended to hold anticoagulants even for more invasive dental procedures. Extractions are usually OK as long as INR is <3.0. Discussion regarding anticoagulants should include patient and learner with emphasis on procedures planned and how this may be affected by anticoagulant therapy. Particularly with newer class of anticoagulants and even dual anticoagulation therapies.*

Appendix 4: Patient Relations Complaint Routing

Appendix 5: DXTX Checklist

PRE-CLINIC PREP AND HUDDLE:

In Chart Review, assess the available patient history, radiographs, and existing data base for your assigned patient. Prepare for your presentation of the patient at the Pre-Clinic Huddle.

AT THE DXT VISIT:

1. LOG IN to Sakai/ STAR Student Assessment (ACE form) using D0150 (or D0150PLAN for a reassigned patient) procedure code. Sign on to Epic at ASOD Group Practice Third or Fourth Floor to access your scheduled patient. Seat the patient in your assigned operatory, Room the patient, and begin the exam.

2. PATIENT HISTORY and (if warranted) additional radiographs: Review Medical History taken from patients Telehealth visit, and enter any missing responses, findings, and conditions including medications, allergies, psychosocial history, family history, RoS, oral health history -- be prepared to discuss with your attending faculty the patient's ASA designation, medical risk, and any dental treatment modifications based on the patient's health.***

- In consultation with your attending faculty determine if additional radiographs are needed. *** If additional radiographic images are to be obtained do so now – if the images (pa's or bw's) are to be obtained in the Office no ORDER is needed. If radiographs (CMS or Panoramic) are to be obtained in the OMFR Clinic, ORDER the images, close ROOMing and escort the patient to Radiology Clinic
- Add D0150 [comprehensive oral evaluation] code and the code(s) for any radiographs obtained on this date [CMS D0210, BWs D0274; Pan D0330] to PLAN.

3. CLINICAL EXAM: EO/ IO, Occlusal Exam, Tooth Chart, Perio Classification

- Adult Extraoral/Intraoral Exam; if the patient has noteworthy intraoral lesions, document on Specialty Exam/ Soft Tissue
- Occlusal Exam [Notes/ Create Note/ Create New Note/ Occlusal Exam/ My Note DENTAL EXAM]
- Dental and restorative exam and charting [Tooth Chart: Hard Tissue]
- Periodontal charting (probe and record 6 sites on each tooth) [Tooth Chart: Periodontal Chart]
- Periodontal findings, classification, diagnosis & prognosis [document on Specialty Exam/Perio Classification and Diagnosis] ***

4. TX PLAN: If the patient needs a Simple or CONTROL PHASE plan of care

- Engage the patient in a consent discussion addressing all reasonable options including risks, benefits, and costs for each
- Construct DRAFT simple or Disease Control Phase plan of care
- Upon patient approval of the concept, list all D-codes on the plan and sequence in order of treatment; if all parties agree, move the plan from DRAFT to PLAN ***
- Have the patient e-sign the treatment plan [WRAP UP/ AVS/ DOCUMENT LIST/Treatment Plan]
- Have the patient e-sign the Consent form [DOCUMENT LIST/ SOD PROCEDURE CONSENT] ***
- Print a hard copy of the treatment plan and/ or consent if the patient would like it

NOTE: If the patient does not need control phase treatment, but does need complex prosthodontic treatment, you will need to meet with your preceptor to determine the Definitive Phase Plan of Care prior to the next patient visit. Regardless, be sure to create – at a minimum – a PLAN for the procedure you anticipate doing at the next patient visit.

5. ADDITIONAL PROCEDURES

- Extraoral and/ or Intraoral photographs
- Impressions/ facebow/ bite registration (not necessary for Control Phase but required for definitive prosthodontic treatment planning)
- Oral prophylaxis (time permitting) on transfer or pOHP patients ***

6. WRAP UP

- Move D0150 and the D-code(s) for any radiographs taken on this date from PLAN to TODAY. Digital Impressions will not be an extra cost
- If a scheduler is available, they schedule the next appointment for the patient with you. If a scheduler is not available, send an In-Basket message to your Patient Navigator
- Check with attending that patient is okay for dismissal ***

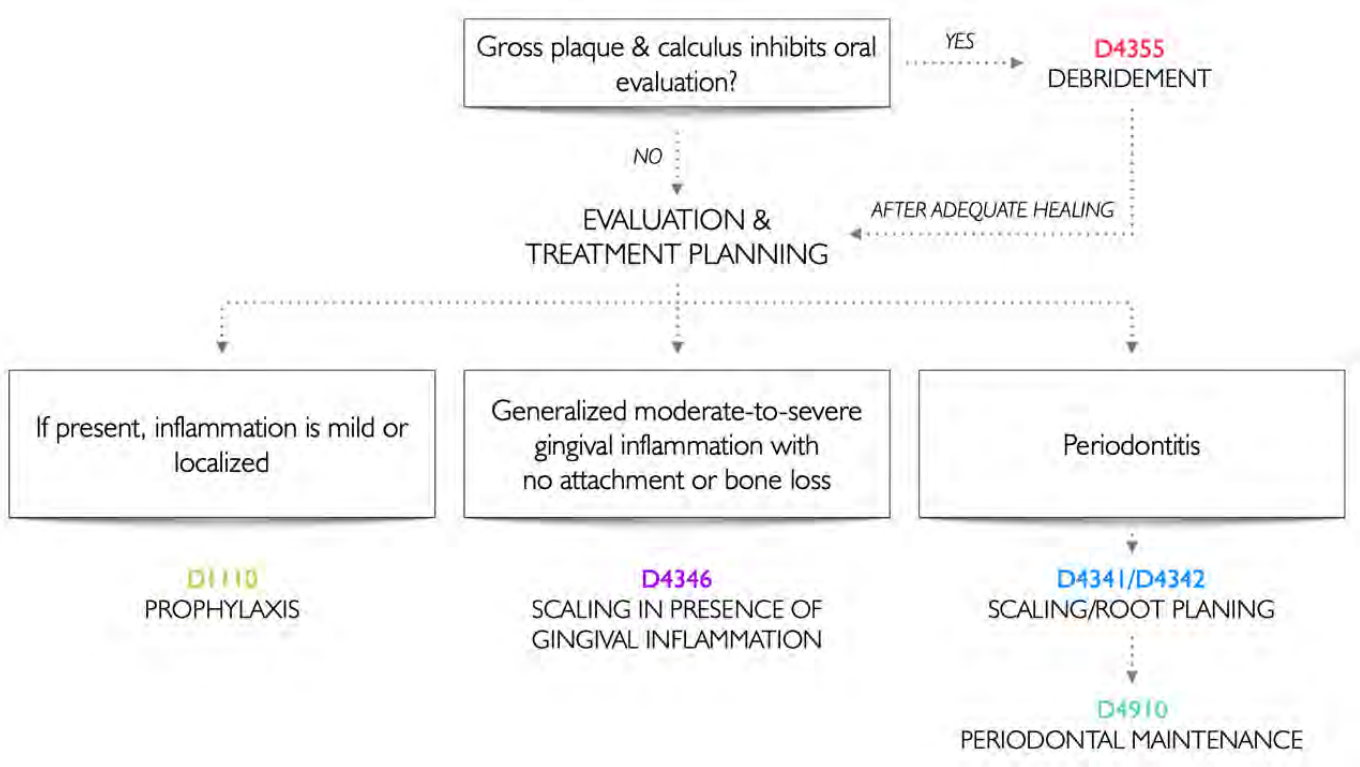
7. AFTER DISMISSAL

- Complete the progress note: Carolina Dentistry General Dentistry Clinic - New Patient Exam
- Complete the Assessment of Clinical Encounter for the Comprehensive Oral Evaluation and discuss with your attending faculty

You will be evaluated via the school's CLINICAL ASSESSMENT; semester and year end grades per DENT 241/ 341 Clinical Diagnosis and Treatment Planning Syllabus

*** = faculty check steps

Appendix 6: CDT Code Flowchart



Appendix 7: Glossary for Assessment of the Clinical Encounter (ACE) Forms

The following section aims to provide criteria, definitions, and examples to calibrate learner evaluation using the Adams School of Dentistry clinical assessment forms. The clinical assessment process is based upon the Entrustable Professional Activity (EPA) and Capacities framework.

I. CORE INFORMATION

Encounter Data

Begin the form by selecting the faculty attending you in clinic on the day of the encounter and encounter date using the calendar provided.

Completion of Data

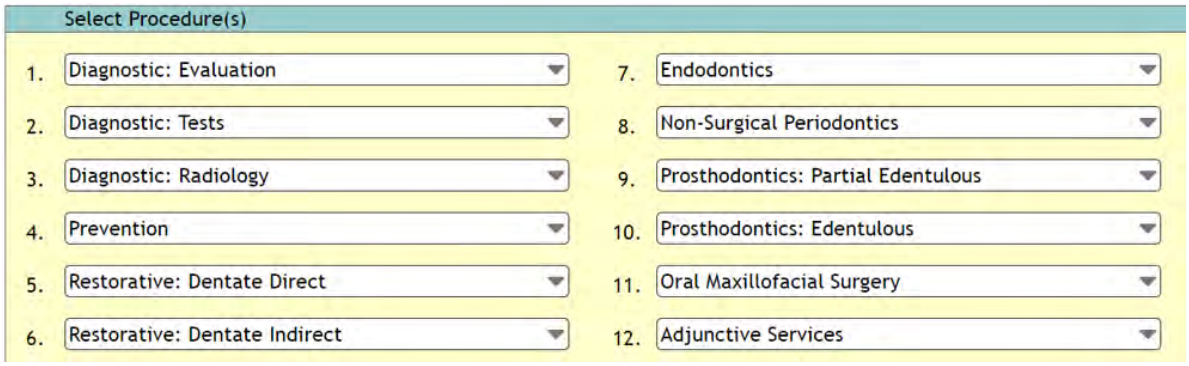
All forms must be completed by midnight the day of patient encounter.

II. EXPOSURE

Patient Background

Criteria	Definition	Criteria	Definition
PatienMRN and Nae	- Epic 12-digit medical record number - *If patient name is associated with an MRN in Epic, the name will automatically populate.*	Patient Age	- ≤ 5 years - 6-12 years - 13-17 years - 18-64 years - ≥ 65 years
Visit Dificulty	- Average: well controlled systemic disease, no significant management challenges, access in care delivery - High: Poorly controlled systemic disease; management challenge (e.g., behavioral); difficulty in care delivery; advanced clinical presentation of dental disease	Patient Circumstances (Follows CODA Standard 2-25)	- Complex medical history (ASA >2) - Cognitive impairment - Developmental disability - Significant physical limitation - Visual or speech impairment - Interpretations services (in person or via phone) - None of the above

Procedure Code(s)



Procedural Skill	Procedural Code	Procedural Skill	Procedural Code
Diagnostics *	- D0120, D0140, D0145, D0150, D0160, D0170, D0180, D0190, D0191, D0415, D0417, D0417, D0419, D0425, D0431, D0460, D0470, D05002, D0601, D0602, D0603, D0999, D0210 Acq/Int, D0220 Acq/Int, D022A Acq/Int, D0230 Acq/Int, D0240 Acq/Int, D0250 Acq/Int, D0251 Acq/Int, D0270 Acq/Int, D0272 Acq/Int, D0273 Acq/Int, D0274 Acq/Int, D0277 Acq/Int, D027A Acq/Int, D027B Acq/Int, D0330 Acq/Int, D033A Acq/Int, D0340 Acq/Int, D0367 Acq/Int, D0380 Acq/Int, D0391	Periodontics	- D4341, D4342, D4346, D4910
Prevention	- D1110, D1120, D1206, D1208, D1310, D1320, D1330, D1351, D1353, D1354	Prosthodontics: Partial Edentulous	- D5211, D5212, D5213, D5214, D5221, D5222, D5820, D5821, D6051, D6056, D6057, D6058, D6059, D6061, D6062, D6065, D6066, D6067, D6068, D6069, D6071, D6072, D6075, D6076, D6077, D6112, D6113, D6740, D6750, D6752, D6790, D6792
Restorative: Dentate Direct **	- D2140 Perm/Prim, D2150 Perm/Prim, D2160 Perm/Prim, D2161 Perm/Prim, D2330 Perm/Prim, D2331	Prosthodontics: Edentulous	- D5110, D5120, D5130, D5140, D5810, D5811, D5863, D5865, D6110, D6111, D6114, D6115

	Perm/Prim, D2332 Perm/Prim, D2335 Perm/Prim, D2391 Perm/Prim, D2392 Perm/Prim, D2393 Perm/Prim, D2394 Perm/Prim, D2940, D260, D2961, D2962		
Restorative: Dentate Indirect	- D2510, D2520, D2530, D2540, D2542, D2543, D2544, D2610, D2612, D2614, D2620, D2630, D2642, D2643, D2644, D2645, D2740, D2750, D2751, D2752, D2790, D2930, D2931	**Oral Maxillofacial Surgery**	- D7111, D7140, D7210, D7220, D7250, D7286, D7310, D7311, D7320, D7321, D7953
Endodontics	- D3110, D3120, D3220, D3221, D3310, D3320, D3330	**Adjunctive Services**	- D9230, D9310, D9311, D9450, D9950, D9944, D9995, D9996

Note:
* Radiology has been separated into acquisition and interpretation.

** Pediatric teeth can be identified as primary (Prim) versus permanent (Perm).

*** Fixed Prosthodontics Code are under Restorative Dentate Indirect and Prosthodontics Partial Edentulous. Step codes used in Epic are available for selection in the ACE form.

III. QUALITY

Ratings to assess quality as defined by the Adams School of Dentistry:

- **Meets expectations of the graduate:** Has met standards for practice readiness.
- **Progressing:** Developing skills appropriate for learners' level (e.g., DDS2/DDS3/DDS4).
- **Below expectations:** Performing at a substandard level that may or may not include a critical error.

Encounter Management

Criteria	Definition	Criteria	Definition
Prepardness	- Present, on time, engaged - Knowledgeable about procedures to be performed - Reviews patient chart before arrival	**Safety & Infection Control**	- Follows infection control standards - Complies with safety regulations e.g., mask, eye protection, gown, etc.

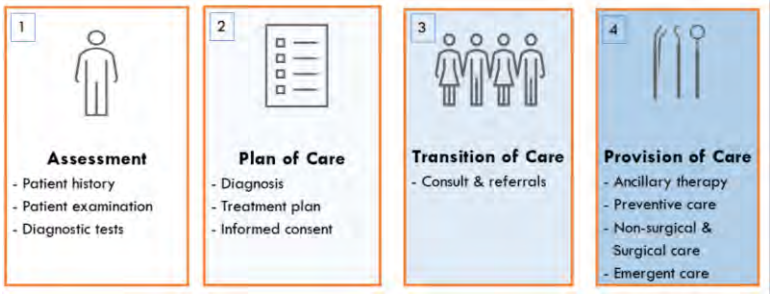
	- Addresses questions about case in huddle		
Time Management	- Practices efficiently to achieve outcomes safely - Limits procrastination & distractions	Documentation/ Completeness & Accuracy	- Obtains necessary information & data - Asks appropriate follow-up questions - Accurately interprets findings - Submits documentation in a timely manner that is succinct, complete, and accurate, and in compliance with laws and regulations

Capacities

Criteria	Definition	Criteria	Definition
Criticalinking & Decison - Making	- Interpretation of data following systematic process - Evidence & rationale to support decision (applies evidence-based care) - Prioritization consistent with patient needs, values & preferences	Team Communication & Collaboration	- Considers multiple perspectives and viewpoints - Interactions are respectful and demonstrate cultural competence - Engages as a collaborative partner
Person-Centerd Care (commnication, patien awarenss & sensitivty)	- Engages in person-centered care: *Shows respect for patients' values, preferences and expressed needs *Provides patient with information and education on clinical status, progress, prognosis, and processes of care *Actively engages patient/caregiver as a partner in decision-making *Attends to patient's physical comfort, manages pain	Biomedical Science Application	- Accurate application of biomedical science knowledge to patient care

	*Provides emotional support and alleviates fear and anxiety *Involves family and friends in patient experience as appropriate (needs, decision-making) *Provides post-appointment information regarding medications, plan of care, and available resources/support - Employs verbal tone, syntax, language, and non-verbal interactions that demonstrate cultural competence - Supports patient/caregiver language and literacy needs to enhance communication		
Heath Promotion	- Provide patient with information to facilitate self-care and health promotion		

Entrustable Professional Activities (EPAs)



Procedural Skills

Procedural Skill	Definition	Procedural Skill	Definition
Diagnostics	- Evaluation/Re-Evaluation, Tests, Radiology - EPAs, Equipment use, Image Quality	Prosthodontics: Partial Edentulous	- Removable Partial Denture, Implant prosthesis , Fixed partial denture - Isolation &Tissue Management, Preparation, Impression, Restoration: Provisional, Restoration: Definitive, Cementation,

			Communication/management with lab - Impressions, MMR, Try-in, Insertion, Follow-up, Communication/management with lab
Prevention	- Prophylaxis, Fluoride, Sealants, Counseling, Oral Hygiene Instructions - Prophylaxis: Isolation & Tissue Management, Plaque and calculus removal, Stain Removal, Local Medication (if applicable) - Fluoride: Isolation & Tissue management - Sealant: Isolation & Tissue Management, preparation, restoration	**Prosthodontics: Edentulous**	- Complete denture/Implant overdenture - Impressions, MMR, Try-in, Insertion, Follow-up, Communication/ Management with lab - Impression, Restoration: Provisional, Restoration: Definitive, Cementation; Prosthesis insertion & management, Communication/management with lab, Local medication delivery (if applicable)
Restorativ: Dentate Diect	- Amalgam, Composite, Protective Restoration, Direct Veneers - Isolation & Tissue Management, Initial Preparation, Final Preparation, Restoration, Local Medication (if applicable)	**Endodontics**	- Pulp cap (indirect, direct), Therapeutic pulpotomy, Pulpal debridement, Root Canal (Anterior, Bicuspid, Molar) - Isolation & Tissue Management, Access Preparation, Work Length Determination, Root Canal Instrumentation, Root Canal Obturation, Restoration
Restorativ: Dentate Inirect	- Inlay, Onlay (Cast, Ceramic) and Composite), Indirect Veneers, Pontic, Crowns (Ceramic, Cast, PFM, SSC) - Isolation & Tissue Management, Preparation, Impression, Restoration: Provisional, Restoration: Definitive, Cementation, Local Medication (if	**Oral Maxillofacial Surgery**	- Extractions - Case Presentation, Sterile Field, Patient Positioning, Throat Screen, Adequate Anesthesia, Proper use and handling of instrumentation, Control Bleeding, Suturing, Post op Instructions

	applicable), Communication/ management with lab		
Non-Surgical Periodontics	- Periodontal scaling and root planning, Periodontal Maintenance - Isolation & Tissue Management, Calculus identification, Calculus removal, Stain removal, Local medication delivery (if applicable)	Adjunctive Services	- Nitrous, Consultation, Case presentation, Occlusion analysis, Occlusal Guard, Teledentistry - Teledentistry: Data Collection, Problem Solving, Referral, Technology Management - Occlusal Analysis: Impressions, Facebow Transfer Record, Mounted Casts, Occlusal Analysis - Occlusal Guard: impressions, maxilla-mandibular relation, Record, Definitive Appliance, Communication/mgmt with lab

Critical Errors

Definition: An event or unprofessional behavior that disrupts safe, legal, and ethical person-centered care. A critical error includes events or behaviors- whether evident or harmful to the patient- that could lead to, but not limited to, disciplinary action by an employer or Board of Dentistry. In an academic setting, repeat critical errors may prompt discussions for dismissal from the program.

Domain	Revised Critical Errors
Advocate	- Fails to act for the benefit of the patient - Reports or documents false or intentional inaccurate information - Practices under the influence of drugs/alcohol - Exhibits inappropriate conduct with patients, faculty, staff, and/or peers
Clinician	- Inaccurate patient assessment and/or diagnosis that could cause harm - Irreversible technical procedure error - Excessive and/or irreversible damage during a procedure - Incorrect procedure, tissue, location, or patient for any clinic activity - Inappropriate medication dosing, administration, and/or prescription - Infection control breach - Radiology procedure breach

	- HIPAA violations or breaches of confidentiality
Thinker	- Unable to solve a problem that can cause patient harm - Unprepared to the extent that can cause harm - Disregards faculty instruction or no faculty consent

IV. INDEPENDENCE

Independence ratings are based on the Ottawa Surgical Competency Operating Room Evaluation (O-SCORE), designed to assess a learner's level of independence using behavioral anchors.

Retrospective O-SCORE: How much supervision did the learner need during the entire encounter?

- Faculty had to do it for the learner (hands-on intervention)
- Faculty had to talk the learner through it (consistent verbal guidance
- Faculty had to prompt the learner from time to time (intermittent verbal guidance)
- Faculty had to be in the room, just in case (limited indirect supervision)
- Faculty did not need to be there (independence)

Prospective O-SCORE: How much supervision should the learner have on a future encounter that is similar?

- Faculty would have to do it for the learner (hands-on intervention)
- Faculty would have to talk the learner through it (consistent verbal guidance
- Faculty would have to prompt the learner from time to time (intermittent verbal guidance)
- Faculty would have to be in the room, just in case (limited indirect supervision)
- Faculty would not need to be there (independence)

Patient Awareness and Sensitivity: Engages in person-centered care; considers patient's dental needs and treatment options in the wider context of the patient's life and preferences; embraces cultural competence

The learner engages in person-centered care and considers the patient's oral health and the multiple and inter-related factors that affect the patient: factors at the policy and societal level (including everything from systemic racism to Medicare and Medicaid policies), at the community level (including what access to healthy food and water looks like in the community to available public transportation) and at the family and individual level (including genetic and biological factors as well as mental health factors and family make up). Patient awareness requires that the provider gathers both holistic and specific knowledge of the patient and then considers and attends to the multiple factors that may influence patient overall experience, from intake to treatment and recovery. Guided by cultural competence, this approach requires the provider to assume a learner stance and set aside their own prior assumptions in interactions with patients to learn from and with the patient. The learner then uses their understanding

of patient's lived experience to guide shared decision-making and treatment planning alongside the patient.

Team Communication and Collaboration: Considers multiple perspectives and viewpoints; interactions are respectful and reflect cultural competence; engages as a collaborative partner; seeks opportunities for learning and personal growth

The learner values all members of the team, evidenced in respectful verbal and non-verbal interactions, active listening, and collaborative decision-making. Practicing cultural competence, the learner seeks out and values team members' multiple perspectives and viewpoints. The learner assumes a self-reflective and flexible stance, seeking opportunities for learning and growth as evidenced by asking authentic questions, actively listening during interactions and seeking input from colleagues. The verbal tone, language, non-verbal interactions and actions reflect respect for team members' knowledge and experience (professional and lived experience). Learners are responsive to team members' needs and reflects concern for team members' growth, success and overall well-being. The learner recognizes the value of the team approach in providing optimal patient treatment.

Patient/Caregiver Communication: Employs verbal tone, syntax, language, non-verbal interactions and actions that reflect cultural competence; actively engages patient/caregiver as a partner in decision-making; supports patient/caregiver language and literacy needs to enhance communication.

The learner seeks to establish a partnership with the patient/caregiver that is physically and psychologically safe for all parties. The learner considers the patient and caregiver as equal partners in care. To that end, the learner seeks out and provides the best approach to support patient/caregiver communication that considers, among other things, the patient's language and literacy needs. The learner actively and authentically engages the patient/caregiver in shared decision making, using person-centered and respectful verbal, non-verbal, language and syntax in all exchanges. Recognizing that the patient is the only one who deeply knows his/her/their life experience, learner's communication with the patient and caregiver reflects respect for the patient's and caregiver's intelligence and lived experience. Throughout the exchange, the learner is self-reflective about their engagement to ensure they are creating a comfortable space for patient/caregiver participation, seeking verbal and non-verbal cues from the patient/caregiver and pivoting as necessary.

Appendix 8: Rubrics

DENTATE: DIRECT OPERATIVE

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATION	CRITICAL ERROR
	ISOLATION AND TISSUE MANAGEMENT	No damage and/or optimal isolation		Poor isolation and/or tissue damage requiring finishing/polishing	Poor isolation and/or tissue damage that requires a major recontour or restoration
PREPARATION: INITIAL	Axis	Parallel to crown long axis	Minor axis discrepancy		Grossly off axis
	Pulpal Floor	≤0.5 mm internal to DEJ (1.5-2.0 mm total depth)	≤1.0 mm internal to DEJ (2.5-3.0 mm total depth)	Enamel present on pulpal wall (<1.5 mm total depth)	≥1.5mm internal to DEJ (≥3.5 mm total depth)
	Axial Wall	≤0.5 mm internal to DEJ (1.0-1.5 mm total depth)	≤1.0 mm internal to DEJ (2.0-2.5 mm total depth)	Enamel present on axial wall (<1.0 mm total depth)	≥1.5mm internal to DEJ (≥3.0 mm total depth)
	Peripheral dentin (DEJ)	Removal to hard dentin		Left firm dentin	Left soft dentin
	Isthmus (F/L Extension)	1.5 - 2.0 mm wide	2.5 - 3.0 mm wide	< 1.0 mm wide	≥ 3.5 mm wide
	Primary Retention	Convergent	Parallel	Excessive convergence	Divergent
	Proximal Clearance	Clearance > 0.5 and ≤ 0.75 mm	Clearance > 0.75 and ≤ 1.0 mm	Inadequate clearance (≤ 0.5 mm)	Clearance > 1.0 mm
		MF ML MF ML	MF ML MF ML	MF ML MF ML	MF ML MF ML
		DF DL DF DL	DF DL DF DL	DF DL DF DL	DF DL DF DL
	Gingival Clearance	Clearance > 0.5 and ≤ 0.75 mm	Clearance > 0.75 and ≤ 1.0 mm	Inadequate clearance (≤ 0.5 mm)	Clearance > 1.0 mm
		MG MG	MG MG	MG MG	MG MG
		DG DG	DG DG	DG DG	DG DG
PREPARATION: FINAL	Carious Tissue Removal (Peripheral dentin/DEJ)	Removal to Hard dentin		Left firm dentin	Left soft dentin
	Carious tissue removal (Shallow/Moderate lesion)	Selective removal to firm dentin		Selective removal to soft dentin	Non-selective removal to hard dentin
	Carious tissue removal (Deep lesion)	Selective removal to soft dentin		Selective removal to firm dentin	Non-selective removal to hard dentin
	Wall Surfaces	Smooth	Rough	Excessive roughness	
	Wall Transitions	Gentle transitions		Abrupt transitions	
	Cavosurface Margins	Enamel supported		Enamel unsupported 70- 80 degrees or margins > 100- 110 degrees	Enamel unsupported < 60 degrees or margins > 120 degrees
	Debridement	Clean		Debris	
	Adjacent Tooth	No iatrogenic damage		Damage - Recontour	Damage - Restore
RESTORATION	Surface Quality	Smooth	Rough	Rough/requires finishing	Rough/requires replacement
	Marginal Integrity	Non-detectable	Detectable	Flawed - minor	Flawed - major
	Occlusal Anatomy	Anatomy reproduced	Anatomy lacks definition	Anatomy absent	Excessive anatomy depth
	Occlusal Function	Ideal occlusion restored/maintained	Restoration in occlusion		Hyperocclusion
	Proximal Anatomy	Ideal embrasure form		Closed embrasure form Open embrasure form	
	Proximal Contact	Ideal contact area	Acceptable contact area	Incorrect contact position	No contact (open)
		M D M D	M D M D	M D M D	M D M D

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT			No damage and/or optimal isolation		Poor isolation and/or tissue damage
PREPARATION: INITIAL	Axis	Parallel to crown long axis	Minor axis discrepancy		Grossly off axis
	Pulpal Floor	≤0.5 mm internal to DEJ (1.5-2.0 mm total depth)	≤1.0 mm internal to DEJ (2.5-3.0 mm total depth)	enamel present on pulpal wall (<1.5 mm total depth)	≥1.5mm internal to DEJ (≥3.5 mm total depth)
	Axial Wall	≤0.5 mm internal to DEJ (1.0-1.5 mm total depth)	≤1.0 mm internal to DEJ (2.0-2.5 mm total depth)	enamel present on axial wall (<1.0 mm total depth)	≥1.5mm internal to DEJ (≥3.0 mm total depth)
	Peripheral dentin (DEJ)	Removal to hard dentin		Left firm dentin	Left soft dentin
	Isthmus				
	(F/L Extension)	1.0 - 1.25 mm wide	2.0 - 2.5 mm wide	< 1.0 mm wide	≥ 3.0 mm wide
	Primary Retention	Convergent	Parallel	Excessive convergence	Divergent
	Proximal Clearance	Clearance	Clearance	Inadequate clearance	Clearance > 1.0 mm or past
		> 0.5 and ≤ 0.75 mm	> 0.75 and ≤ 1.0 mm	≤0.5 mm proximal contact not broken e.g. "crab-claw"	proximal line angles
		MF ML MF ML	MF ML MF ML	MF ML MF ML	MF ML MF ML
		DF DL DF DL	DF DL DF DL	DF DL DF DL	DF DL DF DL
	Gingival Clearance	Clearance > 0.5 and ≤ 0.75 mm	Clearance > 0.75 and ≤ 1.0 mm	Inadequate clearance (≤ 0.5 mm)	Clearance > 1.0 mm or gingival contact not broken
		MG MG	MG MG	MG MG	MG MG
		DG DG	DG DG	DG DG	DG DG
PREPARATION: FINAL	Carious tissue removal (Shallow/Moderate lesion)	Selective removal to firm dentin		Selective removal to soft dentin	Non-selective removal to hard dentin
	Carious tissue removal (Deep lesion)	Selective removal to soft dentin		Selective removal to firm dentin	Non-selective removal to hard dentin
	Wall Surfaces	Smooth	Rough	Excessive roughness	Sharpness
	Wall Transitions	Gentle transitions		Abrupt transitions	
	Cavosurface Margins	Enamel supported 90 degrees		Enamel unsupported 70- 80 degrees or margins > 100- 110 degrees	Enamel unsupported < 60 degrees or margins > 120 degrees
RESTORATION	Debridement	Clean		Debris	
	Adjacent Tooth	No iatrogenic damage		Damage - Recontour	Damage - Restore
	Surface Quality	Smooth	Rough	Rough/requires finishing	Rough/requires replacement
	Marginal Integrity	Non-detectable	Detectable	Flawed - minor	Flawed - major
	Occlusal Anatomy	Anatomy reproduced	Anatomy lacks definition	Anatomy absent	Excessive anatomy depth
	Occlusal Function	Ideal occlusion restored/maintained	Restoration in occlusion		Hyperocclusion
	Proximal Anatomy	Ideal embrasure form		Closed embrasure form Open embrasure form	
	Proximal Contact	Ideal contact area	Acceptable contact area	Incorrect contact position	No contact (open)
		M D M D	M D M D	M D M D	M D M D

DENTATE: INDIRECT CROWN

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT			No damage and/or optimal isolation		Poor isolation and/or tissue damage
PREPARATION	EXTERNAL OUTLINE	Margin location ideal (0.5mm above the FGM) Margins regular in form	Margin location slightly over or under-extended (± 0.5 mm) Margins slightly irregular	Margin location decidedly over- or under extended (> 0.5 mm,< 1mm) Margins decidedly irregular and recognized Minor damage to adjacent tooth and/or soft tissues	Margin location grossly over or under extended (>1mm) Margin decidedly irregular and not recognized Severe damage to adjacent tooth and/or soft tissue
	INTERNAL FORM	Preparation extends into tooth as necessary for the chosen restorative material	These areas are slightly over or under-reduced (± 0.5mm)	These areas are decidedly over (0.5-0.8mm) or under-reduced	These areas are grossly over (> 0.8 mm) or under reduced
			Occlusal Axial Walls Cusp Bevel	Occlusal Axial Walls Cusp Bevel	Occlusal Axial Walls Cusp Bevel
	TAPER	Taper ideal (5-10° TOC)	Taper slightly excessive (10-15° TOC)	Taper inadequate <5° Taper decidedly excessive (15-20° TOC) Minor undercuts	Taper grossly excessive (>20° TOC) Gross undercuts (margin less than 0.5 mm after blackout)
	FINISH OF WALLS AND MARGINS, DEFINITION	Walls and margins smooth Smooth/planar occlusal anatomy Chamfer width and form ideal	Preparation slightly rough Chamfer not ideal, but acceptable	Preparation decidedly rough or ill-defined and recognized Chamfer ill-defined or nonfunctional and recognized Debris remaining on the preparation	Preparation decidedly rough or ill-defined and not recognized Margin ill-defined or nonfunctional Lip or J margin
	SURFACE	Surface uniformly smooth, replicates normal texture	Surface slightly rough, pitted or lacking finish	Surface decidedly rough or pitted	Deeply pitted or grooved
RESTORATION	MARGIN INTEGRITY	Margin is smooth Margins is not short, long, or open	Margins are slightly: • detectable with explorer • over-extended • under-extended	Margins are decidedly: • detectable with explorer • over-extended • under-extended	Margin open Gross overfinish Gross over-extension
	OCCLUSAL ANATOMY AND FUNCTION	Cusp planes, grooves and marginal ridges continuous with existing tooth form Occlusion restored	Slightly over/under contoured Canine guidance not maintained Anatomy lacks definition	Premature occlusal contacts Balancing or non-functional contacts exist Decidedly overcontoured, excessive depth of anatomy Anatomy absent	Restoration fractured, missing Gross hyperocclusion, no other teeth in contact Occlusal contact not existent
	AXIAL CONTOUR, AND PROXIMAL CONTACT	Axial contours continuous with existing tooth form Proximal embrasures and contact restored	Slightly over- or under-contoured Proximal contact visually closed, lacks intensity	Decidedly over-or undercontoured, outside normal hysiologic/anatomic range Soft tissue impingement	Grossly over- or undercontoured Proximal contact visually open
Common Path of Draw for FDP (bridge factor)			Common path of draw exists		A common path of draw doesn't exist without modifying one or both preparations

DENTATE: INDIRECT PEDIATRIC STAINLESS STEEL CROWN (SSC)

		MEETS EXPECTATIONS OF THE GRADUATE		PROGRESSING	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT			No damage and/or optimal isolation		Poor isolation and/or tissue damage
PREPARATION	AXIS	Parallel to long axis of tooth	Minor axis discrepancy, not more than 10^0 off long axis of tooth crown	Preparation axis slightly off from parallel to long axis of tooth crown Minor damage to adjacent tooth, which can be polished out	Preparation axis grossly off ($>20^0$) from parallel to long axis of tooth crown Severe damage to adjacent tooth, which cannot be polished out, and/or soft tissues compromised
	OCCLUSAL REDUCTION	1.0-1.25mm from cavosurface at pulpal wall (0.5mm internal to DEJ)	1.5-2.0mm or <1.0mm from cavosurface at pulpal wall (1.0mm internal to DEJ)	Over (~2.5mm) or under-reduced	Grossly over (> 2.5mm) or under reduced
	MESIAL and DISTAL REDUCTION	Parallel Slight subgingival extension NO ledges/margin	Convergent	Convergence excessive Inadequate subgingival extension Slight margin	Convergence grossly excessive or divergent Excessive subgingival extension Distinct ledge present
	LINE ANGLES AND WALL SURFACES	Preparation rounded and smooth	Preparation slightly rough	Preparation decidedly rough and sharp	Preparation excessively rough and sharp
	GINGIVAL CLEARANCE	Gingival clearance between 0.5 and 0.75mm	Gingival clearance between 0.75 and 1mm OR 0 and 0.5 mm		Gingival contact not broken OR >1mm
	FACIAL AND LINGUAL REDUCTION	Minimal: rounded occlusal bevel/line angles	Reduction extends beyond occlusal 1/3		Removal of facial bulge: ledge/chamfer created
	RETENTION	Retentive: snap fit resistance to removal with spoon excavator		Loose fit: gentle resistance to digital pressure	Loose fit: no resistance to digital pressure
RESTORATION: SSC ADAPTATION	CONTACTS/OCCLUSION	Marginal ridge height equal to adjacent tooth Proximal embrasures and contacts restored	Marginal ridge height slightly above or below adjacent marginal ridge (<0.5mm) Proximal contacts visually closed		Marginal ridge height excessively above or below (>1mm) adjacent marginal; ridge Occlusal contact not existent Proximal contact visually open
	OTHER CRITICAL ERRORS			Damage to adjacent tooth that can be polished out	Damage to adjacent tooth that cannot be polished out Incorrect tooth prepared

DIAGNOSIS AND TREATMENT PLANNING (DXTX)

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
HISTORY	Correctly identifies all significant general and oral health problems in patient Hx.	Failure to identify significant psychosocial issues in patient Hx.		Failure to recognize potentially life threatening medical problem. Failure to address patient's chief concerns.
EXTRAORAL / INTRAORAL EXAM	Correctly differentiates normal from abnormal findings.	Failure to differentiate normal from abnormal findings.		Failure to recognize possible oral cancer.
	Identifies significant positive findings.	Failure to identify significant positive findings.		Ignoring positive findings when developing and phasing an appropriate plan.
ANALYSIS OF DIAGNOSTIC TESTS AND RECORDS	Appropriate selection and interpretation of diagnostic tests/ Appropriately uses school and national radiographic election criteria and proper interpretation of radiographs.	Inappropriate selection and interpretation of diagnostic tests/ Failure to use school and national radiographic selection criteria correctly or failure to properly interpret radiographs.		Lack of diagnostic testing that leads to patient mistreatment.
RISK ASSESSMENT	Accurate categorization of risk.	Miscategorization of risk.		Miscategorization of risk that results in overtreatment or undertreatment.
TREATMENT PLAN PHASING & SEQUENCING	Inclusion of each of the five phases of the treatment plan as appropriate.	Plan did not include all needed phases.		Sequencing definitive indirect restorations in absence of disease control.
	Plan appropriately sequenced according to the needs and priorities of the patient.	Plan not phased to meet patient's needs and/or priorities.		Improper phase or sequence that places the patient at risk for life threatening emergencies.
INFORMED CONSENT	Plan generated with full understanding and collaboration with the patient.	Patient not fully informed of diagnoses, Tx options and attendant risks, benefits, costs.		No documentation of informed consent.

EDENTULOUS RECORD BASE OCCLUSAL RIM

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING		CRITICAL ERROR
ADAPTATION	Record base is well adapted to cast. There is no rocking. Borders fill the vestibules and are smooth and without any sharp edges. Cameo surface is smooth.	Record base has posterior opening of 1 mm and/or a border does not fill vestibule and/or border has sharpness and/or cameo surface has minor irregularities.	Record base has posterior opening between 1-2 mm and/or 2 borders do not fill vestibules and/or have sharpness and/or cameo surface has a major irregularity.	Record base has posterior opening greater than 2 mm and/or rocks on cast and/or multiple borders do not fill vestibules and/or major sharpness of borders and/or multiple major irregularities of cameo surface.
ADAPTATION VESTIBULE DEPTH	Record base is well adapted to cast. There is no rocking. Borders fill the vestibules and are smooth and without any sharp edges. Cameo surface is smooth. Occlusal rim follows curvature of arch. Width is a uniform width between 8-10 mm. Rim ends in front of tuberosities. Labial and buccal surfaces are full and flush to outer aspects of labial and buccal borders and surface of rim is smooth and even. No wax on any border.	Record base has posterior opening of 1 mm and/or a border does not fill vestibule and/or border has sharpness and/or cameo surface has minor irregularities. Occlusal rim does not follow curvature or width is between 8-10 mm but not uniformly or a portion of rim is <8 mm or >10 mm, or rim goes beyond tuberosities, or part of rim is not flush and full with labial or buccal border or surface of rim is not smooth and even or there wax on border.	Record base has posterior opening between 1-2 mm and/or 2 borders do not fill vestibules and/or have sharpness and/or cameo surface has a major irregularity. A combination of 2 of the above.	Record base has posterior opening greater than 2 mm and/or rocks on cast and/or multiple borders do not fill vestibules and/or major sharpness of borders and/or multiple major irregularities of cameo surface. A combination of 3 of the above.
VESTIBULE DEPTH TRAY BORDER	Occlusal rim follows curvature of arch. Width is a uniform width between 8-10 mm. Rim ends in front of tuberosities. Labial and buccal surfaces are full and flush to outer aspects of labial and buccal borders and surface of rim is smooth and even. No wax on any border. Occlusal rim is parallel to base of cast in sagittal and frontal planes. Anterior length of rim is 22 mm from highest point of border, in central incisor region immediately adjacent to labial notch, to incisal edge of rim.	Occlusal rim does not follow curvature or width is between 8-10 mm but not uniformly or a portion of rim is <8 mm or >10 mm, or rim goes beyond tuberosities, or part of rim is not flush and full with labial or buccal border or surface of rim is not smooth and even or there wax on border. One portion of occlusal rim is not parallel either in sagittal or frontal plane, or anterior length is > 22 mm or < 22 mm by 1 mm.	A combination of 2 of the above. Occlusal rim is not parallel to base of cast either in sagittal plane or frontal plane in multiple areas or length is > 22 mm or < 22 mm by 2 mm.	A combination of 3 of the above. Occlusal rim is not parallel to base of cast in both sagittal and frontal planes and length is > 22 mm or < 22 mm by 2 mm or more.
TRAY BORDER BORDER POSITION	Occlusal rim is parallel to base of cast in sagittal and frontal planes. Anterior length of rim is 22 mm from highest point of border, in central incisor region immediately adjacent to labial notch, to incisal edge of rim. Labial flare of rim is between 8-10 mm from line that bisects the incisive papilla. Centers of posterior rims are 2 mm buccal to crest of posterior ridge (COPR) lines (6 mm buccal and 2 mm lingual from COPR line for 8 mm wide rim, 7 mm buccal and 3 mm lingual for a 10 mm width rim).	One portion of occlusal rim is not parallel either in sagittal or frontal plane, or anterior length is > 22 mm or < 22 mm by 1 mm. Labial flare is either > 10 mm or < 8 mm by 1 mm, or a center of one of the posterior rim is > 1mm or < 1 mm from COPR line.	Occlusal rim is not parallel to base of cast either in sagittal plane or frontal plane in multiple areas or length is > 22 mm or < 22 mm by 2 mm. Labial flare is either > 10 mm or < 8 mm by 1 mm or 1 center is > 2 mm or < 2 mm from the COPR line or both the centers of rims are > or equal to 1 mm or < or equal to 1 mm from the COPR lines.	Occlusal rim is not parallel to base of cast in both sagittal and frontal planes and length is > 22 mm or < 22 mm by 2 mm or more. Labial flare is > 10 mm or < 8 mm and both centers or posterior rims are > 2 mm or < 2 mm form the COPR lines.

EDENTULOUS REMOVABLE

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
IMPRESSIONS	All critical landmarks captured , student could define landmarks (Depth of vestibule, frena, posterior palatal seal area, palatal vault; Lingual extension, Buccal shelf, retromolar pad)	Some landmarks are not perfectly smooth/well defined, but student identified them and what the consequences would be	Some non-critical Landmarks not captured and not identified by student	Student could not identify landmarks, or missing critical landmarks (posteriorpalatal seal, retromolar pad)
	Borders properly extended: for definitive impressions, the material should extend to the depth of the vestibule without displacing tissues	Slightly Over or under extended, would require adjusting in restoration if not corrected	Grossly Over or under extended, but student identified and requested assistance to correct	Grossly over or under extended would result in ill-fitting Restoration.
	Good quality of impression	Small voids, bubbles, tears	Larger voids, bubbles or tears that may or may not affect the final restoration quality, but student identified and sled for assistance to correct	Large voids, bubbles, tears that would affect certainly the quality of restoration
MMR-TRI-N	Rims or try-in is adjusted to centric relation is appropriate for the patient	Centric relation is close, but may be slightly off. Close enough that Could be corrected at subsequent step.	Centric relation is incorrect, but student identified and requested assistance to correct	Centric relation is grossly incorrect or not evaluated
	Vertical dimension of occlusion (VDO) is appropriate for the patient (speech and esthetics are acceptable) Correct soft tissue support	VDO is close, but may be slightly off. Close enough that Could be corrected at subsequent step	VDO is incorrect, but student identified and requested assistance to correc	VDO is grossly open or closed, would result in poor restoration
	Appropriate esthetic evaluation	Soft tissue support; Midline slightly off or small cant within acceptable range	Soft tissues Slightly over or undersupported;	Student did not evaluate or did not ask patients opinion; soft tissues grossly over/under supported; midline grossly incorrect; smile display unacceptable
	Ideal phonetics: patient speaks all sounds clearly, and student appropriately evaluated	Phonetics are acceptable. Student may not have evaluated all, but understands concepts and how to improve	Patient cannot clearly pronounce all sounds (fricative or sibilant), but student identified and asked for help	Patient cannot say fricative or sibilant sounds, or phonetics not evaluated
	Occlusal plane is correct	Plane of occlusion slightly high or low (references: ½-2/3 retromolar pad)	Occlusal plane incorrect, but the student identified and asked for help	Reverse curve of spee not identified by student; He of occlusion grossly incorrect and would affect final restoration
	Occlusion and occlusal relationship appropriate for patient	Some occlusal contacts missing- could be tolerated or adjusted easily	Occlusion/occlusal scheme not ideal, but student identified and asked for help	Occlusal contacts not adequate: unilateral or heavy contacts,, or gross interferences not identified
	Prosthesis fully seated	Small interference or undercut remains, but able to seat	Student could not seat fully, recognized and asked for help	Pressure Indicating Paste (PIP) not used; prosthesis not well adapted, loose or rocking
	Occlusion is appropriately equilibrated	Some contacts missing, but bilateral contacts exist	Occlusion is incorrect, but student identified and asked for help	Patient not in CR/MICP as appropriate, occlusion not evaluated
	Patient feels comfortable with prosthesis, can insert and remove	Student identified all issues, even if unable to address	Some slight rough areas or overextensions not completely smoothed	Unaddressed sore spots; patient not asked, or cannot insert /remove prosthesis
INSERTION/ POST-OP	Vertical dimension of occlusion (VDO) is appropriate for the patient (speech and esthetics are acceptable)	VDO slightly open or closed, could be adjusted or accommodated	VDO incorrect, but student identified and asked for help	Vertical so open or closed that could cause complications; student did not evaluate VDO
	Esthetics are acceptable	Esthetics not completely ideal, but within acceptable range to clinician and patient	Esthetics not ideal, but student identified and asked for help	Unacceptable esthetics, or forgot to evaluate or ask patient
	Phonetics are acceptable	Phonetics are acceptable. Student may not have evaluated all, but understands concepts and how to improve	Patient cannot clearly pronounce all sounds (fricative or sibilant), but student identified and asked for help	Patient cannot say fricative or sibilant sounds

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELLOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT	No tissue damage and/or optimal isolation	Rubber dam placement requiring minor correction (such as flossing through contact point or use of caulking agent)	Rubber dam torn, or not retracted from the wings of the clamp	Not able to place rubber dam, incorrect tooth isolated, or clamp not ligated with floss
ACCESS PREPARATION – LOCATION AND SIZE	ANTERIOR: Access is in the middle third (MM1/3) of the palatal surface.	ANTERIOR: Access is shifted away from the MM1/3 palatal surface.	ANTERIOR: Access with encroachment on either marginal ridge.	ANTERIOR: Access is in any surface other than palatal/lingual.
	ANTERIOR: Access reflects the internal pulp chamber size (recognized by radiograph).	ANTERIOR: Access is undersized 1mm less than the confines of the pulp chamber; or oversized 1mm more than confines of the pulp chamber (recognized by radiograph).	ANTERIOR: Access is undersized with inadequate exposure of the pulp horns	ANTERIOR: Access is oversized 2-3 mm beyond the pulp chamber size (recognized by radiograph).
	PREMOLAR: Access is in the center of the occlusal surface.	PREMOLAR: Access is shifted away from the center of the occlusal surface.	PREMOLAR: Access with encroachment on either the marginal ridge or beyond the cusp tips.	PREMOLAR: Access which fails to expose the pulp chamber and / or leads to perforation of the crown
	PREMOLAR: Access reflects the internal pulp chamber size (recognized by radiograph).	PREMOLAR: Access is undersized 1mm less than the confines of the pulp chamber; or oversized 1mm more than confines of the pulp chamber (recognized by radiograph).	PREMOLAR: Access is undersized and fails to completely remove the pulp chamber roof	PREMOLAR: Access is oversized 2-3 mm beyond the pulp chamber size (recognized by radiograph) and leads to damage or perforation to the pulp chamber floor
	MOLAR UPPER: Access is in the mesial half of the occlusal surface, with the oblique ridge left intact.	MOLAR UPPER: Access is shifted away from the mesial half of the occlusal surface.	MOLAR UPPER: Access with oblique ridge totally removed or encroaching on either marginal ridge.	MOLAR UPPER: Access is in any surface other than the occlusal.
	MOLAR UPPER: Access reflects the internal pulp chamber size (recognized by radiograph).	MOLAR UPPER: Access is undersized 1mm less than the confines of the pulp chamber; or oversized 1mm more than confines of the pulp chamber (recognized by radiograph).	MOLAR UPPER: Access is undersized (just exposed- too small)	MOLAR UPPER: Access is oversized 2-3 mm beyond the pulp chamber size (recognized by radiograph).
	MOLAR LOWER: Access is mesial of the occlusal surface, slight shifted to buccal.	MOLAR LOWER: Access is shift away from the mesial occlusal surface.	MOLAR LOWER: Access with encroachment on either marginal ridge.	MOLAR LOWER: Access is in any surface other than the occlusal.
	MOLAR LOWER: Access reflects the internal pulp chamber size (recognized by radiograph).	MOLAR LOWER: Access is undersized 1mm less than the confines of the pulp chamber; or oversized 1mm more than confines of the pulp chamber (recognized by radiograph).	MOLAR LOWER: Access is undersized (pulp chamber roof exposed incomplete removal)	MOLAR LOWER: Access is oversized with damage to the pulp chamber floor or perforated
ACCESS PREPARATION – SHAPE	INCISOR UPPER: Triangle- with the Base incisally and the Apex towards the cervical.	INCISOR UPPER: Incomplete shape of the triangle.	INCISOR UPPER: Wide in mesial-distal direction, but still shape of triangle.	INCISOR UPPER: Access cavity encroaches beyond the cingulum
	INCISOR LOWER: Elongated triangle in an inciso-cervical direction.	INCISOR LOWER: Incomplete shape of the elongated triangle in an inciso-cervical direction.	INCISOR LOWER: Wide in mesial-distal direction, but still shape of the longated triangle.	INCISOR LOWER: Access cavity encroaches beyond the cingulum
	CANINE UPPER AND LOWER: Ovoid in an inciso-cervical direction.	CANINE UPPER: Incomplete ovoid shape.	CANINE UPPER: Wide in mesial-distal direction, but still ovoid.	CANINE UPPER: Access cavity encroaches beyond the cingulum
	PREMOLAR UPPER AND LOWER: Ovoid in a bucco-lingual direction.	PREMOLAR UPPER: Incomplete ovoid shape.	PREMOLAR UPPER: Wide in the mesial-distal direction, but still ovoid.	PREMOLAR UPPER: Any deviation of the B-L ovoid shape.
	MOLAR UPPER: Triangular with the base to the buccal, parallel to the outer buccal surface, and apex of the triangle towards the palatal.	MOLAR UPPER: Incomplete shape of the triangle.	MOLAR UPPER: Wide in the mesial-distal and/or buccal-lingual direction, but still shape of triangle.	MOLAR UPPER: Any deviation of the shape of triangle.
	MOLAR LOWER: Trapezoid, rhomboid, or rectangular in a mesio-distal direction	MOLAR LOWER: Incomplete shape.	MOLAR LOWER: Wide in the mesial-distal and/or buccal-lingual direction.	MOLAR LOWER: Any deviation of the shapes.
EXTENSION	ANTERIOR: Incisally: spare the incisal edge (2mm from incisal edge).	ANTERIOR: Not reaching the limits of ONE of the extensions	ANTERIOR: Going beyond ONE of the extensions	ANTERIOR: Not reaching ALL the limits of the extensions (too small) or going beyond ALL the extensions (too large).
	ANTERIOR: Proximally: spare the marginal ridge (1mm from marginal ridges).			
	ANTERIOR: Cervically: spare the cingulum.			
	PREMOLAR: B-L: from the buccal cusp to the base of the lingual cusp. M-D: spares the mesial and distal marginal ridges.	PREMOLAR: Not reaching the limits of ONE of the extensions	PREMOLAR: Going beyond ONE of the extensions.	PREMOLAR: Not reaching ALL the limits of the extensions (too small) or going beyond ALL the extensions (too large).

LOCAL ANESTHETIC

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
MONITORING VITAL SIGNS AND COMFORT	Correctly obtains vital signs preop and postop and identifies any signs that need to be addressed; monitors patient's comfort throughout procedure	Obtains vital signs pre-op and post-op but may not use appropriate size cuff or position it correctly, or is unsure whether to proceed and asks for guidance; monitors patient comfort	Obtains vital signs pre-op but is unaware that they used wrong size cuff or positioned it incorrectly; may proceed when inappropriate; may not take post-op vital signs; may not monitor patient's comfort	Fails to obtain vital signs preop and/or postop; proceeds with local anesthesia when it may be unsafe resulting in harm to the patient
PATIENT POSITION	Properly positions patient (supine unless clinically contraindicated)			Treats healthy patient sitting up during injection
TOPICAL ANESTHETIC	Applies appropriate topical anesthetic, at correct site, with the correct technique[1]; waits > 1 minute after application before injection	Chooses appropriate anesthetic, but may ask for guidance to locate the correct site; waits at least one minute	Knows to apply a topical anesthetic but unsure what to do	Does not apply a local anesthetic resulting in patient experiencing pain during the procedure
INJECTION PREPARATION	Selects appropriate anesthetic, needle, dosage and proper injection technique for procedure	Selects appropriate anesthetic and needle but inappropriate dosage or not most effective injection technique for the procedure	Selects inappropriate anesthetic, needle, or injection technique for the procedure	Uses an anesthetic, needle, or dosage (e.g., 4% solution for nerve block) that leads to patient harm
INJECTION TECHNIQUE	Uses stable finger rest, locates correct injection site, uses correct technique, including slow injection rate (about 1cc per minute)	Did not perform one of the technique components (finger rest, site, technique), requiring guidance	Did not perform two of the technique components (finger rest, site, technique), leading to delays in patient care	Uses incorrect technique (no finger rest; injection rate too fast) and proceeds without asking for guidance, leading to patient injury or inability to numb patient that leads to aborting procedure

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT	Excellent tissue management	Slight tissue damage	Moderate tissue damage	Severe tissue damage requiring a suture and/or loss of papilla
CALCULUS IDENTIFICATION	All calculus correctly identified	>90% of sites identified	>75% of sites identified	<75% of sites identified
CALCULUS REMOVAL	All calculus removed	>90% of detectable calculus removed	>75% of detectable calculus removed	<75% of detectable calculus removed
STAIN REMOVAL	All stain removed	>90% of sites with stain removed	>75% of sites with stain removed	<75% of sites with stain removed

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
CARIES DISEASE	Data collection	Assessed key risk indicators including a complete diet diary, performed biofilm evaluation and, when necessary, other risk factors (saliva tests, drugs usage, microbiologic tests)	Minor information lacking	Major information lacking	Did not gather data
	Problem solving/clinical decision making	Correctly assigned risk	Minor interpretation lacking	Major interpretation lacking	Did not interpret the information
PERIODONTAL DISEASE	Gather data	Assessed the following: PI, BoP, Tobacco Use, Diabetes status, Alveolar an Attachment Loos, Hx of Periodontitis	Minor information lacking	Major information lacking	Did not gather data
	Interpretation	Correctly assigned risk	Minor interpretation lacking	Major interpretation lacking	Did not interpret the information
OCCLUSION/TRAUMA	Gather data	Assessed key risk indicators including Hx of bruxism, tooth fractures; presence of wear facets, fremitus, mobility, craze lines, compromised cusp integrity	Minor information lacking	Major information lacking	Did not gather data
	Interpretation	Correctly assigned risk	Minor interpretation lacking	Major interpretation lacking	Did not interpret the information
ORAL AND MAXILLOFACIAL PATHOLOGY	Gather data	1. Evaluated all soft and hard tissues by visual, palpation, and radiographic methods; 2. Asked about risk factors for oral cancer (tobacco, alcohol, HPV)	Minor information lacking	Major information lacking	Did not gather data
	Interpretation	Correctly assigned risk	Minor interpretation lacking	Major interpretation lacking	Did not interpret the information

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
CARIES DISEASE	Counseling	Personalized orientation to patient	Minor orientation lacking	Major orientation lacking	Non-personalized orientation given
	Follow up	Reassessed risk factors and changes in these factors due to orientation given	Minor information lacking	Major information lacking	Did not reassess risk factors and improvements
PERIODONTAL DISEASE	Counseling	Personalized orientation to patient	Minor orientation lacking	Major orientation lacking	Non-personalized orientation given
	Follow up	Reassessed risk factors and changes in these factors due to orientation given	Minor information lacking	Major information lacking	Did not reassess risk factors and improvements
OCCLUSION/TRAUMA	Counseling	Personalized orientation to patient	Minor orientation lacking	Major orientation lacking	Non-personalized orientation given
	Follow up	Reassessed risk factors and changes in these factors due to orientation given	Minor information lacking	Major information lacking	Did not reassess risk factors and improvements
ORAL CANCER	Counseling	Personalized orientation to patient	Minor orientation lacking	Major orientation lacking	Non-personalized orientation given
	Follow up	Reassessed risk factors and changes in these factors due to orientation given	Minor information lacking	Major information lacking	Did not reassess risk factors and improvements

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
CASE PRESENTATION	Extremely well organized, logical format, accurate, explicit, well aware of indicated treatment modifications and treatment of potential complications	Thoughtful, signs of organization, unclear at times, mostly accurate grasp of medical concerns and required treatment modifications	Can list medications and medical concerns but doesn't know how they can adversely affect dental care. Aware of possible surgical complications but doesn't know how to avoid them or, if they occur, how to treat them.	Choppy, confused, inaccurate, unaware of how to manage treatment modifications or potential complications
STERILE FIELD	No breaks in sterility during surgery after patient is draped and surgeon is gloved/gowned	Few breaks in sterility	Several breaks in sterility. Unable to properly drape the patient with sterile towels that keep hair out of the surgical field. Forgets eye protection.	Many breaks in sterility
PATIENT POSITIONING	Patient positioned for optimum safety and comfort of patient and operator		Student unaware that putting patient in the supine position during administration of local anesthetic can minimize occurrence of medical emergencies such as syncope.	Patient sitting up (unless it is medically indicated); patient uncomfortable; operator uncomfortable
THROAT SCREEN	Throat screen present and ideally positioned for maximum effectiveness	Throat Screen present but not positioned to be completely effective	Gauze in mouth but completely ineffective.	No Throat Screen
ADEQUATE ANESTHESIA	Patient felt no pain during surgery	Patient felt some pain but was able to tolerate surgery	Student doesn't understand the anatomical structures involved during local anesthetic blocks and infiltrations. Student uses materials and techniques that could injure nerves.	Anesthesia inadequate to accomplish planned procedure
PROPER USE AND HANDLING OF INSTRUMENTATION	Instruments held with fingers not fist. Good finger rest used to avoid injury if instrument slips. No trauma to tissues outside the immediate extraction site.	Some unnecessary trauma to adjacent gingiva but not requiring repair	Student uses instruments in an ineffective manner.	Instruments used with excessive force causing damage to adjacent tissues, teeth, and restorations
CONTROL BLEEDING	Minimal oozing of blood	Mild oozing of blood	Student does not remove all granulation tissue from surgical site making it difficult to control bleeding. Student unaware of options available to control bleeding. Patient leaves clinic with gauze sticking out of the mouth.	Uncontrolled bleeding
SUTURING	Proper choice of suture material. Tissues anatomically correct. Knots away from tongue. Knots tight without blanching of tissues	Sutures properly positioned but somewhat loose	Student uses wrong suture material for to repair an intraoral wound thus causing irritation to adjacent tissues. Student wastes suture material by having very long "tails."	Soft tissue flaps not repositioned anatomically correctly. Gingival margins not aligned. Knots positioned toward tongue.
POST OP INSTRUCTIONS	Verbal and written instructions given. Well organized and definitely understood by patient.	Verbal and written instructions given but delivery somewhat confusing to patient	Student gives wrong information during post op instruction.	No verbal instructions given only written
PROGRESS NOTE	Organized, complete, descriptive, accurate	Mostly organized, complete, and accurate	Student leaves out important information and documentation such as post op vital signs, type of suture material, description of instrument sequence, etc.	Unorganized, inaccurate, or wrong/incomplete

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT			No damage and/or optimal isolation		Poor isolation and/or tissue damage
PREPARATION	EXTERNAL OUTLINE	Margin location ideal (0.5mm above the FGM)	Margin location slightly over or under-extended (± 0.5 mm)	Margin location decidedly over- or under extended (> 0.5 mm,< 1mm)	Margin location grossly over or under extended (>1mm)
				Margins decidedly irregular and recognized	Margin decidedly irregular and not recognized
		Margins regular in form	Margins slightly irregular	Minor damage to adjacent tooth and/or soft tissues	Severe damage to adjacent tooth and/or soft tissue
	INTERNAL FORM	Preparation extends into tooth as necessary for the chosen restorative material	These areas are slightly over or under-reduced (± 0.5mm)	These areas are decidedly over (0.5-0.8mm) or under-reduced	These areas are grossly over (> 0.8 mm) or under reduced
			Occlusal	Occlusal	Occlusal
			Axial Walls	Axial Walls	Axial Walls
			Cusp Bevel	Cusp Bevel	Cusp Bevel
	TAPER	Taper ideal (5-10° TOC)	Taper slightly excessive (10-15° TOC)	Taper inadequate <5°	Taper grossly excessive (>20° TOC)
				Taper decidedly excessive (15-20° TOC)	Gross undercuts (margin less than 0.5 mm after blackout)
				Minor undercuts	
	FINISH OF WALLS AND MARGINS, DEFINITION	Walls and margins smooth	Preparation slightly rough	Preparation decidedly rough or ill-defined and recognized	Preparation decidedly rough or ill-defined and not recognized
		Smooth/planar occlusal anatomy	Chamfer not ideal, but acceptable	Chamfer ill-defined or nonfunctional and recognized	Margin ill-defined or nonfunctional
		Chamfer width and form ideal		Debris remaining on the preparation	Lip or J margin
RESTORATION	SURFACE	Surface uniformly smooth, replicates normal texture	Surface slightly rough, pitted or lacking finish	Surface decidedly rough or pitted	Deeply pitted or grooved
	MARGIN INTEGRITY	Margin is smooth	Margins are slightly:	Margins are decidedly:	Margin open
		Margins is not short, long, or open	over-extended	over-extended	Gross overfinish
			under-extended	under-extended	Gross over-extension
	OCCLUSAL ANATOMY AND FUNCTION	Cusp planes, grooves and marginal ridges continuous with existing tooth form	Slightly over/under contoured	Premature occlusal contacts	Restoration fractured, missing
		Occlusion restored	Canine guidance Not maintained	Balancing or non-functional contacts exist	Gross hyperocclusion, no other teeth in contact
			anatomy lacks definition	Decidedly overcontoured, excessive depth of anatomy	Occlusal contact not existent
				Anatomy absent	
	AXIAL CONTOUR, AND PROXIMAL CONTACT	Axial contours continuous with existing tooth form	Slightly over- or under-contoured	Decidedly over-or undercontoured, outside normal physiologic/anatomic range	Grossly over- or undercontoured
		Proximal embrasures and contact restored	Proximal contact visually closed, lacks intensity	Soft tissue impingement	Proximal contact visually open
Common Path of Draw for FDP (bridge factor)			Common Path of Draw Exits		A common path of draw doesn't exist without modifying one or both preparations

PARTIAL EDENTULOUS IMPLANT FIXED

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
PREPARATION	ISOLATION AND TISSUE MANAGEMENT		No damage and/or optimal isolation		Poor isolation and/or tissue damage
	EXTERNAL OUTLINE	Margin location ideal (0.5mm above the FGM) Margins regular in form	Margin location slightly over or under-extended (± 0.5 mm) slightly irregular	Margin location decidedly over- or under extended (> 0.5 mm,< 1mm) Margins decidedly irregular and recognized Minor damage to adjacent tooth and/or soft tissues	Margin location grossly over or under extended (>1mm) Margin decidedly irregular and not recognized Severe damage to adjacent tooth and/or soft tissue
	INTERNAL FORM	Preparation extends into tooth as necessary for the chosen restorative material	These areas are slightly over or under-reduced (± 0.5mm)	These areas are decidedly over (0.5-0.8mm) or under-reduced	These areas are grossly over (> 0.8 mm) or under reduced
			Occlusal	Occlusal	Occlusal
			Axial Walls	Axial Walls	Axial Walls
			Cusp Bevel	Cusp Bevel	Cusp Bevel
	TAPER	Taper ideal (5-10° TOC)	Taper slightly excessive (10-15° TOC)	Taper inadequate <5° Taper decidedly excessive (15-20° TOC) Minor undercuts	Taper grossly excessive (>20° TOC) Gross undercuts (margin less than 0.5 mm after blackout)
	FINISH OF WALLS AND MARGINS, DEFINITION	Walls and margins smooth Smooth/planar occlusal anatomy Chamfer width and form ideal	Preparation slightly rough Chamfer not ideal, but acceptable	Preparation decidedly rough or ill-defined and recognized Chamfer ill-defined or nonfunctional and recognized Debris remaining on the preparation	Preparation decidedly rough or ill-defined and not recognized Margin ill-defined or nonfunctional Lip or J margin
RESTORATION	SURFACE	Surface uniformly smooth, replicates normal texture	Surface slightly rough, pitted or lacking finish	Surface decidedly rough or pitted	Deeply pitted or grooved
	MARGIN INTEGRITY	Margin is smooth Margins is not short, long, or open	Margins are slightly: • detectable with explorer • over-extended • under-extended	Margins are Decidedly: • detectable with explorer • over-extended • under-extended	Margin open Gross overfinish Gross over-extension
	OCCLUSAL ANATOMY AND FUNCTION	Cusp planes, grooves and marginal ridges continuous with existing tooth form	Slightly over/under contoured	Premature occlusal contacts	Restoration fractured, missing
		Occlusion restored	Canine guidance Not maintained anatomy lacks definition	Balancing or non-functional contacts exist Decidedly overcontoured, excessive depth of anatomy Anatomy absent	Gross hyperocclusion, no other teeth in contact Occlusal contact not existent
	AXIAL CONTOUR AND PROXIMAL CONTACT	Axial contours continuous with existing tooth form	Slightly over- or under-contoured	Decidedly over-or undercontoured, outside normal physiologic/anatomic range	Grossly over- or undercontoured
		Proximal embrasures and contact restored	Proximal contact visually closed, lacks intensity	Soft tissue impingement	Proximal contact visually open

PARTIAL EDENTULOUS REMOVABLE PARTIAL DENTURE (RPD) DESIGN

	MEETS EXPECTATIONS OF THE GRADUATE		PROGRESSING	CRITICAL ERROR
MODIFICATION/NEATNESS			Major connector of RPD framework decidedly ill-defined	Lines too ill defined to read
	Lines neat and well defined	Some lines ill defined or incomplete	Finish lines ill defined	Components drawn grossly out of proportion to wax pattern dimensions
	Appropriate colors used	Some colors inappropriate	Corrected lines not removed completely	Failure to tripod cast
MAJOR CONNECTOR	Properly designed	Minor deviations from proper design	Significant deviations from ideal design. Large areas impinging on gingival margins or floor of mouth	Gross design errors making major connector unusable
		Minor impingement on gingival margins, floor of mouth		
	Proper dimensions, located correctly with respect togingival margins and floor of mouth or palate	Minor deviations from ideal design on palate	Major deviations from ideal design on palate. Missing finish line	No major connector drawn
MINOR CONNECTOR	Properly designed	Design not ideal but reasonable	Unnecessary connectors present in design	Gross design errors making minor connector unusable
	Appropriate dimensions	Dimensions somewhat over or under sized	Dimensions obviously over or undersized	No minor connector drawn
			Missing components such as stops, gingival feet, physical retainer (meshwork)	
CLASP DESIGN	Proper clasp design for Kennedy Classification of cast	Clasp design has components in areas of undercut without indication of blockout or tooth reduction	Clasp design would not provide ideal retention	Clasp design inappropriate for Kennedy classification of cast
				Clasp retentive element placed in area without retentive undercut
	All components present and undercuts properly indicated for reduction or blockout		Clasp design missingcomponent such as reciprocal component	Clasp designed in area of significant tissue undercut
		Clasp design not ideal but would not potentially harm tooth or tissue	Inappropriate amount of retentive undercut	
			No soft tissue survey line	Failure to mark retentive undercut

PERIODONTOLOGY DURING DIAGNOSIS AND TREATMENT PLANNING (DXTX)

	EXPANDED RUBRIC	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
PERIO EXAM AND DATA COLLECTION	• Probe depth (+/-2mm) • Position of gingival margin • Attachment level • Bleeding on Probing/Suppuration • Mobility/Fremitus • Frucation involvement • Mucogingival deficiencies/condition • Occlusal analysis • Local factors (faulty restorations, etc.) • Plaque index	Complete and accurate examination technique and data collection	Incomplete and/or inaccurate examination technique and data collection	Incomplete and/or inaccurate examination technique and data collection	No periodontal examination performed
PERIO RISK ASSESSMENT	• Etiologic factors (plaque, local factors) • Risk factors, determinants, indicators	Accurate risk assessment	Inaccurate risk assessment	Incomplete risk assessment	No risk assessment
PERIO DIAGNOSIS		Complete and accurate periodontal diagnosis	Incomplete and/or inaccurate periodontal diagnosis	Incomplete and/or inaccurate periodontal diagnosis	No periodontal diagnosis
PERIO PROGNOSIS		Complete and accurate periodontal diagnosis	Incomplete and/or inaccurate periodontal diagnosis	Incomplete and/or inaccurate periodontal diagnosis	No periodontal diagnosis
PERIO TREATMENT PLAN		Complete and accurate periodontal treatment plan	Incomplete and/or inaccurate periodontal treatment plan	Incomplete and/or inaccurate periodontal treatment plan	No periodontal treatment plan

PRECLINICAL REMOVABLE PARTIAL DENTURE (RPD) DESIGN

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING		CRITICAL ERROR
MODIFICATION /NEATNESS	Lines neat and well defined	Some lines ill-defined or incomplete	Major connector of RPD framework decidedly ill defined	Lines too ill defined to read
			Finish lines ill defined	Components drawn grossly out of proportion to wax pattern dimensions
	Appropriate colors used	Some colors inappropriate	Corrected lines not removed completely	Failure to tripod cast
MAJOR CONNECTOR	Properly designed	Minor deviations from proper design	Design not ideal but reasonable	Clasp design not ideal but would not potentially harm tooth or tissue
		Minor impingement on gingival margins, floor of mouth		
	Proper dimensions, located correctly with respect togingival margins and floor of mouth or palate	Minor deviations from ideal design on palate	Dimensions somewhat over or under sized	Clasp design has components in areas of undercut without indication of blockout or tooth reduction
MINOR CONNECTOR	Major connector of RPD framework decidedly ill defined	Significant deviations from ideal design	Unnecessary connectors present in design	Clasp design would not provide ideal retention
		Large areas impinging on gingival margins or floor of mouth	Dimensions obviously over or undersized	Clasp design missingcomponent such as reciprocal component
	Finish lines ill defined	Major deviations from ideal design on palate		Inappropriate amount of retentive undercut
	Corrected lines not removed completely	Missing finish line	Missing components such as stops, gingival feet, physical retainer (meshwork)	No soft tissue survey line
CLASP DESIGN	Lines too ill defined to read	Gross design errors making major connector unusable	Gross design errors making minor connector unusable	Clasp design inappropriate for Kennedy classification of cast
				Clasp retentive element placed in area without retentive undercut
	Components drawn grossly out of proportion to wax pattern dimensions	No major connector drawn	No minor connector drawn	Clasp designed in area of significant tissue undercut
	Failure to tripod cast			Failure to mark retentive undercut

PREVENTIVE FLOURIDE

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT	Excellent tissue management/retraction with moisture control Tooth/teeth properly dried in all quadrants	Good tissue management/retraction Tooth/teeth not properly dried in one quadrant	Saliva contamination Inadequate moisture control Teeth were not dried on 2+ quadrants	Tissues were not isolated/teeth not dried, or poor moisture control resulting in fluoride ingestion and contamination
APPLICATION	Proper technique (amount and placement) and fluoride remaining on teeth	Proper technique (amount and placement) and majority of fluoride remaining on tissue	Inappropriate technique (amount and placement) Fluoride on soft tissue not teeth	Fluoride was not applied during the appointment or placement not targeted to teeth in 3-4 quadrants Fluoride on soft tissue not teeth
COMMUNICATION (POST OP INSTRUCTIONS)	Provide evidence-based information to the patient appropriate for the fluoride type	Lacks minor element in discussing instructions	Lacks major elements in discussing instructions, not individualized	Post-op instructions were not provided to caregiver, or inaccurate information that may result in harm

PREVENTIVE MAINTENANCE

	MEETS EXPECTATIONS OF THE GRADUATE		PROGRESSING	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT	Excellent tissue management	Slight tissue damage	Moderate tissue damage	Severe tissue damage requiring a suture and/or loss of papilla
REMOVAL OF PLAQUE AND CALCULUS	All plaque and calculus removed	>90% of plaque/calculus removed	>75% of plaque/calculus removed	<75% of plaque/calculus removed
STAIN REMOVAL	All stain removed	>90% of sites with stain removed	>75% of sites with stain removed	<75% of sites with stain removed
LOCAL MEDICATION DELIVERY	Appropriate delivery of local medication		Inappropriate delivery of local medication	

PREVENTIVE SEALANT

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	PROGRESSING	CRITICAL ERROR
ISOLATION AND TISSUE MANAGEMENT			No damage and/or optimal isolation		Poor isolation and/or tissue damage
PREPARATION	**Prophylaxis**	Free of plaque and calculus			Plaque and calculus present
	Etchant	Chalky white	Chalky white	Contamination	Contamination
	Dentin Adhesive	Even layer of DA applied and light cured			
					Pooling of DA or uneven layer
RESTORATION	**Surface Quality**	Light cured/smooth	Light cured/rough	Undercured/rough/requires finishing/retained	Undercured/rough/requires replacement/ not retained
	Marginal Integrity	Non-detectable/ all pits and fissures covered	Detectable/all pits and fissures covered	Flawed - minor/ not all pits/fissures covered	
	Occlusal Function	Ideal occlusion restored/maintained	Restoration in occlusion		Hyperocclusion

RADIOLOGY ACQUISITION

		MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	CRITICAL ERROR
Intraoral Radiography Image Quality (General, Regional, Local)	**INTRAORAL RADIOGRAPHY EQUIPMENT USE**	• X-ray unit turned on • Barriers placed on x-ray unit, chair and exposure control unit • Proper patient opened in Epic and MiPACS • Lead apron used if appropriate • Rectangular collimator used • Proper use of XCP equipment • Proper detector used • Correct radiographs taken • Correct exposure settings used • Infection control procedures followed • Images properly mounted Operatory cleaned up	• X-ray unit not turned on • Lead apron not used • Settings not according to chart some of the time	• No barriers placed • MiPACS not opened • Rect collimator not in place • Infection controlled not followed • Improper mounting of images • Operatory not cleaned up
	All Intraoral Radiographs	• Correct density and contrast • No vertical distortion • No cone-cuts • Occlusal plane parallel to receptor • Apices 5 mm or more from the edge	• Major deviation not affecting Dx • Major distortion not affecting Dx • Major cone-cut not affecting Dx • Major deviation not affecting Dx	• Major deviation affecting Dx • Major distortion affecting Dx • Major cone-cut affecting Dx • Major deviation affecting Dx
	Pericapical Radiographs	• No overlap of roots • Occlusal surfaces visible	• Apices less than 2 mm from the edge • Major overlap of roots not affecting Dx • Cusps missing	• One or more apices not visible • Major overlap of roots affecting Dx • Occlusal surface missing
	Bitewing Radiographs	• Vertically centered • Crestal bone clearly visible • No overlap of proximal surfaces	• Major deviation but all alveolar bone visible • More than 1/3 enamel overlap but less than 1/2	• Alveolar bone of maxilla or mandible not visible • 1/2 or more enamel overlap
	Anterior Periapical Radiograph	Central incisor contact centered	Major deviation, but all teeth visible	Not all teeth visible
	Lateral-Canine Periapical Radiograph	Lateral-Canine contact centered	Major deviation, but all teeth visible	Not all teeth visible
	Premolar Periapical Radiograph	Distal half of canine visible	Only canine enamel visible	No canine enamel visible
	Molar Periapical Radiograph	• All molars visible • Third molar area visible	Less than 1/2 of one molar visible	One molar not visible
	Premolar Bitewing Radiograph	Distal half of canine visible	Only canine enamel visible	No canine enamel visible
	Molar Bitewing Radiograph	Most distal surface visible		Distal surface not visible
	PANORAMIC RADIOGRAPHY EQUIPMENT USE			
	PANORAMIC RADIOGRAPHY IMAGE QUALITY			

RADIOLOGY INTERPRETATION

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
TIME MANAGEMENT	Student interprets a case in a reasonable time according to the difficulty of the case	Takes 50% more time than meets expectations	Takes 100% more time than meets expectations	Takes 150% more time than meets expectations
PROPER SELECTION CRITERIA	Students are able to determine if the radiographs they are interpreting meet selection Criteria guidelines	Students are 75% correct in identifying correct selection criteria	Students are 50% correct in identifying correct selection criteria	Students are 25% correct in identifying correct selection criteria
	Students are able to suggest selection criteria appropriate radiographs for the study they are interpretation if the series did not meet the guidelines	Students are able to suggest some selection criteria appropriate radiographs for the study they are interpretation if the series did not meet the guidelines	Students are able to suggest a few selection criteria appropriate radiographs for the study they are interpretation if the series did not meet the guidelines	Students are not able at all to suggest selection criteria appropriate radiographs for the study they are interpretation if the series did not meet the guidelines
DETECT FINDINGS	Students are able to detect a most dentoalveolar disease and defective restorations (levels to be determined)	Students are able to detect a majority of dentoalveolar disease and defective restorations	Students are unable to detect a majority of dentoalveolar disease and defective restorations	Students are not able to detect a less than half of dentoalveolar disease and defective restorations
	Students are able to detect a majority lesions and abnormalities of the jaws	Students should be able to detect most lesions and abnormalities of the jaws	Students are able to detect a majority of lesions and abnormalities of the jaws	Students are not able to detect a majority lesions and abnormalities of the jaws
	Students are able to recognize and identity all significant anatomic landmarks on 2D radiographs and most on 3D scans	Students should be able to recognize and identity all significant anatomic landmarks on 2D radiographs and most on 3D scans	Students should be able to recognize and identity all significant anatomic landmarks on 2D radiographs and most on 3D scans	Students are not able to recognize and identity all significant anatomic landmarks on 2D radiographs and most on 3D scans
	Students are able to distinguish between normal anatomy, soft tissues and artifacts in intraoral, panoramic and CBCT images	Students should be able to distinguish between normal anatomy, soft tissues and artifacts in intraoral, panoramic and CBCT images most of the time	Students should be able to distinguish between normal anatomy, soft tissues and artifacts in intraoral, panoramic and CBCT images only half the time	Students are not able to distinguish between normal anatomy, soft tissues and artifacts in intraoral, panoramic and CBCT images
	Students are able to correlate the normal anatomy of an intraoral, panoramic radiograph or CBCT image with the anatomy of a dry skull	Students should be able to correlate the normal anatomy of an intraoral, panoramic radiograph or CBCT image with the anatomy of a dry skull most of the time	Students should be able to correlate the normal anatomy of an intraoral, panoramic radiograph or CBCT image with the anatomy of a dry skull only half the time	Students are not able to correlate the normal anatomy of an intraoral, panoramic radiograph or CBCT image with the anatomy of a dry skull
DESCRIBE FINDINGS	Students are able to use appropriate terminology in describing radiographic findings	Students should be able to use appropriate terminology in describing radiographic findings most of the time	Students should be able to use appropriate terminology in describing radiographic findings only half the time	Students are not able to use appropriate terminology in describing radiographic findings
	Students are able to distinguish between radiographic features of disease and abnormalities versus normal anatomy and artifacts	Students should be able to distinguish between radiographic features of disease and abnormalities versus normal anatomy and artifacts most of the time	Students should be able to distinguish between radiographic features of disease and abnormalities versus normal anatomy and artifacts only half the time	Students are not able to distinguish between radiographic features of disease and abnormalities versus normal anatomy and artifacts
UNDERSTAND FINDINGS	Students are able to identify a disease category for a lesion or abnormality based on its radiographic signs	Students should be able to identify a disease category for a lesion or abnormality based on its radiographic signs most of the time	Students should be able to identify a disease category for a lesion or abnormality based on its radiographic signs only half the time	Students are not able to identify a disease category for a lesion or abnormality based on its radiographic signs
	Students are able to develop an impression (or working differential diagnosis) based on radiographic findings.	Students should be able to develop an impression (or working differential diagnosis) based on radiographic findings most of the time	Students should be able to develop an impression (or working differential diagnosis) based on radiographic findings only half of the time	Students are not able to develop an impression (or working differential diagnosis) based on radiographic findings.
	Students should be able to distinguish a benign lesion from a malignant lesion	Students should be able to distinguish a benign lesion from a malignant lesion most of the time	Students should be able to distinguish a benign lesion from a malignant lesion only half of the time	Students are not able to distinguish a benign lesion from a malignant lesion
MANAGE FINDINGS	Students are able to suggest one of the five options for follow-up after identifying a lesion consistent with best practices • do nothing • watch • follow-up with suggested imaging procedures and a time interval • refer for a biopsy • refer for surgery	Students should be able to suggest one of the five options for follow-up after identifying a lesion consistent with best practices most of the time	Students should be able to suggest one of the five options for follow-up after identifying a lesion consistent with best practices only half of the time	Students are not able to suggest one of the five options for follow-up after identifying a lesion consistent with best practices only half of the time

REEVALUATION

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING	BELOW EXPECTATIONS	CRITICAL ERROR
EVALUATION OF THERAPY	Complete and accurate re-evaluation of all delivered care	Complete re-evaluation, however elements are inaccurate	Incomplete and inaccurate re-evaluation of all delivered care/including risk assessment	
PROGNOSIS AND RISK ASSESSMENT	Complete and accurate evaluation of prognosis and risk assessment	Complete evaluation of prognosis and risk assessment but inaccurate	Incomplete evaluation of prognosis risk assessment	
PLAN OF ADVANCED CARE	Complete and accurate plan of advanced care	Complete evaluation plan of advanced care but inaccurate	Incomplete plan of care	
ORAL HEALTH SUSTAINABILITY INTERVAL	Appropriate assignment of oral health sustainability interval/based on risk assessment	–	Inappropriate assignment of oral health sustainability interval/based on risk assessment	
REFERRALS	Correctly identified potential need for referral of care	–	Incorrectly identified potential need for referral of care	

	MEETS EXPECTATIONS OF THE GRADUATE	PROGRESSING		CRITICAL ERROR
ADAPTATION	Wax relief and tray are well adapted to the cast. There is no rocking of the tray on the cast	Wax and/or trayWax and/or tray are not adapted well to the cast, resulting in minor gaps (1-2 mm). No rocking of the tray on the cast.	Wax and/or tray not well-adapted to cast, with minor gaps in multiple areas, or any gaps 2-3 mm. Tray does not rock on cast. There are some small cracks on the tray.	Larger gaps (>3mm) and/or tray rocks on cast. Tray is broken.
ADAPTATION VESTIBULE DEPTH	Wax relief and tray are well adapted to the cast. There is no rocking of the tray on the cast The depth of the vestibule is accurately marked on the cast. The tray border is 3 mm short of the vestibule.	Wax and/or trayWax and/or tray are not adapted well to the cast, resulting in minor gaps (1-2 mm). No rocking of the tray on the cast. The marked depth of the vestibule is incorrect (by <2 mm). Tray border is slightly over- or under-extended (2 mm or 4 mm).	Wax and/or tray not well-adapted to cast, with minor gaps in multiple areas, or any gaps 2-3 mm. Tray does not rock on cast. There are some small cracks on the tray. The depth of the vestibule is marked incorrectly, by > 2 mm. Tray border is within 1 mm or 5 mm from the vestibule.	Larger gaps (>3mm) and/or tray rocks on cast. Tray is broken. The depth of the vestibule is incorrectly marked by > 3mm. The tray border is at the depth of the vestibule, or > 5 mm short of the depth.
VESTIBULE DEPTH TRAY BORDER	The depth of the vestibule is accurately marked on the cast. The tray border is 3 mm short of the vestibule. The tray borders are about 2-3 mm in width. All borders are smooth. There are no rough or sharp edges. The tray is neat.	The marked depth of the vestibule is incorrect (by <2 mm). Tray border is slightly over- or under-extended (2 mm or 4 mm). Tray borders are >3 or <2 mm in some areas, but smooth. Or tray borders are 2-3 mm with slightly rough, sharp, or uneven edges. Tray may have slight imperfections.	The depth of the vestibule is marked incorrectly, by > 2 mm. Tray border is within 1 mm or 5 mm from the vestibule. Tray borders are < or equal to 1 mm or > 4mm in a few areas, but smooth. Or borders are 2-3 mm, but multiple rough, sharp or uneven edges. Tray is not neat.	The depth of the vestibule is incorrectly marked by > 3mm. The tray border is at the depth of the vestibule, or > 5 mm short of the depth. Tray borders are <1 or >4 mm wide throughout, with generally rough, sharp, or uneven edges. Tray is poorly made.
TRAY BORDER BORDER POSITION	The tray borders are about 2-3 mm in width. All borders are smooth. There are no rough or sharp edges. The tray is neat. The handle position and/or size would not interfere with border molding. The handle is centered on the tray, where the dental midline would be.	Tray borders are >3 or <2 mm in some areas, but smooth. Or tray borders are 2-3 mm with slightly rough, sharp, or uneven edges. Tray may have slight imperfections. The handle position and/or size would not interfere with border molding. Handle is slightly off center.	Tray borders are < or equal to 1 mm or > 4mm in a few areas, but smooth. Or borders are 2-3 mm, but multiple rough, sharp or uneven edges. Tray is not neat. Handle may interfere with border molding movements. Handle is significantly off center and/or not over the ridge.	Tray borders are <1 or >4 mm wide throughout, with generally rough, sharp, or uneven edges. Tray is poorly made. Handle would certainly interfere with border molding movements. Handle is would be difficult to hold and is not functional.