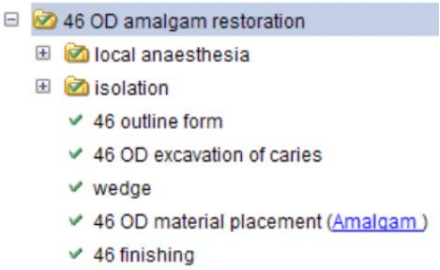


3 Intro to IGP sessions in orientation

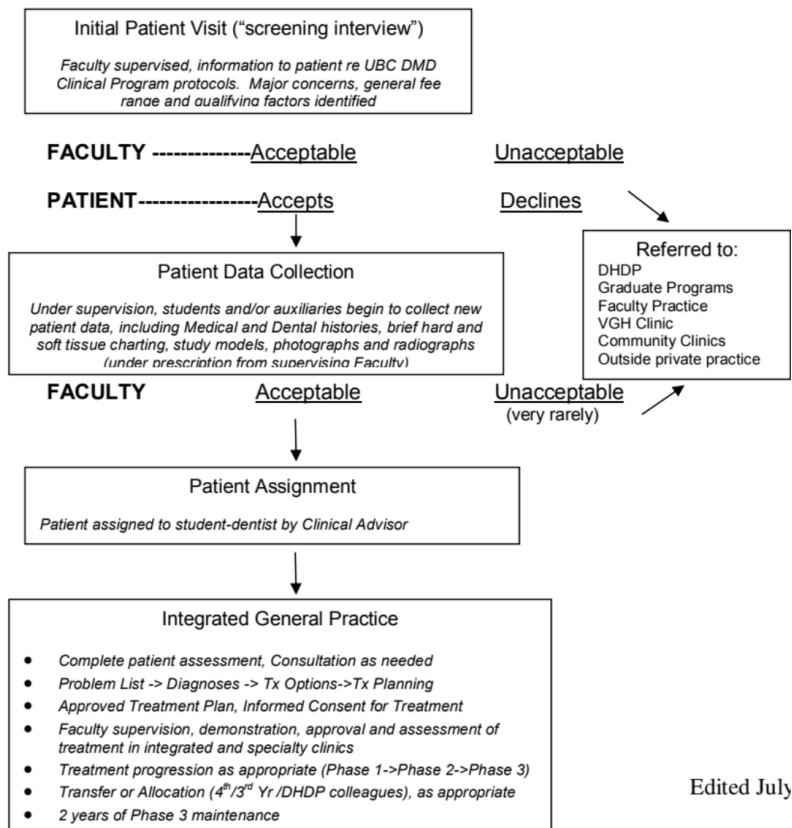
- ICC vs IGP
 - Integrated clinic care: old model of clinic practice at UBC. Did not imply a general practice model
 - Integrated general practice: more realistic teaching approach
 - General practitioners (students) only take on cases they are competent with
 - Concept of IGP
 - Different disciplines provided simultaneously
 - Realistic teaching environment
 - Patient friendly
 - Prosthodontic department consults
 - Only for surveyed crowns, >3 fixed unit Tx plan, FDP, difficult pros procedures
 - 3 fixed unit pros also requires consult from Dr. Fogelman or Dr. Gardner
 - Pros consults will act as the 2nd signatures on these procedures (1st signature being your clinical instructor)
 - Actions that may cause penalties in professionalism
 - Not booking your patient into Axiom prior to appointment
 - Makes it difficult for front desk to track your patients, and dispensary won't have your equipment ready
 - Unbooking a chair if you have no patient – this will allow someone on independent study to book your chair in
 - Tattoos
 - All swipes not being received prior to 5pm
 - Poor charting on Romexis
 - All parts of the procedure should be documented (as seen on right)
 - LA should include type, amount, location, concentration
- 
- 3 step vs 6 step treatment plans
 - What's the difference? 3 step omits grouping problems, options, and detailing phases
 - 6 step is used for nearly all treatments
 - 3 step is only used in certain cases
 - Small modifications to 6 step plans (like adding fluoride rinse). Large modifications (like adding a resto) will require copying and re-making a 6 step Tx plan
 - Patient has a "P" perio designation (3 step approved after perio presentation)
 - Ortho patient
 - Endo patient
- Traits for patient centered care
 - Accountability
 - Competency – clinical instructors may need to step in for some procedures outside of student's competency
 - Honesty – patients must be given all Tx options
 - Self regulation
 - Image
- Treatment plan approvals
 - 3 step perio treatment plans must be approved by perio department
 - 6 step treatment plants can be approved by an IGP instructor
 - If phase 2 is planned as well, then a second instructor's approval is needed
 - Also, a QA pros form will need to be signed by these 2 instructors
 - If instructor #1 and #2 disagree, then a third opinion is needed via a prosth consult
 - Prosth consult will enter their recommendation as a free text note in the Tx plan
- CDSBC's definition of Patient Centered Dental Care
 - Put the interests of patients before the interest of the dentist/CDA in providing professional, safe, quality care
 - Do no harm
 - Respect the patient's right to confidentiality
 - Respect the patient's right and ability to make informed decisions regarding dental care

IGP III student guide

- Types of patients

- Normally screened “comprehensive care” patient**

- Managed by “comprehensive care” (forming a full treatment plan)
 - Patient initially comes in for an interview about dental needs, and explaining what UBC can offer
 - Basic screening exam for “data collection” is done by a student or faculty member
 - Brief med Hx, dental Hx, study casts, photos, initial perio assessment, and radiographs
 - However, casts and radiographs are usually done during exam appts, not screening
 - The “screener” is a student as well – we will do this starting term 2



Edited July

- Urgent care patient**

- Goal is to deal with the chief concern. Patient can be encouraged to go with comprehensive care after
 - 5 rotations per week, with 3 students in a rotation in term 2
 - Many patients are prior UBC patients – there will be a med Hx to look at
 - If one of your patients has an urgent concern (like denture repair), place it into normal ICC sessions not urgent care sessions
 - Romexis 3 step care plan is used
 - Unless there is a prior 6 step already made, or a 6 step similar to it
 - Note: 6 step treatment plans are valid for 1 year
 - Common procedures are resolution of pain, swelling, infection, and tooth fracture

- Limited treatment patient**

- UBC students weren't getting enough endo experience
 - Some patients will be screened to be “endo only”
 - Least common type of patient
 - As a provider, you have 2 treatment plan options with these patients
 - 3 step endo Tx plan: endo → direct restoration → dismiss
 - 6 step endo Tx plan: endo → indirect restoration + crown → dismiss
 - This is much more work because you need mounted casts, custom trays, vacuform templates, and approval for Tx plan
 - Also perform a brief general visual exam for other issues

- Specific treatment patient**

- Patient might come from a private practice to UBC to get one procedure done for cheap
 - Examples: single crown, veneers, resto, etc
 - Perform general assessment but comprehensive plan not needed

- DHDP referred patient**

- Romexis 3 step plan should be pre-made already for DMD student
 - Comprehensive care plan not needed

- Clinical advisors
 - Clinic groups are made up of a 4th/3rd/2nd year buddy
 - Students are paired up with a 4th year depending on class standing and using the stratified random method
 - These group of students will be overseen by one of the 6 clinical advisors
 - Clinical advisors act as facilitators for students dealing with patients and practice management
 - Not responsible for summative student assessment
 - Role of the clinical advisor
 - Assign, allocate, transfer, and dismiss patients to optimize patient care experience
 - Assist students in treatment plan development and implementation
 - Deal with challenging patients
 - Interact with other faculty members to monitor and assess patient care
 - Quality assurance: record keeping, audits on patient progress, review student's patient pool
 - Other feedback regarding patient care
 - Meetings
 - Can be group practice meetings or individual meetings
 - Clinic advisors report student progress and patient management to the clinic director
- Introducing the patient to the ICC instructor – 7 sentence case presentation
 - Name, age, sex
 - Chief concern and history of that concern
 - Med Hx – highlights, medications, and how conditions are managed
 - Vital signs
 - Exam findings – EO, IO, findings around area of CC. If consults are required, also mention it
 - Other findings – radiographic, interpretation of tests
 - Student's Dx and Tx plan
- How to proceed step by step in treating a new screened patient
 - Patient is screened into DMD program and matched with a student
 - Student will book and do a complete patient assessment
 - Booking needs to be done on Axium – “pulls” can also be requested to minimize chitting
 - Note: findings may vary than what was recorded by the initial screening. This is because radiographs and such are not used, just a quick visual exam
 - Medical and dental history → must be swiped before proceeding
 - Extraoral, intraoral, dental, and periodontal exams
 - Caries risk assessment
 - Photographic survey, radiographic survey, diagnostic casts, working casts
 - 2 sets of alginate impressions are needed to make 2 sets of casts
 - Radiographs may be sent in from another dentist if recent
 - Follow ADA guidelines for radiograph indications
 - Generate a problem list based on the findings
 - Diagnose all problems → consultation may be required to get accurate diagnoses
 - Create treatment options for all problems
 - Discuss with the patient which options they want, and treatment plan what to do
 - Treatment plan should be created in Romexis, and also finalized into Axium
 - Treatment plans should be approved by the instructors/prosth consults
 - Prepare diagnostic casts and proper mountings in an articulator
 - Adequate radiographs and photos – follow ADA guidelines
 - It is valid for 1 year
 - In Romexis, there is a 3 step and 6 step treatment plan template
 - 6 step: use for all comprehensive treatment (patients undergoing phase 1, 2, 3)
 - 3 step: use for ortho, perio, endo, and minor procedures (fluoride rinse)
 - Patient should sign the UBC informed consent form before approval of the treatment plan
 - Written in patient's own words and signed off by patient
 - Patient needs to demonstrate adequate understanding
 - In the transaction notes on Romexis, write when the patient is next coming in
 - Self reflection on Axium

Perio pull	41009
Endo pull	39201
Resto pull	01204
Exam pull	01202

- How to proceed step by step in a recall patient
 - When are patients recalled?
 - When a treatment plan indicates recall after a phase I procedure
 - For instance, 3 month recall on a P_c perio patient
 - Otherwise, it is every 12 months
 - Do you need to do a full medical history?
 - Every 12 months, absolutely required
 - Every recall examination
 - Change in student assignment or allocation of the patient
 - **If a full med Hx is not required and the patient has no changes, then document in Romexis “no changes” → this can be swiped at any time in the appointment and you can start right away**
 - Patients with a significant medical history will need that disorder/condition asked about at every appointment. This includes conditions like:
 - CAD, CVD, HTN, anticoagulant use, antiarrhythmic use, inotropic agent use, diuretic use, bleeding disorders
 - HIV/AIDs, Hep B/C, immunosuppression, CCS use, Hx of radiation therapy
 - After the above criteria are met and swiped, proceed with the rest of the exam
 - Like a new patient, start a treatment plan if any procedures are to be planned
 - Photos not needed unless the patient needs a phase 2 procedure done
 - Self reflection on Axium
- Patient treatment phases
 - Phase 1
 - Extractions, endo, perio, caries, operative, provisional prosthesis
 - For perio, it is unfair to charge per unit time due to students’ speed. Rather, process the appointment as “perio package type ___” on Axium so they are only billed a fixed amount
 - U0010 swipe must be obtained at the end of phase 1
 - Phase 2
 - Prosthodontic treatment: fixed and removable
 - Phase 2 may take many years (and hence many re-done treatment plans) to complete due to patient financial limitations and time constraints
 - Therefore, there may be many phase 2 plans
 - When any phase 2 plan is complete, swipe with U0011
 - Phase 3
 - Maintenance: med Hx, exams, periodontal care, caries management
 - Must plan what will be re-evaluated during phase 3
 - Patients will remain in phase 3 for 2 years after the last U0010/U0011 swipe. Afterwards, they will be given to DHDP or recommended to go back to private practice
 - During phase 3, if a phase 1/2 procedure is required, the 2 year limit resets
 - For all phases
 - Write in the transaction notes when the patient is next coming in
 - Consent forms if necessary
 - Self reflection on Axium
- Patient transfer and request
 - Fill out the patient transfer form on connect, and hand it to your CA for sign and approval. Also give a copy of the form to your transferee
 - Transfers should be kept to a minimum, but can be permitted if the patient matches the criteria you are looking for
 - The patient you are given may not end up having the procedure you wanted, but you still need to give them comprehensive care from phase 1, 2, 3
 - 2 types of transfers
 - Completion of care: once transferred, the new clinician finishes care of the patient. This is preferred
 - Limited treatment: patient is transferred only for the one procedure, then transferred back
 - If a patient has an expired treatment plan, it is possible to reactivate it if there is no new diseases and plan is still appropriate
 - It is critical that the patient’s quality of work received and time to complete treatment is not negatively affected
 - Note: if the patient is being transferred within a 4th/3rd/2nd year buddy, then this process is not required

- Requesting new patients
 - Fill out a patient request form, which can be found in our OHC mailbox room
 - Give the patient form to Jonathan in the patient records room, across from Esteves' office
 - Patient request form will be CC'ed to the clinical advisor and reviewed
- Checking instructor evaluations
 - Must be done frequently
 - Axiom → info manager → clinical tab → student evaluations
- Dismissing patients

Reason for Dismissal	Phone Call	No-Contact Letter	Notes in Chart
Patient requests dismissal			Include note indicating why patient leaving
Unable to contact patient (phone # NIS or not correct)		Send NC form letter, giving your phone # and a deadline two weeks in the future	Include notes re: NIS phone # and date the NC letter was sent
Unable to contact patient (patient doesn't return messages left)	Leave 2 voicemail messages, at least one week apart (in case patient was out of town)	If no response to phone messages, send NC letter, giving deadline two weeks in future	Include notes re: dates of phone messages and date the NC letter was sent
All active treatment completed and patient has been in maintenance for two years	When booking PPR, inform patient of 2-year recall policy; if not further work required after PPR, refer to Faculty Practice, Staff RDH, DHDP or outside dentist		Include notes re: where the patient has been referred

- Use a patient dismissal form found on Connect and hand it in to a clinic staff member or patient assignment room
- Only clinical advisors can make the final decision on dismissing a patient
- Also on Romexis, document chronic tardiness, appointment failure, relocation, illness, and other reasons for dismissal
- Patients may defer treatment for up to 1 year for personal reasons. After the deferral, they will return to care with a PPR and re-start the treatment plans
- Benchmarks for 3rd year (not requirements)
 - 3 indirect fixed prosth
 - 1 PRDP
 - 10 surfaces of restos
 - 20 units of scaling
 - At least 1 multidisciplinary treatment plan
 - 1 reflection on vicarious learning achieved through participation in peer's presentations
- Treatment plan discussion with the patient
 - Cost and prognosis of each treatment option is discussed
 - Patient will pick one option for each problem group
 - Patient will fill out an informed consent form on the computer to confirm their understanding and expectations of cost
 - Informed consent = patient knows risks, costs, alternative treatment options, and benefits
 - Provide the patient with a printout of the treatment plan
 - If the patient demands their own treatment option that will not improve oral health, then they should be dismissed from Comprehensive Care program and recommended to see Urgent care or Faculty practice
- Receiving a patient who has a treatment plan on their profile already
 - Expired plan (>12 months) → new plan should be developed, even if unchanged. In rare cases (no new disease + plan is still appropriate), the IGP instructor can reactivate it
 - Current plan (<12 months) → if a patient has missed a PPR or recall which was a part of the Tx plan, then use clinical judgement to see if current plan is still valid
- Multidisciplinary treatment plans
 - Will need more than two swipes to get the treatment plan approved
 - The treatment can then be started
 - For receiving credit, it also needs to be swiped by the clinical advisor under the U0003 code
 - Note: U0003 swipe is for credit only. You can start treatment before getting this swipe

- Presentation of materials to faculty for treatment planning
 - Cases may need to be presented to clinical instructors, prosthodontic consultants, or clinical advisors
 - Diagnostic cast: must be kept for patient records in its intact state and not to be used for any work. If the patient has a prosthesis, take a cast of one with and one without
 - Diagnostic mountings: diagnostic casts are positioned on the WhipMix articulator using a facebow record, unless the patient has a complete removable denture
 - Radiographs: follow ADA guidelines and take radiographs as necessary
 - Clinical photos: if old photos exist, they can be used unless phase II plans are being developed
 - Other aids: bacterial assays, dietary analysis, probing depths, waxups
- What if you deviate from the treatment plan?
 - Small deviation (like adding a fluoride polish): make a separate 3 step plan
 - Any other deviation: get approval from IGP instructor → make new 6 step plan → sign new informed consent form
 - Patient cannot attend due to financial/medical reasons: plan a “return” date → defer patient → when patient comes back, do a PPR → continue care
 - Has to be discussed with CA if reason to defer treatment is valid
 - Dismissal should be up to 1 year. If longer, dismissal may be required
- Specialist consultations
 - How to do it: on the computer, click Consultant Notification and fill out the form to see a specialist
 - When to do it

Periodontics	-There will be a perio specialist during all ICC sessions, but not guaranteed to be available. These non-signup specialists will be for quick consults and questions -Consultation sign up is required for: <ul style="list-style-type: none"> -P cases -Mobility due to periodontal disease -Infrabony defects on radiographs -Mucogingival involvement or lack of attached gingiva -Significant subgingival deposits requiring extensive root planning -Pocketing 5mm+ with evidence of alveolar bone loss -Special periodontal needs -Sign up is required for P cases’ treatment
Endodontics	-Open + drain + pulpectomies can be monitored by an ICC instructor, but anything else needs a specialist -Crowning an endodontically treated tooth if RCT was not done at UBC -Treatment planning post and core (pre-fab and lab posts)
Prosthodontics	-Crowning an endodontically treated tooth -Treatment planning post and core (pre-fab and lab posts). Protocol is as follows: <ul style="list-style-type: none"> -Gutta percha should be removed using Touch n Heat to ↓ risk of perforation or loss of apical seal -Take a periapical to ensure >5mm of remaining GP below the post -2nd PA to ensure post is securely in place without voids <u>before cementation</u> (not necessary with fibre posts) -Fabrication of a provisional, <u>prior to final impressions</u> (IGP instructors can swipe too) -Surveyed crowns ->3 fixed units on a treatment plan → <u>reviewed by Dr. Gardner + Fogelman as well before prosth consult</u> -Fixed dental prosthesis -Difficult prosth procedures - <u>Prosth consult information is recorded in a free text note in Romexis</u> -Changes in occlusal vertical dimension on CRDP’s is OK, but on anything else it should be referred to grad pros
Oral medicine	-Dr Eli Whitney can provide consultation on mucosal lesions, TMD / facial pain, questions with Med Hx -Must get approval from an IGP instructor before contacting -Will be called if immediate consultation is needed. Otherwise, fill in a generic referral form
Oral radiology	-Interpretation should be done in medical grade monitors in OHC 210 and 211 -Radiology specialists can be consulted on an “as required” basis -Division of OMFR may require students to review all images during the course of treatment for the patient, for quality assurance and learning purposes -Images must be interpreted prior to finalizing a treatment plan

- UBC policies on other specific procedures

Replacement of old restorations	-Should not be replaced unless there is a large defect that will lead to failure in the immediate future -If the tooth will need to be crowned, then test existing restorations for retention and stability before crowning it -No evidence to show replacing failing restorations provide any benefit	
Fabrication of provisionals	-Must be deemed satisfactory by IGP instructor or prosth consult before proceeding to take final impression	
Routine prosthodontic procedures	-1~3 prosthesis or indirect restorations usually limited to: -1~3 single unit crowns with foundation restorations -3 unit FDP without a cantilever -Uncomplicated complete/partial removable prosthesis -Must be signed off with a green quality assurance form -Can be signed off in any IGP session	
Complex prosthodontic procedures	->3 prostheses or indirect restorations -≥3 unit FDP* -PRDP with periodontally weak support -Overdenture -Implant overdenture*	-Cantilever FDP* -Implant prosthesis -Immediate CRDP -Difficult pros cases -Implant crown*
	-* = usually needs to be referred to grad pros -Must be signed off with a red quality assurance form -Tx plans with 3+ fixed units must be reviewed by an IGP module coordinator prior to final approval	
Phase 1 prosthodontic procedures	-Repairs, relines, transitional acrylic PRDP's, provisional crowns -Require additional prosthodontic consultant approval regardless of phase	

- Performing procedures
 - Students will be “cleared” to do procedures as they are taught them
 - Requirements to begin 3rd year patient care (doesn't make sense as we haven't done these?)
 - Clearance from restorative 2 and 3 modules
 - Clearance from endodontic simulation clinics
 - It is the student's responsibility to perform within their scope and refer to IGP instructor otherwise
- Quality assurance
 - All chart entries, prescriptions, evaluation, and other forms are accurate and complete
 - Student must obtain all the swipes
 - Protect confidentiality of patient's records
 - False entries or forgery of a faculty's signature will be reported
 - Unreasonable delays in patient care will be reported
- Quality assurance chart audit: clinic instructor will select random patients for each student to check the following:
 - Updated Med Hx
 - Appropriate signatures, radiographs, interpretations, and progress notes
 - Treatment plan is properly designed with fee estimates included
 - Informed consent is signed with clear understanding from patient
 - Treatment is provided in a timely manner
- Quality assurance patient audit: random patients will be brought in to UBC (reimbursed \$25) to check for the following:
 - Presence of undiagnosed/unmanaged disease
 - Determine if treatment plan is appropriate
 - Quality of care provided
 - Patient satisfaction questionnaire
- Laboratory case management
 - Dr El-Adwar + Mr Lewis are our laboratory liasons
 - They manage our relationship with the commercial labs and assesses quality of their work
 - All casts must be mounted before sending to the lab
 - Night guard, occlusal appliance
 - CRDP/PRDP after occlusal registration stage
 - Crown and FDP cases after die trimming
 - In denture repair cases and altered cast impressions for PRDP's, send mounting plate along with the case

- Quality assurance with the lab
 - Lab tech's assessment (done on a blue form)
 - Lab tech will assess what you send as ACCEPTABLE or UNACCEPTABLE
 - Acceptable → work will be done and returned to room 237 in OHC
 - Unacceptable → work will not be done and given to front desk. You will be contacted to make appropriate measures with the patient. Usually due to a problem with the material or damage from shipping. In any case, tell Dr. El-Adwar
 - Student clinician's assessment (done on a pink form)
 - Pink form is filled out if you are unsatisfied with the work done from the lab
 - Also need a signature from an IGP instructor or pros consultant
 - Make a photocopy and give all sheets to El-Adwar in room 238 and make progress notes on Romexis as well
- "Surgical model" of support
 - When a student is scheduled in for clinic but does not have a patient, they should help a fellow student
 - This follows the surgical model where you also learn by shadowing/assisting someone else
 - U0006 code is used to indicate supporting a student the whole clinic session
- Referrals
 - UBC generic referral form can be found on the computer desktop
 - Also update on Romexis (via progress notes) that a referral form was submitted
- Paying for procedures
 - If an outstanding balance is present, it should be cleared before further treatment is given
 - Once swiped and approved on Axiom, the procedure should be registered at the reception
 - Walk patient to reception to pay for procedures
 - If patients are covered by the ministry, refer to email send by Jane Yip for coverage rules
 - Eligibility must be confirmed for all procedures prior to beginning treatment
 - Eligibility is based month to month, so it must be checked on a monthly basis
 - Generally, it covers basic dental procedures up to \$1000 every 2 years for adults
 - If patients have other third party coverage, the reception will provide a form
 - For major procedures, the coverage needs to be pre-approved before commencing
 - Receptionist will help you fill out a form and submit it on behalf of the patient
 - Wait time is generally 4~6 weeks
 - The acceptance/denial notice will be mailed to the patient, not us. Tell the patient to bring it to fax it (604-822-3708) or bring it in their next appointment
 - Waiting for approval is not necessary if patient agrees to pay in full even if coverage is denied
 - Detailed coverage from insurance companies can be found at Intranet → clinic operations manual → Fees, payments, and adjustments
 - Methods of payment
 - Cash
 - Cheques (personal, bank drafts, money orders. Business cheques and non personalized cheques not OK)
 - Bank cards (credit, debit)
 - Procedures requiring special payment
 - Lab fabrication: a 50% deposit is to be paid before sending Rx/impression to the lab and the other 50% paid before insertion/cementation of the prosthesis
 - Endodontics: 50% of the fee is payable at the first appointment. Do not progress until it is paid
 - Endo + crown/denture: if the endo was done at UBC, \$100 credit will be given to the endo once the final impression of the crown/overdenture is made
 - Failed restorations: if inadequate restorations are seen, re-enter it on Axiom but it will be waived
 - Relines: if a denture does not fit, a chairside reline is done and charged. If this reline does not fix the issue and a lab reline is required within 3 months, then the chairside reline is waived
 - Waxups: waxups are charged during treatment planning, but will be waived if patient agrees to the suggested treatment and progresses to phase 2 treatment
 - In any event of a procedure being waived, a fee waiver form needs to be submitted
 - Fee guide
 - Must log in to intranet to view
 - <https://secure.dentistry.ubc.ca/intranet/feeschedule/default.asp>

Overview of a patient exam

Exam	Area	Technique	Look for
Extra oral	TMJ	-1 lb pressure -Raise/lower/protrude -Left/right (lateral movement)	-Symmetry, noise, crepitus, clicking, popping, range of motion, opening pattern, condition of overlying skin -Ask about pain
	Masseter muscle	-2 lb pressure -Clench and don't clench	-One side weaker/bigger -Presence of pain or discomfort -Might as well do the parotid gland while clenching -Also do the pre auricular lymph nodes
	Temporalis muscle	-2 lb pressure -Clench/relax + repeat non stop -Temporal fossa into coronoid process	-Anterior border -Posterior border -Symmetry
	Posterior neck	-Palpate	-Posterior cervical nodes -Nodes are normally not palpable
	Base of skull	-Palpate	-Occipital nodes -External occipital protuberance + superior nuchal line
	Mastoid process	-Palpate	-Posterior auricular nodes -Process enlargement = mastoiditis
	Ear	-Visual and tactile -2 fingers on 1 ear	-Check the helix -Infections from piercings -Cancer due to contact from sun
	Scalp and hair	-Palpate	-Lesion: location, size, number, colour, consistency, shape, texture, borders, integrity (intact?), elevation, relation to midline, symptoms -Coarse hair: hypothyroidism -Psoriasis, Seborrhea, baldness
	Hair line	-Palpate	-Cancerous changes due to sun
	Forehead	-Palpate	-Symmetry -Pain, numbness (CN5), patches, erythema, nodules, ulcers, lesions, scars
	Frontal sinus	-Palpate	-Sensitivity = sinusitis
	Superior and inferior orbital ridges	-Palpate	-Symmetry -Asymmetric = fracture, cyst, neoplasm
	Cornea	-Visual	-Good: white, wet, free of ulceration -Bad: dry (CN7 issue or gland disorder) -Bad: yellow (jaundice)
	Eyes	-Visualize movement	-Coordinated eye movement = conjugate gaze = good -Abnormality = CN3/4/6 or muscle disorder
	Pupils	-Pupil size	-Dilated = CN3 disorder -Will constrict if light is shined (this reflex is controlled by CN 2 + 3)
	Conjunctiva	-Pull eyelid down	-Pale = anemia -Yellow = jaundice/ rules out hypercarotenemia
	Nose + ala	-Ethmoid sinus	-Sensitivity = sinusitis -Asymmetric = risk for chronic sinusitis -Most commonly fractured bone
	Zygomatic arches	-Look for infraorbital foramen (in line but inferior to superior orbital notch)	-Symmetry, fractures, trauma -Skin disorders
	Maxillary sinus	-Palpate	-Sensitivity = Sinusitis, but most pain is sent to the teeth
	Oral and buccal region	-Palpate	-Parotid gland -Pre auricular nodes
	Parotid duct + gland	-Palpate clenched masseter -Gland is big – go down to mandible	-Should feel a duct
	Mandible	-Palpate angle to mental protuberance -Roll skin over to feel inferior border	-Angle, ramus, body, inferior border -Facial artery pulse
	Lips	-Visualize	-Pigmentation, ulceration, blisters, cracking
	Anterior neck	-Roll between fingers and palpate	-Submental nodes (roll tissue under the chin) -Submandibular nodes (roll tissue under lateral mand)
	Tonsillar (jugulo-digastric) nodes	-Tip head back far -Palpate near angle, anterior to SCM	-Part of deep nodes
	Superficial SCM	-1 hand for resistance -1 hand for palpation	-Superficial cervical nodes -Start inferiorly up to the jugulodigastric (tonsillar) lymph node
	Deep SCM	-Move head down so SCM → flaccid -L/R hands push deep under SCM	-Deep cervical nodes
	Clavicle	-Move shoulder up and anterior -Palpate deeply	-Virchow's node (supraclavicular node): metastatic spread of GI, thoracic, pelvic, breast cancers
	Tracheal rings	-Palpate lightly -Move side to side -See swallowing	-Midline of the neck, but freely movable -Visible movement when swallowing -Pulses down = aortic aneurysm -Laryngeal prominence = voice box
	Cricoid cartilage	-Start @ sternal notch, move up -First bump = cricoid cartilage -Next bump = thyroid cartilage	-Feel for thyroid gland and isthmus. Both should be not felt -Will rise when swallowing

Exam	Area	Technique	Look for
Intra oral	Lips	-2 finger palpation -Visual inspection	-Lips and angles, herpes, nutritional deficiency, fungal infxn, -Vermillion border – 2 types of tissue -Minor salivary glands on the inside
	Frenum	-Pull lips up	-Height of attachment, can be a source of gingival recession
	Vestibule	-Pull lips around to see -Mirror may be needed in posterior	-Height -Keratinized areas
	Buccal mucosa	-Thumb = intra oral -Index = extra oral -Palpate and milk the duct w. thumb -Dry with 2x2 gauze first	-Parotid papilla (Stenson's duct leads to it) -Volume, viscosity, clarity of saliva -Saliva pH, flow rate, and buffer capacity -Linea alba → clenching action, tissue being squeezed
	Hard palate	-Indirect vision -Palpation	-Median palatine raphe -Keratinized paler tissue -Incisive papilla -Rugae (contains adipose tissue) -Median palatine torus
	Soft palate	-Indirect vision	-Fovea palatine (2 small holes, minor salivary glands) divides H/S palates -FP is next to the vibrating line – line for dentures -Uvula may be shifted to undamaged side of CNX
	Tonsillar area	-Vision	-Posterior/anterior pillars -Palatine tonsil examine for cancer and infection
	Floor	-Vision (direct + indirect) -Bimanual palpation (outside hand can apply more pressure than the inside) -Dry with 2x2 and see saliva	-High risk of oral cancer, cysts, infection -Sublingual caruncles (has opening of submandibular ducts) -Sublingual folds (sublingual gland) -Tori
	Tongue	-Ask to protrude and move side/side -Examine papillae -Pull with gauze to see sides and back -Palpate (bidigital)	-Motor tongue = CN 12 -Filliform = hairlike, Fungiform = dots, Circumvallate = V shape posterior -Foliate papillae (like sulcus terminalis), Foliate papillae -High risk of cancer (dorsum of tongue is different than base of tongue) -Plaque accumulation on the dorsum of tongue = halitosis
	Ridges	-Bimanual palpation	-Tori -Bony overgrowths (exostosis)
Dental exam	Caries risk	-Ask pt	
	Number of teeth	-Count (be systematic!)	
	Malposition	-Contact areas	-Linguo/facio/disto/mesio version
	Caries and fractures	-Dry to see better -Don't mistake for stains	-Chalky when dried = decalcification -Fillings and sealants
	Existing restorations		
	Contacts	-Use floss	-If teeth are visibly separated, then measure with probe
	Marginal ridge		-Should be level with the next tooth
	Regression and tooth structure loss	-Visual -Assess sensitivity -Use light air for sensitivity	-Visible dentin -Abrasion (aggressive brushing or hard brush), attrition (tooth to tooth), abfraction (non-carious loss of tooth structure from loading/stress at the CEJ), erosion (chemical loss of enamel at the gingival margin) -Chipping, small fractures
	Occlusion		-Class 1 molar: MB cusp (26) = B groove (36) -Class 2 canine: 23 cusp is anterior to embrasure of 33+34 -Overbite = % of mandible covered -Overjet = mm of projection -Crossbite = Mn tooth is buccal to Mx tooth -ICP contacts, contacts in laterotrusion and protrusion
Perio exam	Gingiva	-Visual	-Colour, contour (scalloped), consistency (firm), shape (knife edged), texture (stippled) -Look for minimally attached areas -Look for frenum interference
	Keratinized gingiva	-Roll test -Tension test (pull mucosa) -Visual test (kerat = pale pink)	
	Frenum	-Level of attachment	-At the anteriors and premolars
	Plaque	-See Ramfjord teeth -No tablets allowed	-16, 21, 24, 36, 41, 44
	Probe	-Be systematic -Parallel to long axis of the tooth	-Depth and bleeding -Free gingival margin to the base of the sulcus -Interdentally = angle it and make sure it's the right tooth
	Recession		-CEJ visible
	Furcation		-Class 1 (≤ 3 mm), Class 2 (>3 mm), Class 3 (end to end)
	Mobility		-Class 1 (≤ 1 mm), Class 2 (1~3mm), Class 3 (2mm or vertical)
	Calculate		-Bleeding on probing -Oral hygiene effectiveness

Caries management

- Theories of caries
 - Pathogenic theory: bacteria and yeasts cause an acidic imbalance within the biofilm on the surfaces of teeth
 - Chemoparasitic theory: biofilm coating teeth contain bacteria that metabolize fermentable sugars into acids which dissolve the mineral matrix of teeth
 - pH 6.0~6.4 is enough to demineralize children's teeth
 - pH 5.7~6.3 is enough to demineralize adults' teeth
 - It is possible to remineralize if calcium and phosphate is reintroduced to the area via saliva
 - Caries only begins if there is prolonged demineralization below pH 5.5 (remineralization can't occur)
 - The tooth structure collapses to yield a cavity
 - Extended ecological plaque hypothesis (Nominalistic theory): tooth demineralization depends on organism
 - Non mutans streptococci and actinomyces are mildly acidogenic → stable tooth structure
 - Addition of sugar will promote mutans streptococci, lactobacilli, and aciduric non-mutans strep. Furthermore, actinomyces, bifidobacterial, and yeasts proliferate → more acid → demineralization
 - Demineralization will cause caries to deepen and soften tooth structure
 - Will end up in a hypersensitive cavity
 - This theory is preferred at UBC because it explains caries on a continuum
- Diagnosis
 - Review etiological factors: patient Hx, socioeconomic status, general health, medications, diet, hygiene
 - Not based on a "cookbook" definition, rather it is multifactorial
 - International Caries Detection and Assessment System Coordinating Committee (ICDAS) says that caries management should involve detecting:
 - A demineralized lesion and its extent and activity
 - Risk of further demineralization and development of new lesions
 - Stabilize the clinical environment of not just the tooth but the patient as a whole
 - Diagnostic methods currently used:
 - Visual inspection: tooth must be cleaned and illuminated to see true colour and translucency
 - Radiographs: can show interproximal lesions but not the activity within the decay
 - Cannot be used alone to diagnose caries
 - Sequential radiographs can track progression/regression of lesions
 - Probes/explorers: should not be used as they can damage the mineral matrix
 - Acidogenic bacterial count: not useful for determining localized lesions, but good determinant of caries risk
 - Low count: risk of caries development is low
 - High count: not a valid predictor of lesion development
 - There is no "gold standard," and hence the error rate is high
- Indicators for caries
 - Diagnosis of caries and its restoration within the last 3 years is the biggest indicator of current risk to caries
 - Next, are clinically visible lesions
 - Visible white spot which indicates demineralization of matrix will usually turn into caries, if not managed
 - Further demineralization will cause crystal lattice to collapse, forming a cavity
- Managing caries
 - First step is to always assess risk and what is contributing to that risk
 - Caries questionnaires can be used to estimate a patient's risk
- Managing rampant caries
 - Interim therapeutic restorations should be placed
 - Involves excavation of carious tissue with a spoon excavator and without anesthesia then sealed with GI
 - Leftover bacteria will not cause continued demineralization if they are blocked from access to sugars
 - Once ITR's are complete, they can be replaced with more durable restorations
 - Should always be accompanied by other strategies to reduce risk of caries
- Assessment of risk
 - Balance of elevators and reducers
 - Risk can change quickly, if new medications are added or diet is changed
 - It is wise to frequently assess the patient's risk elevators and reducers

- Risk elevators

Diet	<ul style="list-style-type: none">-Low molecular weight sugar and carbs → gets metabolized into acidic byproducts-Naturally acidic foods like citrus fruits and drinks-Study in elders: multiple ingestions of sweetened drinks/snacks in a day → 2x risk of caries							
Low salivary function	<ul style="list-style-type: none">-Saliva's functions:<ul style="list-style-type: none">-Mechanical flushing of organisms and food remnants-Contains ions to remineralize teeth-Buffers acids via bicarbonate, proteins, and phosphate ions (mostly bicarbonate)-Has a unique carbonic anhydrase which allows bicarbonate to buffer more efficiently-Normal function:<ul style="list-style-type: none">-Stimulated: 1~2 mL/min of secretion mostly from parotid gland-Unstimulated: 0.3~0.5 mL/min mostly from submandibular gland-How to measure salivary function<ul style="list-style-type: none">-Refrain from eating or drinking 1 hour prior to test-Start with a dry mouth by getting the patient to swallow all saliva in mouth-Wait 3 minutes without swallowing-At the end of 3 minutes, spit all saliva into a tared cup-What causes saliva to be a risk elevator:<table><tr><td>Poor buffering capacity</td><td>-However, there is no single analysis which can grade the buffering capacity of all the ions in saliva</td></tr><tr><td>Salivary gland dysfunction</td><td><ul style="list-style-type: none">-Low flow due to medications (diuretics, antidepressants, hypnotics, ... etc)-Low flow due to glandular damage (Sjogren's syndrome, radiotherapy)-Low flow due to methamphetamine use-</td></tr><tr><td>Unstimulated flow rate <0.1 mL/min</td><td>Has been associated with increased caries, but its predictive value for diagnosing caries is still uncertain</td></tr></table>		Poor buffering capacity	-However, there is no single analysis which can grade the buffering capacity of all the ions in saliva	Salivary gland dysfunction	<ul style="list-style-type: none">-Low flow due to medications (diuretics, antidepressants, hypnotics, ... etc)-Low flow due to glandular damage (Sjogren's syndrome, radiotherapy)-Low flow due to methamphetamine use-	Unstimulated flow rate <0.1 mL/min	Has been associated with increased caries, but its predictive value for diagnosing caries is still uncertain
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Unstimulated flow rate <0.1 mL/min	Has been associated with increased caries, but its predictive value for diagnosing caries is still uncertain							
Acidogenic microorganisms	<ul style="list-style-type: none">-Strong evidence that mothers are a primary source of initial mutans streptococci colonization-Knowledge in this process is limited, but well known that organisms play a role							
Surface characteristics of teeth	<ul style="list-style-type: none">-Rough, pitted grooved, fissured surfaces are at greater risk than smooth surfaces-Provides a protective harbour for cariogenic microorganisms-Also applies to defective margins in restorations							
Dentures and orthodontic appliances	<ul style="list-style-type: none">-Complicates oral hygiene-Additional areas for protection for microbes-Patients who need prostheses are generally those who had high caries risk to begin with							
Socio-economic status	<ul style="list-style-type: none">-2x more people in lower incomes have caries than higher incomes-Likely due to diets high in fermentable carbohydrates, inadequate access to health information, poor access to preventative dental services							

- Risk reducers

Oral hygiene	-Tooth brushing reduces accumulation of bacteria in the mouth, but does a poor job in large interproximals -Systematic review of flossing on children showed no prevention in interproximal caries -Brushing should be accompanied by a fluoridated toothpaste	
Chlorhexidine	-Trial: 10% CHX varnish on adults w. dry mouth 1x/week for 4 weeks and 5 th time at 6 months -↓40% root caries, ↓14% coronal caries over 13 months -Long term effectiveness is unclear if left to the discretion of the patient	
Calcium phosphate	-Present in the saliva and act as a buffer for biofilm -Also present in toothpaste	
Sugar substitute	-Xylitol <ul style="list-style-type: none"> -Cannot be metabolized by most bacteria, and inhibit bacterial attachment -Favours growth of less virulent bacteria → could disrupt mother-child transmission of bacteria -Stimulates salivary flow in gum form -0.5g tabs, 0.5g lozenges, 1g gum -Recommended daily dose: 6~10g adults and 3~8g children. Anything more → plateau effect -Side effects: osmotic diarrhea and dehydration -Increase dose slowly in frail adults and young children 	

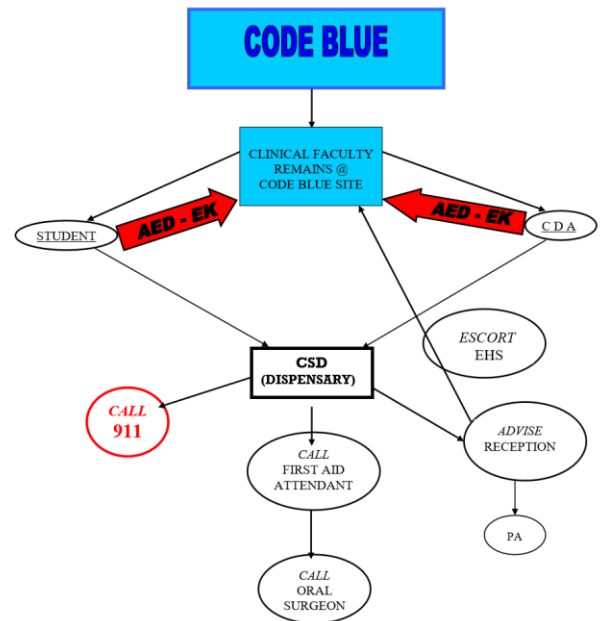
Fluoride	<ul style="list-style-type: none">-Fluoride can prevent, arrest, and reverse demineralization-Systemic prescription is not recommended due to adequate exposure via water supply and toothpaste-Likely a diminishing return with higher fluoride doses-Total daily intake should be 0.05~0.07 mg F/kg body weight to prevent fluorosis of developing teeth-Mechanism<ul style="list-style-type: none">-Fluoride binds to apatite crystals in teeth for form fluoroapatite-Fluoroapatite is more acid resistant and promotes remineralization by attracting Ca and PO₄ ions-Also antibacterial as it binds to bacterial enzymes that produce acids and metabolize sugars-Sources of fluoride:		
	Drinking water	1ppm	-Large reduction in prevalence of caries without mottling of teeth colour
	Paste/gels	Children: 1000 ppm Adults: 1000~1500 ppm	-Keep in mind the <u>amount</u> that should be dispensed in young children -~5000 ppm toothpastes exist, but benefits unknown
	Rinses	Children: 0.05%, 230 ppm Adults: 0.2%, 920 ppm	-Beneficial in children with limited fluoride exposure, but unknown in children already receiving toothpaste -Beneficial in adults with once daily use
	Varnish	5%, 22600 ppm	-Applied 2+ times annually shown to be beneficial -Must stay on tooth for 30+ minutes
	Tabs, drops, lozenges		-Systemic not as good as topical fluoride applications -Optimal when tabs/lozenges sucked for a prolonged time -May be beneficial in areas of limited F in water

<i>Risks</i>	<i>Management Strategies</i>
Frequent intake of fermentable sugars and carbohydrates between main meals	<ul style="list-style-type: none"> • Explain the acidogenic effect of frequent ingestions of sugars and refined carbohydrates; • Recommend non-acidogenic foods and snacks; • Advise to brush twice daily with fluoride toothpaste; • Prescribe for adults 0.2%, for children 6yrs and above 0.05% Sodium Fluoride mouthrinse daily; • Apply a fluoride varnish periodically*; • Prescribe sugar substitutes, e.g. xylitol lozenges (0.5gm) or chewing gum (1gm/pellet) to about 7gms/day.
Low salivary flow	<ul style="list-style-type: none"> • Assess the patient's physical and psychological health, and use of medications and drugs to identify the cause of the salivary disturbance. • Consult the patients' physician and pharmacist to substitute xerostomic with non-xerostomic medication if available; • Consider salivary substitutes or stimulants.
Poor oral hygiene; removable dentures; orthodontic appliances.	<ul style="list-style-type: none"> • Explain the significance of oral hygiene; • Advise to brush twice daily with fluoride toothpaste; • Demonstrate the proper use of a regular and an interproximal toothbrush and other oral hygiene aids; • Prescribe for adults 0.2%, for children 6yrs and above 0.05% Sodium Fluoride mouthrinse daily; • Apply a fluoride varnish periodically as needed*.
Pitted, fissured and rough dental surfaces	<ul style="list-style-type: none"> • Seal surface pits and fissures with a fissure sealant; • Smooth and polish rough surfaces and other surface defects.
Use of anticholinergic medications	<ul style="list-style-type: none"> • Explain the role of anticholinergic medications in dry mouth and caries; • Caution against frequent ingestions of sugars and refined carbohydrates; • Recommend non-acidogenic foods and snacks; • Advise to brush twice daily with fluoride toothpaste; • Prescribe for adults 0.2%, for children 6yrs and above 0.05% Sodium Fluoride mouthrinse daily; • Apply a fluoride varnish periodically as needed*; • Prescribe sugar substitutes, e.g. xylitol lozenges (0.5gm) or chewing gum (1gm/pellet) to about 7gms/day.
* Total daily fluoride intake from all sources should not exceed 0.05-0.07 mg F/kg body-weight for a prolonged period, especially for children <6 years of age..	

Medical emergencies

- Code blue
 - Decreased level of responsiveness
 - Fainting/collapse
 - Chest pain
 - Shortness of breath
 - Seizure
 - Presumed overdose
 - Severe allergic reaction
- Emergency kits
 - OHC crash cart → CSD return window
 - AED → ends of bays 14 and 15
 - Oxygen → ends of bays 2, 10, 15
 - Kit contents → see table →
- Who gets the crash cart?
 - Student, CDA, or first aid assistant will get the crash card after they have notified the CSD
 - Reception will announce over PA of a code blue
- Emergencies in the dental office
 - 74.4% of dentists reported a medical emergency in their career
 - 3% had to perform CPR

Drug or Equipment	Use
Epi-Pen Auto Injector	Acute allergic reaction
Benadryl	Antihistamine
Ventolin inhaler	Acute asthma
Glucagon Emergency Kit	Hypoglycemia
Nitro Spray	Chest pain (vasodilator)
Aspirin	Suspected Myocardial Infarct
Bag Valve Mask	Ventilation device
Pocket Mask	Ventilation device
Oral Airways	Maintain airway in an unresponsive patient
Glucos-tabs	Hypoglycemic Patient
Stethoscope	
Blood Pressure Cuff	
Portable Oxygen Units	



Emergency	Freq	Signs and symptoms	Reason	Management
Syncope	30%	-Brief loss of consciousness and muscle tone -Preceded by presyncope	-↓ blood to the brain -Due to heart failing, loss of vessel tone, lack of blood, or a combination -More serious causes: cardiac failure, subclavian steal syndrome, aortic stenosis	-Trendelenberg -Basic life support + monitor vitals -100% oxygen -Monitor vitals -Apply cold compress -EMS if LOC >5min, or >10 mins of recovery
Mild allergy	19%	-Urticaria -Pruritis -Angioedema -Erythema	-Allergy to latex, environment, or food	-Upright position -100% oxygen -Monitor vitals -Diphenhydramine 25~50 mg orally
Postural hypotension	18%	-Dizziness -Blurry vision -Weakness -Syncope -Confusion -Nausea -Bradycardia	-Change in body position causing drop in BP -Increased risk with nitrates, Parkinson's drugs, antipsychotics, neuroleptics, antianxiety, sedatives, hypnotics, TCA's, antihypertensives	-Lie down immediately -Trendelenberg -Oxygen -EMS if condition worsens or due to steroid use -Reposition slowly -Monitor vitals
Hyperventilation	10%	-Breathing >40 bpm -Impaired consciousness -Tightness of chest -Apprehension -Palpitation of heart -Fullness in throat -Tetany if prolonged -Perioral numbness	-Most commonly anxiety -Others: fever, aspirin OD, infection, stroke, diseases of brain or CNS	-Relax patient -Give reassurance ("you are not going to die" "you will be fine") -Speak softly -Have patient breathe through pursed lips -Cover pts mouth and one nostril → legal implications??

Emergency	Freq	Signs and symptoms	Reason	Management
Hypoglycemia	5.1%	<ul style="list-style-type: none"> -Blood sugar <2.5 mmol/L -Fatigue -Loss of consciousness 	<ul style="list-style-type: none"> -Excessive insulin -Alcohol -Excessive exercise -Missed meals -Illness/infection 	<ul style="list-style-type: none"> -Supine -Airway + monitor vitals -Treat blood sugar levels <2.8 mmol/L, even if asymptomatic -Conscious: oral glucose -Unconscious: activate EMS, give 1mg glucagon IM. Check [sugar] in 15 mins, and repeat glucagon dose if not normalized
Angina pectoris	4.6%	<ul style="list-style-type: none"> -Chest pain, crushing with retrosternal pressure -Pain, nausea, fatigue, SOB, sweating, weakness 	<ul style="list-style-type: none"> -Emotional stress -Exposure to hot/cold -Heavy meals -Smoking 	<ul style="list-style-type: none"> -100% oxygen -Place patient comfortably -Nitroglycerin SL spray q5min up to 15 mins (3 doses) -After 3rd dose, assume acute MI -Set up AED -Activate EMS if signs of hemodynamic instability + chewable aspirin 325mg
		<ul style="list-style-type: none"> -Angina pectoris can be prevented by consulting physician prior to dental treatment -Pharmacological preventative measures: oral sedation, preoperative nitroglycerin dose -Limit epinephrine to 0.04 mg max 		
Seizure	4.6%	<ul style="list-style-type: none"> -Brief blackout followed by confusion -Changes in behaviour (picking at clothing) -Drooling or frothing at mouth -Eye movements -Grunting and snorting -Loss of bladder/bowel control -Mood changes -Shaking of body -Sudden falling -Bitter metallic taste -Teeth clenching -Halted breathing 	<ul style="list-style-type: none"> -Abnormal sodium or glucose -Choking -Electrical shock -Epilepsy -Fever -Head injury -Heart disease -Illicit drugs -Kidney/liver failure -Stroke -Toxemia of pregnancy -Malignant HTN -Withdrawal 	<ul style="list-style-type: none"> -Supine position -Loosen clothing -Relocate instruments -Establish airway -Continue to observe
Bronchospasm	3%	<ul style="list-style-type: none"> -Narrowing of bronchi -Wheezing -Coughing -Shortness of breath 	<ul style="list-style-type: none"> -Genetic -Environment -Immune system -GERD -Medications 	<ul style="list-style-type: none"> -Prevented by salbutamol before dental treatment -Treatment: upright position + EMS -Monitor vitals + 100% oxygen -Salbutamol 2 puffs every 20 mins -If worsening, 0.3 mg epi IM every 20 mins and prednisone 40~60 mg orally
LA overdose	1.5%	<ul style="list-style-type: none"> -Sedation -Lightheadedness -Slurred speech -Mood alteration -Disorientation -Tremors -Tonic clonic seizures -Resp depression -Coma -CV collapse 		<ul style="list-style-type: none"> -Prevented by staying within maximum safe dose
Myocardial infarction	1.4%	See angina pectoris		

Emergency	Freq	Signs and symptoms	Reason	Management
Anaphylactic shock	1.2%	<ul style="list-style-type: none"> -CV collapse or even arrest (hypotension) -Respiratory compromise (bronchospasm) -Symptoms will show 5~30 min if injected, up to 2 hours if ingested -Flushed face, rash, urticaria, tingling, angioedema -Diaphoresis -Impending doom -Loss of consciousness -Incontinence -Cyanosis/pallor -Dizziness 	<ul style="list-style-type: none"> -Foods -Environment (latex, bee stings) -Medications 	<ul style="list-style-type: none"> -EMS -Supine -BLS + monitor vitals -Oxygen -Ventilate manually if necessary, using bag valve mask -Epi 0.3~0.5mg SL, SC, or IM -Diphenhydramine 25~50 mg IM/IV
Cardiac arrest	1.1%	<ul style="list-style-type: none"> -No pulse + breaths -Loss of consciousness -Gasping, laboured breathing -Can be preceded by chest pain 	<ul style="list-style-type: none"> -Acute MI -Cardiomyopathy -hypoxia -Medication reaction 	<ul style="list-style-type: none"> -EMS -BLS -Switch on AED
Acute adrenal insufficiency		<ul style="list-style-type: none"> -Weakness, fatigue -Headache -Nausea, vomiting -Myalgia, joint pain -Abdominal pain -Lethargy -Flank pain -HIS PALMS ARE SWEATY -KNEES WEAK ARMS ARE HEAVY 	<ul style="list-style-type: none"> -Adrenal gland damage (Addison's) -Pituitary gland damage (2ndary insufficiency) -Fever, dehydration, injury, surgery, anesthesia -Abrupt stopping of corticosteroid 	<ul style="list-style-type: none"> -Monitor vitals -Trendelenberg if BP < 90/60 -EMS -Dexamethasone 4mg IM -Continue to monitor vitals
Thyroid storm		<ul style="list-style-type: none"> -Tachycardia >140 -Hypotension <90 -Tremor -Nausea, vomiting -Abdominal pains -Pyrexia >41C 	<ul style="list-style-type: none"> -Exaggerated hyperthyroidism -Seen in pts with mod~severe antecedent Graves' disease -Precipitated by stress 	<ul style="list-style-type: none"> -EMS -100% oxygen -Place patient in comfortable position -Monitor vitals every 5 mins -Initiate BLS

Clinic operations manual (and infection control) – Grossly summarized

- Foreign body aspiration (crown, clamp, bracket)
 - Bring to UBC urgent care hospital to be assessed by a physician
 - Radiographs will likely be taken
 - Patient needs to tell the hospital that a verbal report of findings need to be reported to Dr. Esteves
 - Student does not need to stay with the patient
 - Student needs to fill in incident form and document on patient record
- Dress code
 - Nail polish is prohibited as it acts as a harbor for micro-organisms once the polish starts to break down
 - Religious bracelets OK, as long as it is covered up
 - Clinic scrubs needs to be cleaned daily
 - Long sleeved disposable gowns need to be worn in all cases involving aerosols/splatter. This includes during acrylic denture, custom tray adjustments, and invasive oral surgery
- Patient confidentiality of records
 - Information must be kept secure and not be used for any other purpose
 - Information can only be given out with the patient's express consent or by law
 - Request for records will need to be submitted as a written notice with reasonable notice
 - Patient will also need to sign a release form prior to records being copied
 - Records will be send electronically via an encrypted system, not through email
- Patient models
 - Stored in labelled boxes in JBM 248 with the patient's name, chart number, student's name, and type of cast
 - When patient file is closed, student should return models to Patient Allocation with the written chart
 - Models should be trimmed and boxed within 48 hours → will be discarded if left untrimmed for a week
 - Screening models are placed in the shelves by the south window
- Students treating students
 - Can be done during urgent care clinics for immediate dental pain, irritation, or other problems
 - Treatment in excess of urgent care is also possible, with approval from clinic directors
 - If procedures and treatment plan is approved, an additional 10% discount will apply
- New patient assignment
 - Student must call the patient within 1 week and exchange contact information
 - First clinic visit by the patient must be within 1 month of assignment
 - "Endo only" patients need a specific exam, not a complete exam done in comprehensive care
- Patient emergencies
 - If the patient calls the student, the student is obligated to help the patient with their emergency
 - Student may need to cancel other patients to treat the emergency right away
 - Student can also arrange for the patient to be seen in the soonest urgent care clinic session
 - If the emergency is outside of clinic hours, the student must use their judgement
 - True emergency (swelling, uncontrolled bleeding) → refer to emergency room
 - Not emergency → book in soonest clinic session, or send to private dentist. Patient will be reimbursed for urgent care fees if they bring the bill from the private clinic
- Oral surgery
 - Oral surgery on a patient that has not been to OHC before
 - First, sign the consent form
 - Will require a consultation prior to surgery, which is done at the start of the appointment
 - Consultation involves med Hx, radiographs, and a specific exam
 - Case presentation should be ready 45 minutes into the appointment
 - Oral surgery on a patient that is already in the undergrad/grad program will follow the treatment plan
 - Students should finish 15 minutes before the end of the clinic session
 - Student should book a post-op appointment with the oral surgery assistant one week after surgery if necessary
 - Should be seen by the same operator
 - Ensure that a chair is available and booked

- Prescribing medications
 - Prescription forms are available at the CSD
 - Faculty members must sign and write their College registration number on the prescription as well
 - Written in duplicate → one copy kept in paper chart
- Sedation
 - Combination of oral sedative + nitrous oxide is prohibited
 - Plans to use any sedative must be consulted with a clinical instructor at least 7 days prior to the session
- Oral biopsy
 - Can be done during oral surgery, but some complicated cases may need to be done at a private OMFS clinic
 - Ideally, student will perform the procedure but it will be up to the instructors to decide
 - Follow up appointment should be booked immediately after the procedure
 - Student is responsible for getting the results from UBC hospital oral biopsy service (604-822-7344) when available
 - Student should ensure result is obtained before next patient appointment. If not, then reschedule patient
 - Results should be discussed with the specialist first and then explained to the patient
 - Never disclose information regarding results over the phone
- Treatment to family
 - No student is to provide treatment to an immediate family member or significant other
 - Includes parents, children, siblings, and grandparents
 - Even in volunteer clinics where there may be a family member, the patient will be reassigned to another classmate
- Hypertension protocol

Dental treatment recommendations according to severity of hypertension²

Systolic	Diastolic	Medical risk factor ³	Dental treatment alteration
120-139	80-89	Yes/no	Routine dental care OK; discuss BP guidelines
140-159	90-99	Yes/no	Routine dental care OK; consider stress reduction protocol; refer for medical consult
160-179	100-109	No	Routine dental care OK; consider stress reduction protocol; refer for medical consult
160-179	100-109	Yes	Urgent dental care OK; consider stress reduction protocol; refer for medical consult
180-209	110-119	No	No dental treatment; refer for prompt medical consult
180-209	110-119	Yes	No dental treatment; refer for emergency medical treatment
>210	>120 *	Yes/no	No dental treatment; refer for emergency medical treatment

Antihypertensive drug interactions in dentistry²

Antihypertensive	Dental drug	Possible effect	Recommended action
Diuretics, e.g., furosemide; hydrochlorothiazide	NSAIDs, e.g., ibuprofen	Decreased renal blood flow, loss of antihypertensive effect	Warn patient about possible interaction; use alternate analgesic if hypertensive response
	Epinephrine, levonordefrin	Transient hypokalemia	Consult physician; avoid use if patient is hypokalemic
β-Adrenergic receptor blockers, e.g., propranolol; metoprolol	NSAIDs, e.g., ibuprofen	Decreased renal blood flow, loss of antihypertensive effect	Warn patient about possible interaction; use alternate analgesic if hypertensive response
Nonselective β-blockers, e.g., propranolol	Epinephrine, levonordefrin	Hypertension and bradycardia	Use cautiously; monitor blood pressure
ACE inhibitors, e.g., captopril	NSAIDs, e.g., ibuprofen	Decreased renal blood flow, loss of antihypertensive effect	Warn patient about possible interaction; use alternate analgesic if hypertensive response
Centrally acting α-receptor agonists, e.g., clonidine	CNS depressants, opioid analgesics	Increased CNS depression	Use cautiously
Peripheral adrenergic neuron blockers, e.g., guanethidine	Epinephrine, levonordefrin	Increased cardiovascular responses to vasoconstrictor	Use cautiously; monitor blood pressure

- Antibiotic prophylaxis in joint replacement
 - Studies found bacteremias to involve bacteria outside of the mouth. Few prosthetic joint infections have an observable and clearly defined relationship with dental procedures
 - Conclusion is that antibiotic prophylaxis is not recommended
 - However, if the patient presents with a note from a physician requiring coverage, then they are to be contacted to ask more information and see why
- Nitrous oxide and oxygen protocol
 - Student giving nitrous should have prior permission from clinical instructor and the student must have an assistant (another student). Never be alone with a sedated patient
 - Signed consent form needed from the patient or parent guardian
 - If the student needs to leave the operatory, nitrous should be discontinued and 100% O₂ given for 5 minutes
 - Steps in administering
 - Physically open nitrous and oxygen tanks → set oxygen to 6L/min initially, but adjust PRN
 - Patient should be supine
 - Place nose piece in a comfortable position and wait for 2-3 minutes
 - Check Section IIIB for more detailed instructions on titrating dose
- Cubicle cleanliness
 - Keep it clean and only put dental instruments on counter tops
 - At the end of the day, put the chair in cleaning position (position #4)
- Lab interaction
 - When printing a lab prescription form, it is beneficial to show it to your IGP instructor before sending it off
 - Prosthodontic consult must review and authorize the form with an electronic signature via the swipe card
 - Then, it will automatically be uploaded to Romexis
 - Print 1 copy to send to the lab with the case material
 - There are 6 dental labs, and you will be assigned to one at random. However, you will stick to 1 lab during all the steps required with one patient
 - OHC 237 will have outgoing cases and cases in progress
 - OHC 238A will have completed cases which will not be released until 50% of the remaining fee is paid by the patient
- Radiology – retake or no retake?

Situation	Retake?	If yes, how?
Over exposed (dark radiograph)	Yes	Correct the setting for proper site
Under exposed (light radiograph)	Yes	Correct the setting for proper site
Exposed PSP on wrong side	No	Flip horizontally in software
Cone cut	No, unless critical area missed	
Cone cut in endo	Yes	Repositioning
Foreshortening (vertical angulation)	No, unless for measuring endos	
Elongation (vertical angulation)	No, unless for measuring endos or apical area is cut off	
Overlapping of interproximals (horizontal angulation)	Yes	

- How to request a retake
 - Go to radiology tab on Romexis
 - Click on “retake request” and have it swiped by an instructor
 - If a supplementary radiograph is needed, click on “indication and request”
- QA discrepancies
 - Most commonly due to:
 - Not updated medical history
 - Record unapproved by instructors
 - Uninterpreted radiographs
 - Incomplete/inaccurate entry of notes and procedures for billing
 - Initial QA report will be generated in August, with the deadline to fix it being the end of September
 - Thereafter, a monthly QA report will be generated and will be due on the 20th of every month
 - Leaving QA discrepancies will lock a student out of Axium and Romexis until there is a meeting with a clinical director to get the issue fixed

	*Does Not Meet Expectations: Shows frequent lapses in these behaviours and/ or makes critical errors	Borderline: Shows occasional lapses in these behaviours, with no critical errors	Meets Expectations: Demonstrates most of these behaviours most of the time, with no critical errors	*Exceeds Expectations: Consistently demonstrates all of these behaviours
Professionalism -Sensitivity to cultural, social and economic situations -Ethical behaviour, proper dress code and grooming -Teamwork, accepts feedback constructively -Effective communication, verbally and written, with patients, peers and faculty -Independent access, retrieval and evaluation of relevant information	-Regularly unshaven or untidy scrubs -Swears -Not considering patient's concerns -Frequently late and unprepared -Fails to return calls -Inappropriate comments in chart -Rude remarks in front of the patient about treatment provided by previous student dentist -Deflects responsibility -Neglects informed consent -Repeatedly forgets to approve med Hx -Neglects instructor to review key treatment steps -Neglects instructor to see treatment before dismissal -Begins treatment without supervision -Lying -Referral missing several components -Frequently forgets name tag -Neglects disease management to perform rehabilitative treatment -Fails to participate in the pre-session huddle	-Occasionally unshaven, bad/unclean attire -Tries to jump the queue at CSD -Uses slang in a professional report -Does not share instructor fairly with peers -Does not review/present patient chart adequately -Competitive behavior -Undermines another student's credibility -Inquires peers how to chart basic things -Uncertain verbal communication -Not sensitive to cultural needs -Keeps patient in long after schedule -Does not attempt to develop rapport -Hesitant at times in providing treatment and prefers someone to guide him/her through the procedure -Does not introduce patient to instructor or vice versa -Visible annoyance when pt selects alternative treatment -Does not return calls within 48h or 1 business day -Referral missing a component -Occasionally forgets name tag -Avoids/delays difficult treatment -Late to pre-session huddle	-Well groomed maintaining good clinical attire -Displays expected courtesy -Discourages patients from unwarranted treatment -Effectively communicates most options for Tx, risks/benefits and cost, before treatment -Active participant in team work activity -Regularly introduces bay instructor, assistants, etc -Helps other students in the group -Treats all patients equally -Concise, accurate and complete patient records -Discussion with peers/faculty using dental terminology -Using lay language to patients -Accepts constructive feedback -Follows up on contact in 48h or 1 business day -Consistently books 1 week in advance leaving some openings for changes of schedule or urgent treatment -Occasionally solicits feedback from instructors, patients -Good patient rapport -Referral complete that describes treatment discussed -Rarely forgets name tag -Prioritizes treatment appropriately -Works effectively with patients, peers, faculty	-Consistently well groomed + excellent attire -Ensures patient comfort -Communicates all reasonable options for treatment, risks/benefits and cost to patient before treatment -Translation services for patient if needed -Research pt' questions using EBP -Shares knowledge with peers -Exceptional leadership capabilities in group -Goes out of way to help peers who may be struggling -Accepts constructive feedback and takes actions to make improvements accordingly -Consistently books 2 weeks in advance leaving some openings for changes of schedule or urgent treatment -Consistently follows up contact well within 48 hours or 1 business day -Regularly solicits feedback -Excellent rapport with patients -Treats patients like family regardless -Passionate about dentistry and patient care -Referral is comprehensive providing a thorough well-written description of information provided to the patient, and the connection to the overall plan
Application of Knowledge -Asks thoughtful and relevant questions -Accurate self-assessment -Follows established clinical QA protocol	-Does not know the steps or procedure -No prior review of patient chart -Unable to answer questions, asks thoughtless questions -No attempt at self-assessment -Does not follow QA protocols -Full marks on self-assessment even when poor -Begins tx without an approved plan -Repeatedly pages consultant without direction from their ICC instructor	-Reviews patients chart but does not apply previous knowledge to current patient -Unable to answer some relevant questions -Asks some questions that could be found in readings -Performs procedure but without necessarily understanding -Weak self-assessment skills -Attempts to follow clinical QA protocols -Inadvertently pages the consultant without direction from their ICC instructor	-Reflects and draws on previous knowledge -Able to answer most relevant questions -Ready to perform procedure: knows steps, instruments required, aware of contraindications -Asks appropriate questions -Demonstrates satisfactory self-assessment skills -Follows established clinical QA protocols	-Frequently involved in discussions towards improving treatment outcome and provides excellent quality control -Asks appropriate questions indicative of superior grasp of the topic -Demonstrates accurate self-assessment -Able to self-identify areas of weakness and independently searches for answers from reliable sources
Clinical Skills -Quality of treatment process -Quality of treatment results -Quality of patient management -Maintains balanced posture	-Ergonomics is not respected -Does not know the landmarks for giving IAN block -Causes irreversible iatrogenic damage -Clinically unacceptable result -Consistently has voids in restos -Inaccurate anatomy in restos -Fails to direct cap pulp when needed -No RD used when needed -Wrong pt, wrong site, wrong procedure error	-Frequent ergonomic lapses -Often has voids in the restorations -Produces restorations with underfill and/or overfill that are serviceable -Void is found 4 mm away apex during endo obturation -Burnished amalgam restoration -Light proximal contact -No occlusal anatomy -Problems with patient management	-Clinically acceptable treatment result consistently -Restoration is in occlusion and reflects anatomy -Ergonomically balanced -Aware of patients needs throughout -Acceptable quality of service -Able to produce successful restorations on anterior teeth with acceptable esthetics -Good patient management	-Excellent functional and esthetic results (i.e. Performed complex amalgam restoration to specs) -In occlusion and reflects a detailed anatomy -Performs balanced operator and patient position and instrument control using appropriate illumination -High quality service and achieving patients' satisfaction -Exemplary patient management

Organization, Time Management and Infection Control -Starts on time -Practices standard infection control precautions -Work area clean, neat and well organized -Achieves goals set at start of session -Complete and accurate record keeping -Finishes on time	-Consistently late and no effort to manage time -Works 30+ minutes beyond the end of clinic due to lack of organization (not for unanticipated issues) -Deliberately avoids preclinical huddles -Improper use of overgloves/patient care gloves -Uses patient care time for setting up -Does not disinfect op/rad room before/after use -Uses a dropped instrument or simulation instruments -Not showing up without informing the patient -Neglects to complete patient record entirely -Misses key medico-legal details in record -Neglects to book patient (or themselves) in chair per clinic policy on more than 2 occasions -Misses multiple signatures on the Prosth QA forms	-Student usually starts and finishes on time -Counter organization can be improved -Works 15-30min beyond end of clinic due to disorganization -Chit out instruments multiple times due to lack of planning -Some instructor signatures may be missing -Organized before the session but becomes unorganized -Infection control precautions generally followed -Student sometimes does not accomplish all goals set at beginning of session -Student manages to start and finish on time but is rushed -Student records bare minimum of procedures done but is missing details -Fails to book patient (or themselves) in the chair -Misses occasional signatures on the Prosth QA forms	-Operatory set up 10 mins before the apt time -Student charts records correctly and gets required swipes before the session ends -If student does not accomplish all goals set at beginning of session he/she plans ahead for alternative times to finish them -Overgloves are set out and propped open, for easy access and are replaced as soon as they are used, before leaving the operatory -consistent attention to QA processes	-Always checks in with instructor even when on Endo sign up -Student is always punctual and prompt -All instruments are sterilized and barriers in place -Sets reasonable treatment goals for the session and exceeds them -Every procedure is noted and documented thoroughly in progress notes -Student is very efficient with time -Offers assistance to others with their organization, time management and infection control
Degree of Difficulty Includes anatomic factors, extent of disease, and patient management factors	Simple -Fluoride application -Patient is cooperative -Caries Risk Assessment -sealant placement -Oral Hygiene Instruction -Buccal pit or small occlusal restoration	Routine -Basic class I, II, III restoration -Regular anesthesia Injections - P1-P2 perio debridement - PPR -Supragingival crown prep with good access -routine treatment planning -routine removable prosthodontics	Some Difficulty -Difficult tooth to anesthetize -Patient has language barriers -Class II Restoration on 7's -Patient with limited mouth opening. -Class III or IV anterior esthetic restorations -Combine fixed removable prosth -difficult CDRP due to anatomic or expectation issues -Rampant caries management -anxious or nervous patient -patient is aggressive/ demands alternate Tx -Larger CI II MODBL	Extremely Difficult -Large subgingival restorations -Patient with speaking disability -Hyperactive pediatric patient -Extraction of bony impacted 8's -Extensive decay reaching very close to pulp -Patient has a cognitive/ mental disability -Final impression -Patient with severe phobia for dental treatment -Patient with completely unreasonable outcomes expectations
Degree of Student Independence Instructors should demonstrate and assist as needed but intervention should decrease as the students gain experience.	Significant Intervention Instructor completed the treatment or provided significant hands on help When the instructor needs to provide hands on for the benefit of patient protection (and not time management)	Moderate Intervention More frequent demonstration or verbal direction needed This is where instructors provide verbal and hands on guidance and demos more frequently than would be anticipated given the average student performance for a student at this stage of their development	Minimal Intervention minimal hands on assistance needed, or verbal only This is the expected routine for most sessions where instructors provide verbal and hands on guidance and demos. Typically desired performance during 3rd yr and first term 4th year or when the student has no had any experience with the procedure.	Independent Care No assistance required or indicated This is where instructors still check procedures but there is no need to provide verbal and hands on guidance and demos. Typically desired performance during second term 4th year when the student has already had experience with the procedure.
<p align="center">*Ratings of "Does Not Meet Expectations" or "Exceeds Expectations" must be explained with specific examples.</p> <p align="center"><i>Provide additional objective written comments at any time. This may include a request for patient follow up, or suggestions and/or directions for future appointments. The student's Clinical Advisor will follow-up with the student and provide you with additional information as needed.</i></p>				

Charles Kim

Infection control

- Wipe twice