

HARVARD SCHOOL OF DENTAL MEDICINE

ORAL MEDICINE RESIDENCY PROGRAM

Accredited by the Commission on Dental Accreditation (last accreditation in 2016)

Revised Oct 1st, 2022

Table of Contents

INTRODUCTION	3
Program Overview	4
ADMISSIONS	5
GOALS & OBJECTIVES OF THE PROGRAM	6
PROGRAM PROFICIENCIES	7
PROGRAM POLICY	8
PROGRAM CURRICULUM AND REQUIREMENTS	12
COURSEWORK	12
Courses Schedule	12
Description of Courses/Seminars/Rounds	16
RESEARCH REQUIREMENTS	26
Research Timeline	27
Research Proposal Format	28
COMMUNITY SERVICE	28
CLINICAL WORK	29
Tentative Clinic Schedule	29
CORE CLINIC ROTATIONS	31
OFF-SERVICE ROTATIONS	38
RESIDENT RESPONSIBILITIES	49
ALL RESIDENTS	49
CHIEF RESIDENT(S)	51
ON-CALL DUTY (with Pager)	52
RESIDENTS COVERING GUIDELINES	53

Oral Medicine Program Manual

ORAL MEDICINE RESIDENCY POLICY ON SUPERVISION OF RESIDENTS	55
MANDATORY PROGRESS MEETINGS with Program Director	56
PROGRESS EXAMINATIONS	56
MENTORING PROGRAM	57
CLINICAL GUIDELINES	58
GUIDELINES FOR INPATIENT CONSULTATIONS	58
GUIDELINES FOR EMERGENCY ORAL MEDICINE & DENTISTRY SERVICES	65
GUIDELINES FOR EVALUATING HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT) PATIENTS	75
GUIDELINES FOR EVALUATING ORGAN TRANSPLANT, CARDIAC VALVE, HEAD AND NECK CANCER, AND CHEMOTHERAPY PATIENTS	78
OFF-SITE PRE-HSCT DENTAL SCREENING PROGRAM	81
OFF-SITE PRE-RADIATION DENTAL SCREENING PROGRAM (PRE-H&N CANCER THERAPY)	82
APPENDIX	88
PAGER INSTRUCTIONS FOR ED/INPATIENT CONSULT ON-CALL RESIDENT	88
CLINICAL PHOTOGRAPHY POLICY AND STEPS	91
MAINTAINING THE PATIENT LOG IN NEW INNOVATIONS SOFTWARE	98



INTRODUCTION

The Advanced Graduate Education (AGE) program in Oral Medicine at Harvard School of Dental Medicine (HSDM) is an intensive training program for dentists committed to pursuing a full-time academic and/or institutional career. Clinical training is at Harvard-affiliated teaching hospitals including Brigham and Women's Hospital (BWH), Dana-Farber Cancer Institute (DFCI), Massachusetts General Hospital (MGH), Boston Children's Hospital (BCH), and Massachusetts Eye and Ear Infirmary (MEEI). Trainees are co-appointed as Residents at BWH and HSDM. BWH and MGH are founding members of the Mass General Brigham (MGB) System, formerly known as Partners HealthCare.

The program is fully accredited by the Commission on Dental Accreditation (CODA).

The program is composed of three training tracks:

- I. CERTIFICATE ONLY
- II. CERTIFICATE AND MASTER OF MEDICAL SCIENCES DEGREE
- III. CERTIFICATE AND DOCTOR OF MEDICAL SCIENCES DEGREE

Certificate Only

This is an intensive 36-month training program, with stipend support, for dentists committed to pursuing a fulltime academic and/or institutional career. This program culminates in the awarding of a *clinical certificate* in Oral Medicine.

<u>Salary and benefits</u> follow the MGB Resident Salary Scale. There are three-year facilities fee but no associated tuition fee. Trainees in this track are encouraged to consider pursuing further training in clinical research through various available mechanisms to best prepare for a successful academic and/or institutional career.

Certificate and Master of Medical Sciences

This is a four-year program (three years of tuition fee and a one-year facilities fee) with master-level course requirements, culminating in a *clinical certificate* in Oral Medicine as well as a *Master of Medical Sciences* (MMSc). There is no stipend support.

Certificate and Doctor of Medical Sciences

This is an intensive five-year tuition-bearing program (four years of tuition fee and a one-year facilities fee) that culminates in the awarding of both a *clinical certificate* in Oral Medicine and a *Doctor of Medical Sciences* degree (DMSc) in Oral Biology. There is no stipend support; however, partial scholarship support may be available for highly qualified US residents.



Program Overview

The goal of the AGE program in Oral Medicine is to train future leaders in the field of Oral Medicine. All tracks are uniquely organized such that students benefit from the rich academic and institutional resources of Harvard Medical School (HMS) and HSDM while receiving all clinical training at BWH and other HMS affiliated institutions, i.e., DFCI, and MGB-affiliated hospitals. These are world-class teaching and clinical institutions with academic and clinical environments that are well suited for training in the specialty of Oral Medicine. The wealth of educational and research opportunities in the Harvard medical community is unparalleled. The Harvard academic environment is largely dependent on self-motivation, self-learning, individuality, and drive for knowledge and exploration. Residents are expected to work hard, seek out opportunities, embrace challenges, and achieve at their highest possible level. While there is a considerable framework of organization, structure, and requirements, in large part it is what residents put into the program, at every level (i.e., coursework, seminars, clinical rotations, research), that will define what they take away.

The clinical, educational, and research resources at HSDM, BWH, and the greater HMS/Longwood Medical Area (LMA) campus offer one of the most unique environments for training in Oral Medicine. The Oral Medicine & Dentistry clinics at BWH and DFCI manage a high volume of inpatients and outpatients with a wide range of oral medicine conditions, with a strong emphasis on oncology. All faculty members are board-certified in Oral Medicine. All medical records are electronic and fully integrated into the MGB System.

The following pages provide a detailed outline of all program tracks, including descriptions of the didactic, clinical, and research activities and requirements. <u>While a great deal of effort has been put into creating this</u> resource, specific details may be subject to change, and any specific questions should be directed to the <u>Program Director</u>.



ADMISSIONS

Candidates must possess a DMD, DDS, or equivalent degree (e.g., BDS). Completion of a hospital-based general practice residency (GPR) or equivalent is preferred. Applicants from countries in which English is not the primary language must provide an official Test of English as a Foreign Language (TOEFL) score report. Please visit the <u>HSDM website (https://hsdm.harvard.edu/age-applicants)</u> for additional details including minimum TOEFL requirements.

Applications and Contact Information

Applications are due in October and must be submitted through <u>PASS</u> (<u>https://www.adea.org/PASSapp</u>). Please visit the <u>HSDM website</u> (<u>http://www.hsdm.harvard.edu/</u>) for additional details and required supplementary materials.

The admissions committee considers academic performance during dental school, personal statements, letters of recommendation, research experience, extracurricular activities, and prior postdoctoral clinical experience. The HSDM/BWH Oral Medicine advanced graduate education program admit qualified candidates of any race, color, national or ethnic origin, sex, age, disability, religion, sexual orientation, gender identity, veteran status, or marital status to all the rights, privileges, programs, and activities made available to them. Candidates are prescreened and selected candidates, approved by the Committee of Advanced Graduate Education programs (CAGE) are invited for mandatory interviews in November. The Oral Medicine programs in the United States have a common notification date for acceptances (usually the first week of January), after which applicants have 48 hours to make a decision. Following this deadline, additional offers can be made if positions remain unfilled.

Program Director:

Piamkamon Vacharotayangul, DDS, PhD Brigham and Women's Hospital Division of Oral Medicine & Dentistry 1620 Tremont St., Suite BC-3-028, Boston, MA 02120 Email: <u>pvacharotayangul@bwh.harvard.edu</u>

Program Coordinator:

Anna Dukess, MHA Brigham and Women's Hospital Division of Oral Medicine & Dentistry 1620 Tremont St., Suite BC-3-028, Boston, MA 02120 Tel: (617) 525-9113 Email: <u>ADUKESS@PCPO.PARTNERS.ORG</u>



GOALS & OBJECTIVES OF THE PROGRAM

- 1. Act as primary care providers for patients with orofacial, non-odontogenic diseases. This includes the diagnosis and management of patients with diseases that include, but are not confined to the following:
 - a. acute disease (e.g., herpetic gingivostomatitis, erythema multiforme)
 - b. chronic mucosal disease (e.g., vesiculobullous diseases)
 - c. salivary gland disease (e.g., Sjögren syndrome, cGVHD, etc)
 - d. orofacial pain and neurosensory dysfunction conditions
 - e. oral manifestations of systemic diseases
 - f. oral infections
- 2. Act as a consultant for the dental and medical community. This may include the following:
 - a. treating patients with conditions as outlined above
 - b. performing dental evaluations in patients in preparation for organ transplantation and head and neck cancer therapy
 - c. managing cancer therapy-related oral complications
 - d. diagnosing and managing mucosal and odontogenic infections in medically complex patients
 - e. providing comprehensive oral health management consultations
- 3. Function competently, efficiently and effectively in the health care environment as a member of a multidisciplinary health care team through participation in tumor boards, seminars, and teaching rounds during medical rotations.
- 4. Apply scientific principles to learning and patient care. This is obtained through critical thinking and selfdirected, life-long learning, that includes:
 - a. reading and critically interpreting the scientific literature
 - b. use of information technology
 - c. making evidence-based decisions regarding patient care
 - d. becoming competent in the conduct of clinical research
- 5. Always behave ethically and professionally with students, colleagues and patients, and always provide the best possible care.
- 6. Be engaged in community service and act as an ambassador for dentistry and the oral medicine specialty.



PROGRAM PROFICIENCIES

The educational program provides training to the level of <u>proficiency</u> for the following clinical skills:

- 1. Taking a history including the history of present illness, medical and surgical history, medication history, allergy history, and family and social history
- 2. Performing a medical risk assessment
- 3. Performing a comprehensive head and neck and oral examination for patients with, but not limited to:
 - a) oral mucosal diseases
 - b) salivary gland diseases
 - c) orofacial pain and neurosensory disorders
 - d) oral manifestations of systemic diseases
 - e) oral complications related to medical therapies, especially in cancer patients
- 4. Establishing differential and working diagnoses
- 5. Performing diagnostic procedures (e.g., biopsies, cultures, and cytology), and ordering tests for blood counts, serology, and chemistry, and interpreting them
- 6. Selecting appropriate imaging studies and interpreting oral radiographic films
- 7. Interpreting radiographic reports for CT, MRI, and PET scans
- 8. Developing and implementing a treatment plan for the management of the patient
- 9. Evaluating the results of therapy including the occurrence and management of adverse events
- 10. Implementing a recall program appropriate for the disease
- 11. Communicating effectively and professionally with other health care providers
- 12. Keeping accurate patient records including all telephone and email communications
- 13. Performing dental evaluations prior to organ transplantation
- 14. Performing clinical follow-up on patients in the hematopoietic stem cell program
- 15. Performing dental evaluations prior to head and neck cancer therapy



PROGRAM POLICY

Program Duration

The program begins in <u>mid-June with orientation</u>. Residents in the certificate track complete the program in mid-June of the 3rd year. Residents in the Certificate/MMSc or Certificate/DMSc track complete the program in May of the 4th year and 5th year, respectively (at the time of HSDM graduation).

All residents enrolled in a degree program will begin as PGY-0 and complete the majority of the course work during the first year. Additional degree-specific components of the training (e.g., additional coursework, thesis level research) will be incorporated during PGY-1 (equivalent to the first year of clinical training and first year of training for the *Certificate only* track), PGY-2, and PGY-3. Clinical rotations will be completed during PGY-1, PGY-2, and PGY-3. Residents in the DMSc track will complete and defend their thesis research during PGY-4.

	Certificate	Certificate/MMSc	Certificate/DMSc
PGY-0	-	Didactics	Didactics
PGY-1	Clinics	s Clinics Clinics	
PGY-2	Clinics	Clinics	Clinics
PGY-3	Clinics	Clinics	Clinics
PGY-4	-	-	Research

		Clinical Rotations	Didactic Classes	
	Certificate	Certificate/MMSc	Certificate/DMSc	
PGY-0	-	Mid-June	Mid-June	
		orientation only,	orientation only,	July – End of May next year
		On-call 4 weeks	On-call 4 weeks	Except Clinic Rounds (all
PGY-1	Mid-June with	Mid-June	Mid-June	year)
	orientation	Mid-June	Mid-June	Or make-up classes if any, in
PGY-2	Mid-June	Mid-June	Mid-June	June
	Mid-June	Mid-June	Mid-June	
PGY-3	Mid-June	Mid-June	Mid-June	
	Mid-June	End of May	End of May	
PGY-4	-	-	-	

Program Costs

Certificate track

• The Certificate only track is non-tuition bearing, but there is an associated annual HSDM facilities fee. Please visit the HSDM website for information on <u>current fees</u> for Advanced Graduate Education (AGE) programs.

Certificate/MMSc track

The certificate/MMSc track is a four-year program (three years of tuition and a one-year facilities fee).
 Please visit the HSDM website for information on <u>current fees/tuition</u> for Advanced Graduate Education (AGE) programs.



Certificate/DMSc track

• The certificate/DMSc track is a five-year program (four years of tuition and a one-year facilities fee). Please visit the HSDM website for information on <u>current fees/tuition</u> for Advanced Graduate Education (AGE) programs.

All residents

- Every resident enrolled in a certificate, diploma, or degree-granting program of higher education must participate in the Harvard University student health coverage. This is comprised of two different plans:
 - 1) Student Health Fee (SHF) basic coverage
 - 2) Student Health Insurance Plan (SHIP) extended coverage

Note that the SHIP/extended coverage can be waived with proof of comparable coverage. The SHF/basic plan cannot be waived. The <u>Harvard University Student Health Program website</u> includes details regarding coverage and benefits.

Salary

Certificate track

- Residents are paid according to the <u>MGB Resident Salary Scale</u>. *Certificate/MMSc/DMSc*
- There is no salary support for this program track.

Vacation Days

All vacation time must be used within a given academic year; vacation time cannot be accumulated or carried over to another academic year. The Oral Medicine and Dentistry clinic is closed on all official BWH holidays. Residents are scheduled to take a 24-hour emergency call on these holidays. The Oral Medicine Program follows the MGB Guidelines on vacation/leave policy with additional rules as follow.

- (1) All vacation time should be scheduled at least ONE MONTH in advance using a vacation request form from the program coordinator or download from Dropbox folder 'Forms'. Do not make any travel commitments or purchase any airline or other travel-related tickets until the request has been approved.
- (2) Residents may not take 2 consecutive weeks of vacation time, and only one week may be taken during any 2-3-month rotation block.
- (3) Vacation time may not be taken during the last week, or the first three weeks of the program.
- (4) Vacation time is not permitted during off-service rotations that are only one weeklong and are discouraged during off-service rotations that are 2-3 weeks long. Vacation time during A rotation is also discouraged.
- (5) **Residents must arrange for their own clinical coverage and discuss with Chief Residents and coresidents who will cover for them** before submitting the request to the Program Director.
- (6) Residents must notify the supervising attending, co-residents, and clinic staff by email if away <u>as soon as</u> <u>approved and with a 24-hour notice</u>.
- (7) Vacation time can be used for the purpose of preparing for an exam. This will not be a paid leave of absence.

Certificate track

• Residents are provided four weeks of paid vacation annually. Vacation time must be used within the academic year to which it applies.



Certificate/MMSc track and Certificate/DMSc track

• Per HSDM policy, AGE residents are permitted 20 days of vacation per academic year. Residents are generally granted Harvard University holidays; however, on-call requirements may supersede the University holiday schedule. If a resident must work on a scheduled University holiday, a personal day may be taken at a time determined in conjunction with the Program Director. Time off must be requested at least one month in advance and is subject to the approval of the Program Director.

Sick Leave and Medical Leave of Absence

A Graduate Trainee is entitled to **twelve (12) paid sick days** annually upon matriculation, to be used solely for illness significant enough to interfere with the performance of duty or when advised by Occupational Health directives (e.g., related to a communicable disease). Unused sick days may accrue to a maximum of sixty (60) days, but they may not be "cashed in".

An illness of 12 consecutive days duration or greater, or individual sick days which total twelve days or greater, will require work time to be made up at the conclusion of the program. To avoid having to make up this time, sick days can be deducted from vacation days. In the event that an extended sick leave warrants a **medical leave of absence**, a formal request must be made to the Program Director and the CAGE at the HSDM. At the committee's discretion, a medical leave will be granted for a period of six months. Extension of this sick leave is at the discretion of the Program Director and the CAGE.

Other policies on leave of other reasons will follow the MGB guidelines https://www.partners.org/Graduate-Medical-Education/Policies-Resources/Policies.aspx

There may be instances where certain resident tasks will need to be distributed amongst the remaining residents on the A, B and C rotations. For example, if there is a lack of resident coverage due to absences or illness, some of the time-sensitive B resident tasks may fall to the A or C residents. Please follow the instruction in section <u>Resident Coverage Guidelines</u>.

Holidays

Holidays vary based on the specific institution at which the resident is currently studying and/or rotating:

- HMS/HSDM Holidays
 - New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Indigenous Peoples Day, Veterans Day, Thanksgiving Day, Christmas Day
- BWH Holidays
 - New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Juneteenth, Independence Day, Labor Day, Indigenous Peoples Day, Thanksgiving Day, Christmas Day

Moonlighting

Please refer to the HSDM student handbook and the MGB Graduate trainee moonlighting policy.

Complaint Policy

Residents have the right to file formal complaints with the Program Director as well as directly with the Graduate Medical Education (<u>GME</u>) of the BWH or with the Commission on Dental Accreditation (CODA). Please visit the <u>CODA website</u> for more details.



Available Resources

Residents will have access to free copies of these software through HSDM. Please contact Sean MacDonald <u>Sean MacDonald@hsdm.harvard.edu</u> for information.

- EndNote
- Adobe Software

Many books and journals are available with the HSDM account. Physical access will be provided to HSM and HSDM Libraries. PubMed database is included.

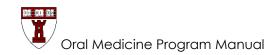
Major references and textbooks for the oral medicine training program are available in the Resident's Work Room at BWH OM Clinic. Please follow the instruction on how to check them out. In addition, residents will have free access to **Up To Date** and other research resources by Partners Application.

The program has an annual subscription to the online contents of Dr. Jeffrey Okeson's "Complete Lecture Series" with 33 hours of lectures on clinical approach to manage orofacial pain. Please contact your Program Director for detail.

Resident Workspace

In addition to the common spaces and libraries at HSDM and HMS, the following rooms are available to all trainees: -

- On call rooms: trainee suite on Tower 4D at BWH. The room numbers are (Female) rm. #2 and (Male) rm. #14. The codes to the rooms will be provided by the program coordinator.
- Brigham Education Institute space at BWH located at 127 Thorn Building
- OBC Conference rooms on 3rd and 4th floor
- Providers' room at BWH Oral medicine clinic (during A and C rotation)
- Y11: Providers' room at DFCI (during B rotation)
- Dana D-103 at DFCI
- Oral Medicine and Periodontology room at HSDM REB 203 (please contact Mr. Sean MacDonald at <u>Sean MacDonald@hsdm.harvard.edu</u> for access to the room).



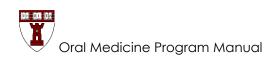
PROGRAM CURRICULUM AND REQUIREMENTS

COURSEWORK

Formal didactics are a cornerstone of the advanced graduate education program in Oral Medicine. Residents must receive a passing grade in every required course. Below is a summary of the course requirements, as well as program specific required courses. All coursework is expected to be completed during the first two years of study, with most credits being completed by the end of the first year. Please refer to the <u>HSDM Student</u> <u>Handbook</u> for specific details on requirements and deadlines, including course registration, cross-registration and adding and dropping courses. Questions should be directed to the <u>Office of the Registrar at HSDM</u>.

COURSES SCHEDULE

TRACK	Fall Semester (Sep – Dec)	Spring Semester (Jan – May)
PGY-	 Biostatistics (Tues 1-3 PM) Graduate H/N Anatomy (July 2 wks., AM only) Oral Medicine Core Lectures (Orientation) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM) 	 Adv. Oral Med/Path/Radio (Mon 10 AM -12 PM) Hematology (April-May, W/F 8-10 AM) Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)
Certificate only PGY-	 Oral Immunology (Mon 10 AM -12 PM) Intensive Review of Internal Medicine Course (July, 1 week) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM) 	 Clinical Pharmacology (Tues 1-3 PM) DFCI Clinical Oncology Seminar (Tues 4-5 PM) Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)
PGY-	 Foundations for the Advanced Dental Practitioner (Fri 8 - 9.30 AM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15-4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM) 	 Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15 - 4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM - 12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)



TRACK	Fall Semester (Sep – Dec)	Spring Semester (Jan – May)
TRACK	 Oral Medicine Core Lectures (Orientation) Oral Medicine Seminar (2nd and 4th Wed 1.15 - 4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM - 12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial 	 Spring Semester (Jan – May) Adv. Oral Med/Path/Radio (Mon 10 AM -12 PM) Hematology (April-May, W/F 8-10 AM) Clinical Pharmacology (Tue 1-3 PM) Craniofacial Development and Genetics (Mon 8-10 AM) ** AGE Research Seminar Series Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)
Certificate/MMSc & Certificate/DMSc PGY-1	 Pathology (2nd and 3rd Wed 4-5 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM) 	 AGE Research Seminar Series Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)
PGY-2	 Intensive Review of Internal Medicine Course (July, 1 week) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM) 	 AGE Research Seminar Series DFCI Clinical Oncology Seminar (Tues 4-5 PM) Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM) Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2nd and 3rd Wed 4-5 PM)
PGY-3	 Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) 	 AGE Research Seminar Series Precision Medicine and Oral Disease (1st and 4th Wed 12 -1 PM)



TRACK	Fall Semester (Sep – Dec)	Spring Semester (Jan – May)
	 Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial Pathology (2rd and 3rd Wed 4-5 PM) 	 Oral Medicine Seminar (2nd and 4th Wed 1.15-4 PM) Oral Medicine Grand Rounds (1st Wed 11 AM -12 PM) Oral Medicine Literature Review (3rd Wed 1.15 - 4 PM) Surgical Oral and Maxillofacial
		Pathology (2 nd and 3 rd Wed 4-5 PM)
PGY-4*	Oral Medicine Grand Rounds (1 st Wed	Oral Medicine Grand Rounds (1 st Wed
	11 AM -12 PM) - Audit	11 AM -12 PM) - Audit

**DMSc only

Credit Requirements for Combined Certificate/Degree Tracks

DMSc / Certificate	MMSc / Certificate
Expected Program Length: 5 years	Expected Program Length: 4 years
36 credits including the following:	28 credits including the following:
12 credits minimum	12 credits minimum
12 Basic Science credits minimum	4 Basic Science credits minimum

Approved non-HSDM Courses

The non-HSDM courses listed below have been approved for fulfillment of the Certificate/Degree requirements and are highly recommended based on the curriculum and relevance to the Oral Medicine program. They first year core courses for the Biological and Biomedical Sciences (BBS) PhD program and are excellent, comprehensive, in-depth graduate (doctoral) level courses. For more details, please refer to the HMS Course Catalog (<u>http://www.medcatalog.harvard.edu</u>). Courses that are not listed below must be approved by the Program Director and registrar prior to enrollment.

When cross-registering for courses, credits transfer as follows: HMS > HSDM 1:1

HSPH	>	HSDM	2.5:2
MIT	>	HSDM	Varies, check with registrar's office

Course Listing	Title	Semester	Credits
HMS BP715.0	Molecular Approaches to Drug Action Discovery and Design	Spring	4
HMS BP723	Molecular Biology	Fall	4
HMS GN 701.0	Principles of Genetics	Fall	4



Course Listing	Title	Semester	Credits
HMS CB 713.0	Molecular Biology of the Cell	Spring	4
HMS CB704.0	Molecular and Systems Level Cancer Cell Biology	Fall	4
HMS HT140	Molecular Medicine	Fall	2
HMS HT030	Human Pathology	Fall	4
HMS HT080	Hematology	Spring	2
HMS HT175.0	Cellular and Molecular Immunology	Fall	4
HMS IM702.0	Principles of Immunology	Fall	4
HMS ME732	Fundamental Methods of Clinical Trials	Spring	3
HT572.0	Future Medical Technologies	Spring	1
MIT HST594	Translational Medicine Seminar	Fall/Spring	
MIT BIO 7.95	Cancer Biology	Spring	
SPH EPI249	Molecular Biology for Epidemiologists	Fall	2.5
SPH EPI250	Molecular Epidemiology of Cancer	Fall	1.25
SPH IMI208	Immunology of Infectious Diseases	Spring	5
SPH NUT202	Science of Human Nutrition	Spring	5



DESCRIPTION OF COURSES/SEMINARS/ROUNDS

Oral Medicine Seminar

Seminars are on the 2nd and 4th Wednesday of each month, from 1:15 PM to 4:00 PM, at One Brigham Circle, 3rd floor conference room and on Zoom, which will be recorded. Attendees on Zoom must always keep the camera on. The seminar series includes in-depth review of core oral medicine curriculum, Top 50 prescribed medications, case reviews, and critical analysis of the literature. The annual schedule (based on a 36-month curriculum) is prepared by the chief resident(s) in consultation with the Course Director and finalized in the late spring. Advanced reading of assigned articles and preparation of formal, professional Power Point presentations (when presenting a topic for the session) are mandatory.

Seminar presenter responsibilities:

- Identify pertinent scientific articles for the seminar topic (at least 8). Preference should be given to randomized controlled trials and "key articles". Articles and power point presentation must be submitted via email to the Course Director at least two weeks prior the seminar for approval. Approved articles must be uploaded to Dropbox no later than 5 PM Friday prior to the seminar.
- 2) Include the most frequently prescribed medications pertinent to the presentation topic (even if the medications are NOT included in the 50 most prescribed medications) in the Power Point presentation.
- 3) Update the Top 50 most prescribed medications table according to the schedule provided by the chief resident, using the following format:

	Name	Dosage	Clinical indications	Pharmacology/ mechanism of action	Pharmacokinetics	Interactions	Contraindications	Side effects	Oral features
1	Generic name (Brand name)								

Attendance at all seminars is mandatory. **Certificate/DMSc residents in their last year of training do not attend seminar and are expected to use this time for research.** Any potential conflicts must be discussed with the Course Director. At the end of the session, each resident will be evaluated according to a four-point scale (see below) for the following:

- <u>Participation</u>: residents are evaluated on a four-point scale according to the substance and quality of their contribution to the discussion of assigned readings.
- <u>Presentation</u>: the presenting resident is evaluated according to the organization, clarity, quality, and content of the seminar presentation.

Presentation was well organized and at the appropriate knowledge level	Anticipated learning objectives were met by this presentation
Information was clearly presented in logical manner	Key points were identified and explained in detail
Presentation supported by appropriate number of most current literature	Pace of the presentation was appropriate



Four-point evaluation scale:

1 – unsatisfactory; 2 – below expectations; 3 – meets expectations; 4 – exceeds expectations

• <u>A comprehensive written examination</u> will be administered twice a year (January and May). Please refer to the "<u>PROGRESS EXAM</u>" section in the manual for further details.

Required readings (to be read throughout the program)

Residents will be provided access to a shared folder of Oral Medicine Literature via Dropbox. The folder is updated regularly by the Oral Medicine Faculty. Residents are expected to read the papers on a regular basis.

Oral Medicine Seminar Curriculum (3-year curriculum)

Oral Medicine Seminar Curriculum (3-y Year A	Year B	Year C
1. Introduction to clinical oral medicine –	1. Introduction to clinical oral	1. Introduction to clinical oral medicine – Chief
Chief Resident	medicine – Chief Resident	Resident
2. Clinical research, study design/phases, IRB,	2. Pigmented lesions (1): Oral lesions	2. Genomics, Personalized Medicine and Oral
FDA approval – <mark>Sonis</mark>	3. Pigmented lesions (2): Associated	Disease - Sonis
Hematology/Oncology (1): Leukemia	disorders	3. Cancer treatment complications (1): short-
Hematology/Oncology (2): Lymphoma	Salivary gland disease (1): SG	term
Hematology/Oncology (3): Stem cell	anatomy/physiology, saliva,	4. Cancer treatment complications (2): long-
transplantation	diagnostics	term
Hematology/Oncology (4): GVHD - Treister	5. Salivary gland disease (2): Neoplasia	5. HIV - Vacharotayangul
Hematology/Oncology (5): Solid tumors	 priority to path resident 	6. Antibiotics/antimicrobials
post-SCT	6. Salivary gland disease (3):	Fungal infections – priority to path resident
8. Case reviews	Infections, inflammatory conditions	8. Viral infections
9. Cardiovascular diseases	7. Autoimmune (1): SLE, Sjögren	9. Case reviews
10. Hematology (1): Bleeding disorders –	syndrome, RA, etc.	10. Endocrine (1): Diabetes mellitus
Ikeda	8. Autoimmune (2): Therapies	11. Endocrine (2): Thyroid, parathyroid and
11. Hematology (2): Hemoglobinopathies	(immunosuppressive, biologicals)	pituitary disorders
12. CNS and psychiatric disorders	9. Solid organ transplantation	12. Pain (1): Review of anatomy and pathways,
13. Odontogenic infections	10. Case reviews	clinical features, patient assessment – Ikeda
14. Antiresorptive therapy in cancer – Woo	11. Odontogenic cysts and tumors –	13. Pain (2): TMJ/TMD (part 1)
15. Case review	priority to path resident	14. Pain (3): TMJ/TMD (part 2)
16. Vesiculobullous and ulcerative (1): RAS,	12. Fibro-osseous lesions	15. Pain (4): Neuropathic, Taste and smell
LP, Bechet	(benign/malignant) – priority to path	disorders
17. Vesiculobullous and ulcerative (2): PV,	resident	16. Pain (5): Headaches
BP, MMP, paraneoplastic – priority to path	13. Leukoplakia, PVL and other	17. Case review
resident	potentially malignant lesions - Woo	18. Complementary and alternative medicine
18. Vesiculobullous and ulcerative (3): EM,	14. Case review	19. Principles of nutrition (with emphasis on
SJS, TEN	15. Liver diseases	oral health and orofacial diseases – invited
19. Granulomatous diseases (1): OFG, IBD, vasculitis	16. Renal/Adrenal diseases	speaker
20. Granulomatous diseases (2): sarcoidosis,	17. Cancer (1): Cancer biology (introduction to the cancer problem)	20. Practice Management in Oral Medicine – invited speaker
TB, cat scratch, leprosy, syphilis - Sroussi	18. Cancer (2): Common	
	adult/pediatric cancers	
	19. Cancer (3): Treatment of cancer	
	20. Cancer (4): Head and neck SCC	



Oral Medicine Grand Rounds

Oral Medicine Grand Rounds meets the 1st Wednesday of every month from 11 AM - 12 PM at One Brigham Circle 3rd Floor Conference Room and Zoom which will be recorded. Attendees on Zoom must always keep the camera on. Attendance and regular presentations throughout the program are mandatory. Presentations should include adequate background and introduction, concise presentation of the case, including all pertinent laboratory, histopathology and radiology studies, and a review of the literature. Two cases are presented, with each taking approximately 25 minutes and 5 minutes of discussion.

The chief resident (s) is responsible for coordinating the Oral Medicine Grand Rounds schedule for the year according to the schedule template. A schedule template is available in the Dropbox folder and the schedule is finalized each June. Presentations will be divided among Oral Medicine and Oral Pathology residents.

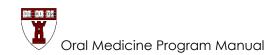
It is the responsibility of the presenting resident to identify a case and faculty advisor well in advance of their presentation date. They are to submit a <u>draft</u> of the presentation to their faculty advisor **at least two weeks before** their presentation date and discuss it with him/her. The presenting resident will also supply the name of the presentation and their faculty advisor to the course director **two weeks before** their presentation date. A copy of the <u>final</u> PowerPoint presentation should be emailed to the course director by midnight before the day of their presentation. At the end of the session, each presenting resident is evaluated according to organization, clarity, quality, and content of the seminar presentation according to a four-point scale (see table below).

If the presenter does not have a case of their own and needs assistance identifying one, they should contact the Program Coordinator/Program Director, who have access to a master file with flagged cases for Grand Rounds presentation from New Innovations.

All presentations are archived in a folder entitled **Oral Medicine Grand Rounds** in Dropbox online storage. It is the chief resident's responsibility to 1) maintain the Oral Medicine Grand Rounds Excel spreadsheet log (by contacting each presenter for the date, MRN of the case, and diagnosis), 2) create a new folder in Dropbox for each session (Year-Month-Day), 3) ensure that the presenters upload their PowerPoint presentations to the folder, and 4) maintain a database of suggested cases to be presented approved by the oral medicine faculty.

Attendance is mandatory. Any potential conflicts must be addressed as soon as possible and discussed with the chief resident (s). If schedule changes are required, it is the responsibility of the presenting resident to identify another resident willing and able to switch, keeping in mind the number of presentations required each year (this number will vary depending on the number of residents in the two programs each year). All changes must be approved by the chief resident. Once changes are made, the Course Director should be notified. Failure to fulfill the required number of presentations may result in a lower course grade.

At the end of the session, each resident will be evaluated according to a four-point scale, same as in the Oral Medicine Seminar presentation.



Oral Medicine Literature Review

Literature review sessions are the 3rd Wednesday of each month (1:15 PM – 3:15 PM), at One Brigham Circle, 3rd floor conference room. The scope of these sessions is to keep residents up to date with the current literature, and to learn how to critically read/review scientific papers.

Based on an annual syllabus, each resident is assigned a list of journals to review. Residents are expected to identify 3-4 articles to present from their assigned journals. Each resident will send their journals' tables of contents and the list of articles for presentation to the Course Director no more than one week prior to the scheduled session. Following approval, the articles are uploaded to Dropbox (no later than 5 PM, on Fridays) prior to the seminar. The most important figure from each approved paper is presented to the group on a PowerPoint slide. The course director will send one article in advance for the group to review in a way a peer-review manuscript is reviewed.

<u>Journals reviewed</u>: American Journal of Transplantation, Biology of Blood Marrow Transplantation, Blood, Bone Marrow Transplantation, Head and Neck, Journal of Clinical Oncology, Journal of Oral Pathology and Medicine, Journal of the American Dental Association, Journal of the American Medical Association, Lancet Oncology, New England Journal of Medicine, Oral Diseases, OOOO, Oral Oncology, and Journal of Oral and Maxillofacial Surgery, JAMA Dermatology, Journal of Oral and Facial Pain and Headache, and Journal of Dental Research.

The annual journal assignment and curriculum is prepared by the chief resident(s) in consultation with the Course Director and finalized in late spring. In addition, the chief resident is responsible for maintaining the **Oral Medicine Literature Review** folder in the Dropbox shared drive.

At the end of the session, each resident will be evaluated for:

- Participation (50%): Active learning is essential. Residents will participate at all sessions and assigned a list of journals to review. Residents are expected to identify 3-4 articles to present from their assigned journals and these will be discussed within each session. Classroom participation will be graded for quality of contribution to the topic, quantity of contribution, and the professionalism of the response.
- Knowledge base (30%): Residents will be graded for the quality and quantity of knowledge and level of evidence.
- Attendance (20%): Attendance at all sessions is mandatory. Attendance is graded as part of the overall evaluation. Incomplete attendance makes it impossible to receive an "Honors" grade. Any potential conflicts must be discussed in advance with the Course Director.

Four-point evaluation scale: 1 – unsatisfactory; 2 – below expectations; 3 – meets expectations; 4 – exceeds expectations



Required readings

The following is a list of required readings for residents to read during the first month of the residency program. A copy of the reading material will be available in Dropbox shared drive. Please ask for access to this shared drive from PD.

- 1. JAMA series: A user's guide to the medical literature. Articles I-XV. 1993
- 2. Linden A, Roberts N. A user's guide to the disease management literature: recommendations for reporting and assessing program outcomes. Am J Manag Care. 2005 Feb;11(2):113-20.
- 3. Foucar E, Wick MR. An observational examination of the literature in diagnostic anatomic pathology. Semin Diagn Pathol. 2005 May;22(2):126-38.
- 4. Riegelman RK, Hirsch RP: Studying a study and testing a test: How to read the health science literature (Third edition. Boston: Little, Brown and Co., 1996.
- 5. <u>Bhattacharrya S</u>, <u>Miller J</u>, <u>Ropper AH</u>. The case for case reports. <u>Ann Neurol.</u> 2014 Oct;76(4):484-6.
- 6. Macrina FL: Science integrity. Washington, DC: American Society for Microbiology, 1995.
- 7. Norman GR, Streiner DL: Biostatistics: the bare essentials. St. Louis, Mosby Year Book, Inc., 1994.
- 8. Williams JM: Style: Ten lessons in clarity and grace, Fifth edition. New York, Addison Wesley Longman, Inc., 1996.

Class	Deadlines	Course Director
OM Seminar-	2 weeks before the presentation \rightarrow	Dr. Piam Vacharotayangul
PowerPoint and articles (avoid review articles and preference to RCT and original studies).	Upload approved articles for residents on Dropbox by 1 week before the presentation	
OM Grand Rounds presentation	2 weeks before the presentation \rightarrow	Dr. Piam Vacharotayangul
	Upload the final PowerPoint to Dropbox by midnight before the presentation.	+ attending faculty of the case
OM Literature Review-	1-2 weeks before class →	Dr. Herve Sroussi
Table of contents + articles	Upload all approved articles to Dropbox one day before class	

SUMMARY OF ORAL MEDICINE CLASSES AND DEADLINES



Surgical Oral and Maxillofacial Pathology

A strong understanding of pathology and familiarity with histopathological interpretation is essential for the practice of oral medicine. Oral pathology review sessions are twice a month (2nd and 3rd Wednesday of every month at 4 -5 PM) and given by Dr. Reshma Menon at HSDM.

This bi-monthly surgical oral pathology conference is designed to train oral medicine residents in the diagnosis of characteristic and common oral pathologic conditions. Participants will be provided in advance with limited clinical histories and microscopic slides and residents will prepare written descriptions and differential diagnoses in advance for discussion. At each session, residents will offer their interpretations and receive feedback from one another and the instructor. The objective of this course is to train residents to become competent in the microscopic diagnosis of characteristic and common oral pathologic conditions that they will be expected to encounter routinely in clinical practice. A practical examination will be administered at the end of each semester in which residents will be expected to demonstrate diagnostic competence and progression throughout each year of training.

Precision Medicine and Oral Diseases

This is a course that meets for one hour on **the 1st and 4th Wednesday of each month** during the Spring semester. Participation is typically limited to individuals who have matriculated to any of the advanced education (residencies) tracks in Oral Medicine offered by Brigham and Women's Hospital and the Harvard School of Dental Medicine. Graduate students or residents in other programs may enroll in the course depending on space availability and at the discretion of the course director. The objective of the course is to introduce basic and translational concepts in precision medicine as applied to oral diseases and/or systemic diseases with oral manifestations. While a text is not required, *Genomics, Personalized Medicine and Oral Diseases* (Springer 2015) can be used as a source. Suggested readings will be provided by the course director in advance of each meeting with the expectation that each will be reviewed by participants. Attendance is required.

Course Content (subject to modification)

- 1. Introduction to Precision Medicine and review of fundamentals of genetics and genomics
- 2. The oral microbiome and its relationship to genomics and oral diseases
- 3. Periodontal diseases
- 4. Aphthous stomatitis and Bechet's disease
- 5. Blistering diseases including lichen planus
- 6. Pre-malignant lesions and oral cancer
- 7. Salivary gland diseases
- 8. Gene therapy
- 9. Translational approaches and challenges

<u>Assessment</u>

Students will receive a pass/fail assessment based on preparedness and seminar participation.



BWH Introduction to Clinical Research Course

The Center for Clinical Investigation offers this intensive two-day course of lectures and small breakout group discussions that covers the fundamentals of clinical research for junior faculty, advanced residents, fellows, and postdocs who would like to be better prepared to design and conduct their research at BWH. This is a unique opportunity to learn from and meet with experienced clinical researchers at BWH who will provide you with the tools and resources to facilitate your research at this institution. Breakfast refreshments and lunch will be provided on both days.

Topics include Study Design, Data Analysis, IRB, Research Integrity, Publishing, Grant Writing Upon completion of this activity, participants will be able to:

Understand the correct conduct and practices of clinical research, as well as comply with new policies, practices, etc.

- 1) Recognize the various roles and responsibilities of the research team in the conduct of clinical research.
- 2) Identify the clinical research resources available within the hospital and greater research community.

Intensive Review of Internal Medicine Course

HMS/BWH CE course, 1 week, July, PGY-2

PGY-2 takes intensive internal medicine course for 1 week in July. The program coordinator signs up for the resident in advance.

The Intensive Review of Internal Medicine Course is designed to enhance internal medicine knowledge by offering a comprehensive update (internal medicine & its subspecialties); a case-based review of challenging clinical problems and a review of literature to guide evidence-based practice and serve to prepare attendees for the ABIM Board Examinations (for Certification and Recertification). Many outstanding clinicians/teachers have been chosen as course instructors. Throughout the course, emphasis will be made on the practical application of physiological principles to the understanding and management of clinical problems for both clinical practice and board exam preparation. By updating practicing physicians/internists and trainees on ever-changing medical guidelines and therapeutic strategies, this course will serve not only to bridge the gap related to lack of knowledge for certification and recertification but is also designed to improve physician competence in the patient care setting where current/updated knowledge is applied.

Head and Neck Radiology Seminar Series

An intensive series of seminars on the principles of head and neck radiology are given during the entire academic year. Seminar topics include;

- Review of x-ray production
- Digital radiography
- Cone beam and medical CT
- Other imaging modalities (e.g., MRI, fMRI, Nuclear medicine)
- Basic concepts of interpretation



There will also be **monthly case review sessions** held by Dr. Bernard Friedland at HSDM. These sessions will focus on the recognition of imaging features of various developmental, odontogenic/non-odontogenic maxillofacial lesions, evaluation of emergent head and neck pathology, and maxillofacial radiological interpretation.

Internal Medicine Seminar Series

The internal medicine series aims to strengthen resident's training in the fundamentals of Internal Medicine history taking, bedside physical examination, and note writing. Through didactic sessions and case-based learning, residents improve their ability to:

Identify and interpret important components of the medical patient's history and physical exam

- Understand reasons for ordering and interpretation of commonly ordered labs in medical patients
- Recognize patterns to distinguish the severity of common medical conditions for which oral medicine is frequently consulted

Residents meet with Internal Medicine clinician-educators for several half-day immersion sessions in the first half of the year that focuses on the skills needed to interpret medical admission notes and progress notes, using interactive exercises aimed at applying the information to clinically relevant situations.

In the second half of the year, review sessions provide time for guided case-based interpretation of internal medicine cases that residents are likely to encounter during their clinical rotations. Trainees bring in notes from cases they've been involved with, and can review cases, clarify points of confusion, and discuss medical issues encountered. These sessions focus on improving trainees' ability to effectively communicate about and manage the oral care of medically complex patients.

Residents will also participate in a series of Clinical Pathology didactic sessions. These sessions are run by the Clinical Pathology resident and cover hematology, chemistry, microbiology/blood bank, enabling trainees to gain a deeper understanding of the laboratory medicine involved in the care of their patients.

Oral Medicine Core Lectures

A series of introductory lectures is given during orientation. Lectures include: how to give presentation; differential diagnosis for the most common oral mucosal conditions; management of common dental emergencies; principles of pathology and histopathological interpretation; common mucosal conditions; leukoplakia, dysplasia and oral cancer; common oral medicine therapeutics; introduction to oncology; hematopoietic cell transplantation and the dentist; dental management of head and neck cancer patients; mucositis; orofacial pain including TMD and neuropathic pain; and oral complications in cancer survivors.

Required readings (to be read during orientation week)

- 1. Baccaglini L, Shuster JJ, Cheng J, Theriaque DW, Schoenbach VJ, Tomar SL, Poole C. Design and statistical analysis of oral medicine studies: common pitfalls. Oral Dis. 2010 Apr;16(3):233-41
- 2. Royce TJ, Hendrix LH, Stokes WA, Allen IM, Chen RC. Cancer screening rates in individuals with different life expectancies. JAMA Intern Med. 2014 Oct 1;174(10):1558-65



- 3. Pearson TA, Manolio TA. How to interpret a genome-wide association study. JAMA. 2008 Mar 19;299(11):1335-44.
- 4. BMJ series "How to read a paper" <u>http://www.bmj.com/about-bmj/resources-</u> readers/publications/how-read-paper

Oral Medicine Clinical Rounds

Oral Medicine Clinical Rounds meets the 2nd and 4th Wednesdays of every month from 11 AM - 12 PM at One Brigham Circle 3rd Floor Conference Room and Zoom. Attendees on Zoom must always keep the camera on. Attendance and regular presentations throughout the program are mandatory and are a component of the resident clinical education. Residents will briefly present all-new clinic patients seen in the previous 2 weeks as well as any interesting follow-up cases and updates with outcomes. This is intended to be a forum where residents summarize the types of patients seen in the clinic, review the variety of treatment strategies, and discuss challenging cases with faculty, with the emphasis on decision making based on evidence, ethics, and professionalism of oral medicine practice.

Presentations should include a brief but concise summary of the patient (gender, age, medical diagnosis, reason for referral, differential diagnosis or final diagnosis, treatment decisions, and rationale for the treatment decisions). Residents who have covered A, B, or C rotation can present from 1-3 cases, depending on the available time. It is advised that they discuss the required time for their cases before the Clinical Rounds so everyone has enough time to present. Discussion on references is not required nor encouraged due to limited time. Very interesting cases should be presented in the Grand Rounds with references, not in the Clinical Rounds.

Advanced Topics in Oral Medicine Seminar Series

This special seminar series occurs **every month, on the 3**rd **Wednesday, at 8 – 9 AM on Zoom and will be recorded.** Occasionally, the date and time may be varied depending on the invited speaker's schedule. Topics varies each academic year and range from theories to practical oral medicine and updated research subjects. Seminars are given by invited speakers who are leaders in the field. Occasionally, it may be expanded to a halfday workshop with hands-on experience or intensive discussion on the topic among the speaker and participants. The purposes of this seminar series are to expand the knowledge on the current and advanced topics in oral medicine practice, provide the opportunity to meet with experts in the field and brings initiatives to the oral medicine practice and research.

Oral Medicine Immersion Series

Topics and scheduling vary by year. The Oral Medicine faculty will give lectures, lead a literature review session, or provide hands-on demonstration on various topics/practices in oral medicine.



Head and Neck Oncology (HNO) Tumor Board

Residents on the "B" rotation are required to attend the Head and Neck Oncology Tumor Board every Wednesday at 8 – 9 AM on Zoom. Cases are presented by DFCI HNO surgeons and oncologists with neuroradiologist providing interpretation of the imaging studies. Residents will have the opportunity to observe the discussion on treatment plans as unique to each advanced HN cancer case s. Residents sign up for this series via PD/PC with Ms. Marlisa Frederick (<u>Marlisa Frederick@DFCI.HARVARD.EDU</u>).

Craniomaxillofacial Pathology Conference (Boston Children's Hospital)

Residents on the "C" rotation are required to attend the Craniomaxillofacial Pathology conference every third Friday of the month from 7 AM to 8 AM on Zoom. Cases are presented by oral and maxillofacial surgeons, plastic surgeons, and oral and maxillofacial pathologists.

DFCI Seminar in Oncology

Seminars in Oncology is a major Cancer Biology and Oncology seminar series at the Dana Farber Cancer
 Institute. For over 20 years, local, national and internationally recognized research-oncologists, have presented
 a rich diversity of prevalent topics in cancer research and care to a live audience of faculty and medical fellows
 from surrounding Institutions in Boston's Longwood Medical Area. These seminars are especially important for
 the oral medicine residents in their development as specialist in oral oncology. Seminars are held on Tuesday at
 4pm in the Jimmy Fund Auditorium (35 Binney Street, Boston). Attendance is required during PGY-2.

Empowered Relief Instructor Certification Workshop

PGY-3 residents on the "C" rotation attend the Empowered Relief Instructor Workshop offered by Stanford University to learn about how to offer patients pain management skills. All certification workshops involve didactic content, a demonstration patient class, interaction with peers and faculty, and small group skills practice. Attendees finish the two-day event with foundational information and skills, all treatment materials (background scientific articles, the Empowered Relief therapist manual, instructor slide deck, and all patient materials), as well as an advertising kit. Workshops Include two full days of expert-led didactics, demonstration, and skills practice, demonstration of the Empowered Relief class with actual participants, continuing Education credits/units and all materials required to successfully implement Empowered Relief into the clinic or healthcare system. Information on the course schedule is available at https://empoweredrelief.stanford.edu/.



RESEARCH REQUIREMENTS

Advances in the field of Oral Medicine depend on well-planned, designed, and executed research. Residents gain introductory experience in research through coursework and seminars, as well as through practical experiences. The Division of Oral Medicine and Dentistry maintains an active and robust agenda of clinical and translational research, providing ample opportunities for resident projects.

Residents must complete the Human Subject Protection Training Requirements through the University of Miami Collaborative IRB Training Initiative (CITI Course) by the end of their first year of training. This is an online, mandatory training that is required to participate in any research involving human subjects (including retrospective chart-based research). Create a new account (the institution is Brigham and Women's Hospital) and complete the "CITI Basic Course" at https://www.citiprogram.org/.

Residents must add any research project update to the tracker in Dropbox (link below). Under "status" please select the best option from the dropdown menu.

https://www.dropbox.com/home/ORAL%20MEDICINE%20RESIDENCY/Research%20tracker

Certificate only requirements

Residents are expected to complete TWO of the following research activities:

- 1. Case report to be submitted for presentation at the AAOM annual meeting, ideally during PGY-2 (abstract submission deadline is mid-December).
- 2. Write a review paper or a chapter as the primary author.
- 3. Conduct an original research project. It is expected that the results will be presented as an abstract at a scientific meeting and subsequently published in a peer-reviewed journal.

Certificate/MMSc requirements

Residents are expected to complete TWO of the following research activities:

- 1. Case report to be submitted for presentation at the AAOM annual meeting, ideally during PGY-1 (abstract submission deadline is mid-December).
- 2. Write a review paper or a chapter as the primary author.
- 3. Conduct an original research project. It is expected that the results will be presented as an abstract at a scientific meeting and subsequently published in a peer-reviewed journal.

Certificate/DMSc requirements

In addition to the required thesis research project, Certificate/DMSc residents are encouraged to complete one of the above-described research activities

Please refer to the <u>HSDM Student Handbook</u> and the Office of Research webpage at the HSDM website (<u>www.hsdm.harvard.edu</u>) for details on the Certificate/DMSc (or other relevant) research requirements and deadlines. All research-related questions should be initially directed to the Office of Research.



It is highly recommended that residents complete 1-2 laboratory rotations during the first year before identifying their thesis laboratory and mentor. A research laboratory and thesis project should be determined by the end of the first year or early during the second year. In addition to exposure to research faculty during courses/seminars, and the resources available through the Office of Research at HSDM, here are a few Harvard websites that are of use in identifying potential research laboratories and mentors:

Harvard School of Dental Medicine *DMSc Research Guidebook*: <u>http://www.hsdm.harvard.edu/depts/research/pdf-files/DMScResearch_Guide.pdf</u>

Harvard Medical School Division of Medical Sciences Faculty: <u>http://www.hms.harvard.edu/dms/faculty.html</u>

The Harvard Catalyst: http://connects.catalyst.harvard.edu/PROFILES/SearchProfiles.aspx

Research at Dana-Farber Cancer Institute: <u>http://www.dana-farber.org/res/</u>

TRACK	PGY-0	PGY-1	PGY-2	PGY-3	PGY-4
Certificate track only		 Explore and identify a research project and a mentor Submit two-page proposal Begin research project 	 Continue approved research project 	 Complete research project, publish results 	
Certificate/MMSc	 Identify research mentor and project and begin research Submit Research proposal 	 Submit Research Proposal 	 Continue approved research project 	 Complete research project, publish results Present research in IDP800.IN Advanced Graduate Education Research Seminar Series Present abstract at Student Research Day 	
Certificate/DMSc	 Identify research mentor and project and begin research 	 Submit Research Proposal Convene Thesis Advisory Committee Complete Oral Qualifying Exam 	 Continue approved research project 	 Continue approved research project Convene Thesis Defense Committee 	 Complete research project Defend thesis Present research in IDP800.IN Advanced Graduate Education Research Seminar Series Present abstract at Student Research Day

RESEARCH TIMELINE



RESEARCH PROPOSAL FORMAT

Background and Significance

Describe the significance of the research and provide the rationale for choosing the project. This section should also contain a thorough and critical evaluation of the relevant literature. This review should progress from the historical background to current knowledge and should acknowledge the various controversies and unanswered problems.

Hypothesis and aims

The hypothesis should be formulated in a single sentence indicating what is known in the field and stating how the knowledge could be advanced or refined by this research. After the hypothesis, list the research aims to explain the hypothesis. Describe each aim in one to three sentences.

Study plan

This section should include a general description of the study plan. This is followed by a description of the methods to be used and the analysis plan. It should be clear how the desired goal is going to be achieved given these methods and procedures.

References

The references format should follow the New England Journal of Medicine. It is expected that a referencing application such as Endnote[™], or any other similar application will be used for managing references.

COMMUNITY SERVICE

- Residents participate in community service activities including but not limited to community outreach and education in Oral Medicine topics. Residents will be responsible for preparing a 1-hour presentation on the most frequently encountered conditions in the oral cavity. The conditions should resemble the most common referrals to oral medicine units by dental practitioners and/or medical practitioners. The presentation is provided to a health care center which usually consists of volunteer dental students, nurses, dental health care auxiliaries and qualified dentists working in a community dental service in Boston.
- Residents have the opportunity to serve in the Oral Medicine Clinic at the associated community health center as a part of the United Against Racism project. This is incorporated during the Oral Medicine Rotation (C) during PGY-3.



CLINICAL WORK

All residents complete the exact same clinical rotations during PGY-1, PGY-2 and PGY-3. Clinical rotations are divided into consecutive two-month blocks.

Rotation	# of blocks	Description
А	3	Consult service: consults (no BMT), outpatient clinic, secondary oral medicine
В	3	Oral medicine/Oral oncology service
С	6	Oral medicine: full-time oral medicine clinic
D1	1	ENT (1 month); Dermatology (1 month); Rheumatology (2 weeks); Research (2 weeks)
D2	1	OMFS (2 weeks); OFP (1 month); Research (5 weeks); Board Prep (1 week)
D3	1	Imaging (2 weeks); Medical Oncology (2 weeks); Infectious Diseases (2 weeks);
		Research (6 weeks)
D4	1	Adult Hematology/Oncology (3 weeks); Pediatric Hematology/Oncology (1 week); Elective or Externship (1 month); Headache (2 weeks); Radiation Oncology (2 weeks)

This may be subject to changes during the Program

		Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	Apr	May	Jun
Y	PGY-1-A	А	А	А	В	В	В	D1	D1	D1	А	А	А
Ε	PGY-1-B [#]	D1	D1	D1	А	А	А	А	А	А	В	В	В
А	PGY-2-A	С	С	С	D2	D2	D2	В	В	В	С	С	С
R	PGY-2-B [#]	В	В	В	С	С	С	С	С	С	D2	D2	D2
1	PGY-3-A	С	С	С	D3	D3	D3	С	С	С	D4	D4	D4
	PGY-3-B [#]	D3	D3	D3	С	С	С	D4	D4	D4	С	С	С
Y	PGY-1-A	А	А	А	В	В	В	D1	D1	D1	А	А	А
Ε	PGY-1-B [#]	D1	D1	D1	А	А	А	А	А	А	В	В	В
А	PGY-2-A	С	С	С	D2	D2	D2	В	В	В	С	С	С
R	PGY-2-B [#]	В	В	В	С	С	С	С	С	С	D2	D2	D2
2	PGY-3-A	С	С	С	D3	D3	D3	С	С	С	D3	D3	D3
	PGY-3-B [#]	D3	D3	D3	С	С	С	D4	D4	D4	С	С	С
Y	PGY-1-A	А	А	А	В	В	В	D1	D1	D1	А	А	А
Ε	PGY-1-B [#]	D1	D1	D1	А	А	А	А	А	А	В	В	В
А	PGY-2-A	С	С	С	D2	D2	D2	В	В	В	С	С	С
R	PGY-2-B [#]	В	В	В	С	С	С	С	С	С	D1	D2	D2
3	PGY-3-A	С	С	С	D3	D3	D3	С	С	С	D4	D4	D4
	PGY-3-B [#]	D3	D3	D3	С	С	С	D4	D4	D4	С	С	С

TENTATIVE CLINIC SCHEDULE

#DMSc/MMSc resident



Important notes:

- PGY-2 covers inpatient service when PGY-1 in orientation and H&N Anatomy Course.
- During AAOM Annual Meeting, certificate only PGY-1 covers inpatient service and emergency call.
- Off-site rotations during the first two months of the program (June, July) are unlikely to be scheduled with the off-site clinics successfully and therefore discouraged.

Required Readings

Reading is an essential component of the training program, and residents are expected to keep up with all assigned readings for courses and seminars, as well as self-directed reading.

The following five books must be read in full before beginning the program during orientation:

- Bruch, Jean M., Treister, Nathaniel S. *Clinical Oral Medicine and Pathology*. Humana Press, 2017
- Fisher, Dena J., Treister, Nathaniel S., Pinto, Andres. *Risk Assessment and Oral diagnostic in Clinical Dentistry*. Wiley-Blackwell
- Woo, S-B. Oral Pathology: A Comprehensive Atlas and Text 2nd Edition, 2016
- Glick, M., Burket's Oral Medicine, 2015
- Okeson, J. Management of Temporomandibular Disorders and Occlusion 8th Edition, 2019

These books provide a strong basis on which to build oral medicine knowledge and to develop clinical skills.

Clinical Clerkship

The clinical clerkships begin in July of the first year for the certificate track and in mid-June of the second year for the Certificate/MMSc track and Certificate/DMSc track (following completion of the spring semester courses). On-call coverage may begin in June. Please see the program grid for more details.

Clinical rotations include training in oral medicine as well as various related medical specialties. There are both core and off-service clerkships, described below. Sufficient time is made available for coursework, seminars, and research.

- o All clinical rotations are at BWH unless otherwise specified
- Dress is professional, unless on a surgical rotation where hospital scrubs are standard
- Evaluations must be completed in New Innovations following completion of each clinical rotation
- A white coat and photo ID must be worn during all clinical rotations
- o A head light is provided for inpatients consultation
- Upload patient's photos during A, B and C rotations (see details in <u>Appendix</u>)
- The New Innovations *Patient Encounter Log* must be maintained on each rotation (see details in <u>Appendix</u>)



CORE CLINIC ROTATIONS

Oral Medicine & Dentistry Consultation Service (A)

3 blocks (2 months per block)

During this block rotation, the resident is responsible for managing the inpatient consult service. Residents are also responsible for four/five outpatient clinic sessions per week, with the focus being oral healthcare management of medically complex patients and coordination and provision of emergent care for inpatients. Residents will perform oral surgical procedures in the operating room at least one time per block. The resident will become proficient in interacting with the medical staff and examining and treating patients who are severely immunocompromised and/or otherwise medically complex. Residents will also provide daytime Emergency Department coverage. Residents are responsible for the evaluation of organ transplant, cardiac valve, head and neck cancer, and chemotherapy patients either by direct patient care or consulting on off-site dental evaluations.

Goals and Objectives:

- Understand the role of the oral medicine consult service within the hospital framework
- Learn to work inter-professionally with the hospital staff, including nurses, physician assistants, physicians in training, and attending
- Understand the appropriate use and interpretation of laboratory and diagnostic tests in the context of inpatient consultations
- Provide clear and concise consultation notes and clinical recommendations and demonstrate good communication (all forms either spoken, written, electronic) with the various members of the health care team

	М	Т	W	TH	F
AM		Outpatient clinic	Emergency patients only	Outpatient clinic	Outpatient clinic
PM	Outpatient clinic				

In-patient consultations Please refer to "Guidelines for Inpatient Consultations"

ED consultations Please refer to "Guidelines for Emergency Oral Medicine & Dentistry Services"

Consult bag The "A" resident is responsible for maintaining a fully supplied on-call consult bag weekly (every Monday morning). A checklist will be always provided and placed in the bag for residents to mark used items.

Faculty preceptors:

- Nathaniel Treister, DMD, DMSc
- Herve Sroussi, DMD, PhD
- Sook Bin Woo, DMD, MMSc
- Piamkamon Vacharotayangul, DDS, PhD
- Kentaro Ikeda, DDS, MPH



Oral Oncology/Oral Medicine Service (B)

3 blocks (2 months per block)

Residents will be fully immersed in the oral oncology program during this rotation. Resident responsibilities include:

- 1. Oral Oncology Clinic at DFCI (four clinic sessions/week with Oral Medicine faculty).
- 2. BMT Inpatient Round at BWH: BMT A (Monday).
- 3. Off-site Dental Screening Program.
- 4. Attend the DFCI Head and Neck Oncology (HNO) tumor board conference
- 5. Attend the DFCI Oncology Seminars (PGY-2)

	М	т	W	ТН	F
AM	7 -8 AM BMT-A	DFCI – Yawkey 11	8 – 9 AM HNO Tumor Board Conference	DFCI – Yawkey 11	DFCI – Yawkey 11
PM	DFCI – Yawkey 11	4 – 5 PM DFCI Oncology Seminar Series			

Goals and Objectives:

- Develop a strong basis in the epidemiology, pathophysiology, and medical management of various medical conditions that may be treated with hematopoietic stem cell transplantation (HSCT)
- Understand the timeline and rationale for autologous and allogeneic HSCT including the conditioning regimen intensity and stem cell source
- Educate the BMT teams and clinicians throughout DFCI through clinical teaching on the oral features/complications of BMT and oral complications from cancer treatment
- Develop a strong understanding of the importance of good dental health as well as the various infectious and non-infectious early and late oral complications that can arise in cancer patients
- Develop clinical competency in the diagnosis and management of oral complications related to cancer therapies (e.g., mucositis, GVHD, infection, salivary gland dysfunction, taste dysfunction, orofacial pain disorders)
- Develop clinical competency in the diagnosis and management of oral potentially malignant lesions (e.g., leukoplakia, erythroplakia)

1. Oral Oncology Clinic at DFCI

The clinic sessions will be scheduled with referrals from within DFCI. In addition to patients scheduled on an as-needed basis, the clinic will also include standardized screening visits for certain high-risk patients (e.g., oral cancer screening in post allogeneic HSCT patients). The clinic will provide the following services:

a. Clinical education for all new head and neck cancer patients. These visits will include a discussion of potential oral complications secondary to cancer therapies and a review of reasonable expectations based on the patient's individual treatment plan. The importance of good oral hygiene during and



after completion of treatment will be emphasized. Fabrication of radioprotective appliances for certain patients scheduled to undergo XRT.

- b. Triage clinic for patients with dental pathology. Patients requiring urgent care will be referred to the BWH Oral Medicine and Dentistry clinic on an as-needed basis (e.g., urgent extractions before the initiation of therapy).
- c. Oral Medicine consultation and services for patients with acute and late/chronic oral complications related to cancer therapies such as mucositis, infection, salivary gland dysfunction, taste dysfunction, chronic pain, and trismus.
- d. Oral potentially malignant lesions long-term follow-up clinic (in coordination with HNO).
- e. Coordinate fabrication of radio-protective appliances for mucositis prevention.

Like the BWH Oral Medicine clinic, residents will obtain the history, perform the clinical examination, and document the visit in the electronic medical record.

It is the resident's responsibility to check the schedule *prior* to the clinic session and review all available notes for returning patients. The resident will provide a summary of the patient to the attending that includes the following:

- concise clinical summary
- treatments, outcomes
- pertinent laboratory reports

2. BMT Inpatient Service

All *new BMT admissions* are seen within 1-2 days of admission and documented to confirm their dental and oral status and to review mouthcare. The resident will follow the patient on rounds with the BMT A (Monday AM). It is the responsibility of the resident to check the admit list (which is emailed by the attending) prior to rounds to determine if there have been any new admissions. Residents will also educate the BMT teams through clinical teaching on the oral features/complications of HSCT, including diagnosis and management (raise the oral knowledge/intellect of the team).

BMT-A House Staff Service

The Bone Marrow Transplant Housestaff service (BMT-A) is devoted to patients who are preparing for, undergoing, or suffering from complications of hematopoietic stem cell transplantation. Most patients admitted to this service are undergoing myeloablative or cord blood stem cell transplants. Teaching rounds occur daily from 7:30-11:30 AM (meet at 6A). Educational topics discussed during rounds include rationale for transplantation, conditioning regimen, donor source, and GVHD prophylaxis. A dedicated 30-minute session on Fridays will also review infectious, pulmonary, and GI complications transplantation. The team is made up of a faculty member specializing in BMT and 1 resident and 2 interns from the internal medicine residency program at BWH. A pharmacist rounds daily with the team and a hematology-oncology fellow is available intermittently throughout the year. The housestaff cover the patients from 7AM-7PM Monday-Friday. A night float resident covers the patients overnight. The BMT service varies greatly with respect to workload and number of patients. The census can range from 12-18 patients and care can range from routine transplantation to multi-organ system failure because of infection or GVHD.



BMT-B PA Service

The Bone-Marrow Transplant Physician Assistant (PA) service (BMT-B) is comprised of a team of Physician Assistants who are trained in and maintain competencies in the management of bone marrow transplantation and its complications. The team manages mostly autologous and reducedintensity allogeneic transplants. Patient rounds occur daily starting at 8:00AM, with a Bone Marrow Transplant attending, nurse and pharmacist, as well as caregivers of other disciplines who all contribute to the care of the patients. A Hematology-Oncology Fellow is available intermittently throughout the year. The census on BMT-B can range from 12-20+ patients and the care can range from routine transplantation issues to multi-organ system failure as a result of infection or GVHD. The PAs are first responders to clinical issues that arise during any given day from 7AM-7PM, 7 days a week. A nocturnist physician covers the patients overnight.

3. Off-Site Dental Screening Program

Residents are responsible for completing the pre-HSCT and pre-XRT evaluations from community dentists (please see below). All letters will be finalized under the supervision of the attending on B for that specific day. The attending will remain available with any questions.

- 4. <u>Attend HNO Tumor Board.</u> See detail in <u>Description of Courses/Seminars/Rounds</u>
- 5. <u>Attend DFCI Oncology Seminar (PGY-2).</u> See detail in <u>Description of Courses/Seminars/Rounds</u>

Curriculum in preparation for the rotation:

- A. Participate in the orientation block at the beginning of the Oral Medicine residency program which will include multiple lectures on:
 - a. Basics of HSCT (101)
 - b. Dental management of HSCT patients
 - c. Dental management of patients with head and neck cancer
 - d. Oral complications related to BMT
- B. Participate in a case review session for dental management of cancer patients

Required readings:

- 1. Tsuji K, Shibuya Y, Akashi M, Furudoi S, Yakushijin K, Kawamoto S, Okamura A, Matsuoka H, Komori T. Prospective study of dental intervention for hematopoietic malignancy. J Dent Res. 2015 Feb;94(2):289-96.
- 2. Toljanic JA1, Bedard JF, Larson RA, Fox JP. A prospective pilot study to evaluate a new dental assessment and treatment paradigm for patients scheduled to undergo intensive chemotherapy for cancer. Cancer. 1999 Apr 15;85(8):1843-8.
- 3. Treister N, Chai X, Kurland B, Pavletic S, Weisdorf D, Pidala J, Palmer J, Martin P, Inamoto Y, Arora M, Flowers M, Jacobsohn D, Jagasia M, Arai S, Lee SJ, Cutler C. Measurement of oral chronic GVHD: results from the Chronic GVHD Consortium. Bone Marrow Transplant. 2013 Aug;48(8):1123-8.
- 4. Treister N, Duncan C, Cutler C, Lehmann L. How we treat oral chronic graft-versus-host disease. Blood. 2012 Oct 25;120(17):3407-18.
- Couriel D, Carpenter PA, Cutler C, Bolaños-Meade J, Treister NS, Gea-Banacloche J, Shaughnessy P, Hymes S, Kim S, Wayne AS, Chien JW, Neumann J, Mitchell S, Syrjala K, Moravec CK, Abramovitz L, Liebermann J, Berger A, Gerber L, Schubert M, Filipovich AH, Weisdorf D, Schubert MM, Shulman H, Schultz K, Mittelman



B, Pavletic S, Vogelsang GB, Martin PJ, Lee SJ, Flowers ME. Ancillary therapy and supportive care of chronic graft-versus-host disease: national institutes of health consensus development project on criteria for clinical trials in chronic Graft-versus-host disease: V. Ancillary Therapy and Supportive Care Working Group Report. Biol Blood Marrow Transplant. 2006 Apr;12(4):375-96.

- Filipovich AH, Weisdorf D, Pavletic S, Socie G, Wingard JR, Lee SJ, Martin P, Chien J, Przepiorka D, Couriel D, Cowen EW, Dinndorf P, Farrell A, Hartzman R, Henslee-Downey J, Jacobsohn D, McDonald G, Mittleman B, Rizzo JD, Robinson M, Schubert M, Schultz K, Shulman H, Turner M, Vogelsang G, Flowers ME. National Institutes of Health consensus development project on criteria for clinical trials in chronic graft-versus-host disease: I. Diagnosis and staging working group report. Biol Blood Marrow Transplant. 2005 Dec;11(12):945-56.
- 7. Jagasia MH, Greinix HT, Arora M, Williams KM, Wolff D, Cowen EW, Palmer J, Weisdorf D, Treister NS, Cheng GS, Kerr H, Stratton P, Duarte RF, McDonald GB, Inamoto Y, Vigorito A, Arai S, Datiles MB, Jacobsohn D, Heller T, Kitko CL, Mitchell SA, Martin PJ, Shulman H, Wu RS, Cutler CS, Vogelsang GB, Lee SJ, Pavletic SZ, Flowers ME. National Institutes of Health Consensus Development Project on Criteria for Clinical Trials in Chronic Graft-versus-Host Disease: I. The 2014 Diagnosis and Staging Working Group Report. Biol Blood Marrow Transplant. 2014 Dec 18.
- 8. Elad S, Raber-Durlacher JE, Brennan MT, Saunders DP, Mank AP, Zadik Y, Quinn B, Epstein JB, Blijlevens NM, Waltimo T, Passweg JR, Correa ME, Dahllöf G, Garming-Legert KU, Logan RM, Potting CM, Shapira MY, Soga Y, Stringer J, Stokman MA, Vokurka S, Wallhult E, Yarom N, Jensen SB. Basic oral care for hematology-oncology patients and hematopoietic stem cell transplantation recipients: a position paper from the joint task force of the Multinational Association of Supportive Care in Cancer/International Society of Oral Oncology (MASCC/ISOO) and the European Society for Blood and Marrow Transplantation (EBMT). Support Care Cancer. 2015 Jan;23(1):223-36.
- 9. Jawad H, Hodson NA, Nixon PJ. A review of dental treatment of head and neck cancer patients, before, during and after radiotherapy: part 1. Br Dent J. 2015 Jan 23;218(2):65-8.
- 10. Jawad H, Hodson NA, Nixon PJ. A review of dental treatment of head and neck cancer patients, before, during and after radiotherapy: part 2. Br Dent J. 2015 Jan 23;218(2):69-74.
- 11. Antin J, Yolin Raley D, Manual of Stem Cell and Bone Marrow Transplantation. Cambridge Medicine

Faculty preceptors:

- Nathaniel Treister, DMD, DMSc
- Herve Sroussi, DMD, PhD
- Sook Bin Woo, DMD, MMSc
- Piamkamon Vacharotayangul, DDS, PhD

Oral Medicine Program Manual

Oral Medicine Clinic (C)

6 blocks (2 months per block)

Residents rotate through the Division of Oral Medicine and Dentistry's Oral Medicine clinic at BWH (75 Francis Street). Typical cases include patients with mucosal diseases such as lichen planus and leukoplakia; patients with burning mouth syndrome; patients with oral manifestations of systemic disease; and patients with chronic graft-versus-host disease and other cancer-related complications. Residents obtain a history and perform a head and neck exam, then present the findings, provide a differential diagnosis, and suggested a treatment plan.

Resident responsibilities include:

- 1. Oral Medicine Clinic at BWHI (8 clinic sessions/week with Oral Medicine faculty).
- 2. Attend the Craniomaxillofacial Pathology Conference (BCH)
- 3. Upload clinical photographs and keep NI log updated
- 4. PGY-3 attend BCHC Community Oral Medicine Clinic (3rd Friday)

Goals and Objectives:

- Develop effective skills in obtaining a complete medical history and writing clinical notes
- Develop proficiency in the appropriate use and interpretation of diagnostic tests
- Develop proficiency in generating an appropriate differential and working diagnosis
- Develop proficiency in determining the most appropriate treatment plan, including pharmacotherapeutics, patient education and counselling, and monitoring and follow-up

	М	т	W	тн	F
AM	BWH	BWH	Academic morning	BWH	7 – 8 AM Patho Conference (BCH/Zoom) BWH/BCHC*
PM	BWH	BWH	Academic afternoon	BWH	BWH/BCHC*

*3rd Friday of each month, one PGY-3 resident attend BCHC Oral Medicine with Dr. Vacharotayangul

Faculty preceptors:

- Nathaniel Treister, DMD, DMSc
- Herve Sroussi, DMD, PhD
- Sook Bin Woo, DMD, MMSc
- Piamkamon Vacharotayangul, DDS, PhD
- Kentaro Ikeda, DDS, MPH

The objective of this clerkship is to train residents to <u>proficiency</u> in the clinical practice of Oral Medicine, including:



- history taking
- proper use and interpretation of microbiology, histopathology, radiography, and laboratory studies
- diagnosis and management of oral mucosal and salivary gland diseases
- anticipation, prevention, identification, and management of cancer-related orofacial complications
- recognition and management of orofacial pain disorders
- treatment planning for, and delivery of optimal oral health care for the medically complex patient

All patients are seen in the *Division of Oral Medicine and Dentistry* outpatient clinic at BWH (2nd floor, or "Pike", Exit 3). Residents must check the schedule *prior* to the clinic session and review all available EPIC notes for returning patients. Just prior to seeing each follow-up patient, the resident will briefly present their history to the attending:

- concise clinical summary
- treatments, outcomes
- pertinent laboratory reports

In most cases, **<u>new patients will initially be evaluated by the resident</u>**. The resident will write the clinical notes in EPIC (using the correct templates and entering meaningful use fields taught in EPIC training) and forward to the attending for review and finalization.

Residents must ensure that the names and addresses of all referring physicians and dentists have been entered by the dental assistants. The resident must enter the referring doctors in EPIC (taught during EPIC training). In case of missing information, if the patient does not have their dentist's address, it can typically be found easily by searching the [dentist's last name], the word [dentist], and the [name of the town] in Google. Note that all dentists' information is entered manually by the dental assistant, whereas nearly all physicians are already in the database. For those who will only receive the note in letter format (to a physical address), they must be addressed to individually and not in CC. This must be completed prior to forwarding notes to the attending for review.



OFF-SERVICE ROTATIONS

ORL (Otorhinolaryngology 2 weeks/Head & Neck Oncology 2 weeks)

Residents see patients referred to the Division of Otorhinolaryngology (ORL) at BWH and DFCI for a variety of head and neck complaints. Residents can observe the diagnosis and management of patients with a wide range of ORL conditions in the inpatient, outpatient, and operating room setting, ranging from benign to malignant. Residents attend the Head and Neck Tumor Board at DFCI and gain extensive experience in head and neck oncology during this rotation.

Goals and Objectives:

- Review and demonstrate a clear understanding of the radiographic and clinical aspects of head and neck anatomy
- Learn the epidemiology, pathophysiology, diagnosis, and management of the most common ORL conditions
- Understand the principles of ORL physical examination and head and neck imaging
- Identify potential non-odontogenic causes of orofacial pain/symptoms, and know when referral to an ORL specialist is indicated

Details from the ORL Division

We expect all our providers, including students, to show up on time for their scheduled sessions with appropriate attire and hospital identification. It is most helpful if you have read the educational information prior to beginning the rotation. This will vastly increase your ability to participate and learn from your patient interactions.

We designed this clerkship so that you can be involved with both *ambulatory otolaryngology and head and neck oncology*, where you will work directly with a faculty preceptor on taking the histories and performing ear and neck portions of the physical exam, as well as *operative experience* so that you can see the unique anatomy of the head and neck. Because many of us are sub-specialists, e.g., otology or head and neck, we do not want you to spend the entire rotation with just one faculty member. We realize that this has the disadvantage of one faculty not getting to know you well, but the advantage of getting a broader exposure of our specialty seems to outweigh this other consideration.

We also want to give you some flexibility in your choice of how to spend each day. The program coordinator will give you a schedule, but if you find that there is a specific operative case or clinic experience that you wish to substitute to achieve your personal or course objectives please let the Chief Resident or appropriate faculty member know so that we can facilitate your learning.

Several offices, emergency, and non-surgical conditions falls in the purview of ORL. Over the course of the clerkships, residents will be expected to become familiar with the diagnosis, triage, and management of the following:



- Emergency/Trauma
 - Airway obstruction
 - o Epistaxis
 - o Craniofacial, Cervical and Laryngeal fractures and soft tissue injury
 - o Head trauma
 - Acute infections, including deep neck
 - Foreign bodies and caustic ingestion
- Infections of Head and Neck Sites
- Neoplastic Diseases and Mass Lesions of Head and Neck Sites
 - o Benign; Malignant
 - Congenital masses/cysts
 - Tumor-like conditions
- Non-neoplastic and inflammatory Conditions of Head and Neck Sites
 - Acute; Chronic
- Oral mucosal diseases and related dentistry
- Voice, Speech and Swallowing Disorders and Rehabilitation
- Sleep Disorders

Knowledge

Ear

- 1. Differentiate between sensorineural and conductive hearing loss.
- 2. Differentiate an acute otitis media from an otitis media with effusion from otitis externa; recognize the complications of each (mastoiditis, hearing loss).
- 3. Understand the evaluation of a patient with dizziness, including details of the history that help distinguish various etiologies of dizziness (Menière's disease, acoustic neuroma, vestibular neuritis, labyrinthitis).
- 4. Know the indications for tympanocentesis, myringotomy and tube placement.
- 5. Know the differential diagnosis for otalgia and pertinent historical and clinical findings.
- 6. Know how to interpret an audiogram and the functional consequences of hearing loss in different frequency ranges.

Nose and Sinuses

- 1. Know the symptoms, common causes and treatment options for rhinitis and Eustachian tube dysfunction.
- 2. Differentiate anterior from posterior epistaxis, including the treatment options for each.
- 3. Know the signs and symptoms of infectious vs. inflammatory sinusitis and possible complications.
- 4. Know the indications and basic anatomic principles of endoscopic sinus surgery.
- 5. Know and be able to demonstrate normal and abnormal findings on sinus CT.

Oral Cavity and Oropharynx

- 1. Differentiate a peritonsillar abscess from tonsillitis.
- 2. Be able to identify leukoplakia of the oral cavity.



Larynx

- 1. Know the differential diagnosis and evaluation of a patient with hoarseness.
- 2. Know the basic evaluation of a patient with dysphagia.
- 3. Demonstrate command of the basics of airway management, anatomic landmarks and be able to identify airway emergencies (e.g., supraglottitis).
- 4. Be familiar with the differential diagnosis of stridor.

Salivary Glands

1. Understand the diagnosis and treatment of sialolithiasis and parotitis.

Neck

- 1. Know the differential diagnosis and basic evaluation of a neck mass, including a thyroid nodule.
- 2. Know basic neck anatomy on neck CT scan.

Skills

Clinic

- 1. Be able to examine the ear, including the auricle, ear canal and tympanic membrane (BWH clinic).
- 2. Be able to perform a thorough neck examination with particular attention to identifying the cricoid cartilage. Be able to fully describe the location and characteristics of a neck mass or adenopathy (DFCI clinic).
- 3. Take a focused history from a patient in an ambulatory setting. Be able to establish a rapport with the patient during the visit (BWH/DFCI clinics).

Operating Room

- 1. Be able to demonstrate knowledge of sterile technique and function safely in sterile environment.
- 2. Be aware of operating room routines and the beginning and end of cases and facilitate those routines when involved in a surgical procedure.
- 3. Know and be able to demonstrate relevant anatomy for the cases assigned.

Attitudes

- 1. Demonstrate awareness of functional impairments that might affect ORL patients.
- 2. Be able to discuss the impact of ORL disease on a patient's quality of life.
- 3. Be mindful of each patient's sense of his/her disease and assess his/her understanding of the proposed treatment plan.

Educational Materials

<u>Some of your learning will need to be independent</u>. In this way, you can benefit more deeply from the actual patient experiences during your time with us. It will enhance your learning experience if you read the brief handbook entitled: Primary Care Otolaryngology. You may find this publication online: <u>http://www.entnet.org/EducationAndResearch/primaryCare.cfm</u>

In addition, we recommend that you work through the web-based curriculum (COOL) at: http://www.entnet.org/EducationAndResearch/COOL.cfm



Required Reading Prior to Beginning the Rotation:

- Pasha R. Otolaryngology: Head and Neck Surgery A Clinical and Reference Guide. 2nd ed. Plural Publ, 2006.
- TNM Staging of Head and Neck Cancer and Neck Dissection Classification <u>http://www.entnet.org/sites/default/files/ChapterFiveFINAL.pdf</u>

Recommended Reading:

 Lalwani A. Current Diagnosis and Treatment in Otolaryngology – Head & Neck Surgery. 2nd ed. McGraw-Hill, New York, 2008

TYPICAL WEEKLY SCHEDULE (can be flexible based on specific interests):

	Monday	Tuesday	Wednesday	Thursday	Friday
AM	BWH Outpatient Clinic	H&N Oncology Clinic, DFCI Y11	Tumor Board (8-9AM, DFCI)	BWH Outpatient Clinic	OR: H&N Oncology
			OM didactics		
12-1 PM			OM didactics		
12-1 PIVI			(when scheduled)		
PM	BWH Outpatient Clinic	H&N Oncology Clinic, DFCI Y11	OM didactics (when scheduled)	H&N Oncology Clinic, DFCI Y11	BWH Outpatient Clinic

Contacts: Dr. Ravindra Uppaluri (<u>Ravindra Uppaluri@DFCI.HARVARD.EDU</u>) BWH - Michelle Swoboda (<u>mswoboda@bwh.harvard.edu</u>) DFCI - Marlisa Frederick (Marlisa Frederick@DFCI.HARVARD.EDU)



Dermatology (1 month)

Residents learn the fundamentals of dermatology, including how to perform a skin examination on patients. Residents learn the correct terminology for a variety of skin conditions and present their findings, differential diagnoses, and treatment plan to the attending dermatologist. Residents also can assist with and perform skin punch biopsies, cryotherapy and intralesional injections.

<u>Goals</u>

- Review the epidemiology, pathophysiology, diagnosis, and management of the most common dermatologic conditions
- Understand the principles of a full skin exam
- Understand the various diagnostic tests used in dermatology
- Review the medical management of patients with mucocutaneous disease with particular emphasis on the basic principles of dermatological therapeutics

Objectives

- o Fluency in basic descriptive dermatological terminology (macule, papule, vesicle, etc.)
- Recognition of the most common or serious dermatoses, and those with significant oral manifestations:

Acne	Atopic dermatitis	Herpes simplex and zoster	Contact dermatitis
Warts	Seborrheic dermatitis	Impetigo	Fungal infections
Psoriasis	Seborrheic keratosis	Tinea versicolor	Pityriasis roseas
Actinic keratosis	Pigmented lesions (nevi)	Lichen planus	Urticaria
Basal cell carcinoma	Alopecia	Malignant melanoma	Squamous cell carcinoma Vesiculobullous disorders

- Recognition of important cutaneous reactions and markers of syndromes (erythema multiforme, erythema nodosum, GVHD, etc.)
- Familiarity with cutaneous signs of systemic disease, particularly collagen vascular and malignant diseases
- Ability to perform:
 - a. KOH preparations
 - b. Scabies preparations
 - c. Wood's lamp exams
 - d. Tzanck smears
 - e. Punch biopsies
- o Familiarity with the basic principles of dermatological therapeutics

Recommended Readings:

- a. Freedberg I, Eisen A, Wolff K., et a., <u>Fitzpatrick's Dermatology in General Medicine</u>, 5tj ed., New York: McGraw-Hill (1999). Chapters 4, 5, & 6
- b. Lookingbill DP, Marks JG., <u>Principles of Dermatology</u>, 4th ed., Philadelphia: WB Saunders Co. (2006) 331 pages
- c. Arndt KA., <u>Manual of dermatologic therapeutics</u>, 5th ed., Boston: Little, Brown & Co. (1995)



d. Fitzpatrick TB, Johnson RA, Polano MK, Surmond D, Wolff K., <u>Colors Atlas and Synopsis of Clinical</u> <u>Dermatology</u>, 3rd ed., New York: McGraw-Hill (1997)

Required Readings: papers are uploaded in the ecommons under *My Collaborations > Oral Medicine Clinical Rotations > Dermatology*

Faculty preceptor: Vinod Nambudiri, MD, MBA, EdM (<u>vnambudiri@bwh.harvard.edu</u>) **Program coordinator:** Mackenzie Leonard (<u>mleonard6@bwh.harvard.edu</u>)

Rheumatology, Allergy & Immunology (2 weeks)

Residents learn about the diagnosis and management of patients with rheumatologic, autoimmune, and allergy disorders. Special emphasis will be placed on history taking, physical examination, and the appropriate use and interpretation of laboratory and imaging tests. Residents also gain experience in the use and limitations of allergy testing.

The subspecialty of Rheumatology includes a wide array of autoimmune, inflammatory, and degenerative diseases that affect the musculoskeletal and other organ systems, including the orofacial complex. A working knowledge of the basic and clinical sciences that relate to musculoskeletal and rheumatic disease is fundamental to the practice of oral medicine. The objective of this two-week rotation is to gain a working knowledge of clinical Rheumatology, with respect to history taking, physical examination, ordering and interpretation of laboratory and imaging tests, diagnosis, management, and follow-up.

One week is devoted primarily to the consult service. The second week is spent in the outpatient clinic. Some exposure to pediatrics is provided.

Didactics & Seminars

Grand Rounds Tuesdays 8-9 AM, Bayles Conference Room

Lunch Rounds Tuesday 12-1 PM, Bayles Conference Room

Goals and Objectives

- Understand the work-up of a patient suspected to have a rheumatic condition, with particular emphasis on history taking, use of laboratory medicine, and the roles of imaging and pathology
- Become familiar with the range of pharmacotherapeutic approaches to managing rheumatic, immunologic and autoimmune conditions, including rationale for use of various agents as well as necessary monitoring
- Be able to recognize oral manifestations of systemic diseases and understand the role for oral medicine in management of such patients

Contact: Dr. Simon Helfgott (<u>SMHELFGOTT@BWH.HARVARD.EDU</u>) and Deborah Sylvester (<u>dsylvester@bwh.harvard.edu</u>)



Oral and Maxillofacial Surgery (2 weeks)

Residents learn the fundamentals of OMFS and the correct terminology for a variety of OMFS conditions. Residents present their findings, differential diagnoses, and treatment plan to the attending oral surgeon.

Goals and Objectives:

- Gain experience in simple and surgical dental extractions and complex oral biopsies
- Gain experience in management of complexed temporomandibular joint disorders
- Gain experience in treatment planning and management of jaw lesions
- Become familiar with medical considerations that impact the management of dental surgical patients
- Be able to demonstrate knowledge of sterile technique and function safely in sterile environment
- Be aware of operating room routines and the beginning and end of cases and facilitate those routines when involved in a surgical procedure

Process

- 1. Oral medicine resident contacts Dr. Tannyhill 1 week before their rotation begins
- 2. Upon their arrival on the first day, introduce themselves to the Chief resident and inquire for cases that they can work on
- 3. Residents attend the OMFS clinic at Massachusetts General Hospital

Faculty preceptors: Richard John Tannyhill III, M.D., D.D.S. (<u>RJTANNYHILL@MGH.HARVARD.EDU</u>) **Coordinator:** Rajaa Khoubach (<u>rkhoubach@partners.org</u>)

Orofacial Pain (1 month)

Residents spend one month at the Massachusetts General Hospital's Division of Orofacial Pain. The purpose of the rotation is to become familiar with the classification, in depth evaluation, examination, diagnosis and treatment of Orofacial pain disorders and associated medical conditions. The resident will be fully integrated into the accredited Orofacial Pain training program with the Orofacial Pain residents and evaluate and treat patients in the outpatient clinic and inpatient consultations. The resident will also participate in the didactic program and clinical conferences. Recommended readings are listed in Dropbox.

Faculty preceptors: Jeffry R. Shaefer (jeffry shaefer@hms.harvard.edu) Coordinator: Rajaa Khoubach (<u>rkhoubach@partners.org</u>)

Imaging: Head & Neck Radiology (2 weeks)

Residents observe all aspects of imaging studies at the DFCI Head and Neck Imaging and Interventions Division of Neuroradiology with faculty members. The oral medicine resident will

- Learn the foundation of imaging interpretation of H&N anatomy in PET, MRI, CT, as well as other nuclear medicine studies, with an attending in a lecture or case reviews with residents
- Learn the imaging education specific for H&N pathology and oncology. Residents observe all aspects of imaging studies with faculty members and fellows.

Goals and Objectives:



- Understand the principles of head and neck imaging and the indications for and limitations of different imaging studies
- Become familiar with the radiographic interpretation of advanced head and neck imaging studies, including identification of the study type and plan, as well as description of basic hard and soft tissue anatomy
- Understand how to interpret the written radiology report

Contact: Dr. Jeffrey Guenette (JPGUENETTE@BWH.HARVARD.EDU)

Medical Oncology (2 weeks)

Residents observe and gain practical clinical experience in the evaluation, diagnosis and management of patients in a variety of oncology clinics at DFCI. Time is divided between breast, lung, genitourinary, sarcoma, and the early phase clinical research program.

Goals and Objectives:

- Understand the fundamental principles of clinical diagnosis and management of patients with solid cancers
- Become familiar with medical considerations that impact the management of oncology patients
- Gain an appreciation for the role of clinical research in oncology, in particular early phase studies

Faculty preceptor: Ann LaCasce, MD, MMSc <u>Ann_LaCasce@dfci.harvard.edu</u>) Contact: Marlisa Frederick (<u>Marlisa_Frederick@DFCI.HARVARD.EDU</u>)

- GU Geraldine Sanon = <u>Geraldine_Sanon@DFCI.HARVARD.EDU</u>
- GI Stephen Flaherty = <u>Stephen_Flaherty@dfci.harvard.edu</u>
- Breast Joseph Scorzoni = <u>Joseph_Scorzoni@DFCI.HARVARD.EDU</u>
- Sarcoma Shannon McDonough = <u>Shannon_McDonough@DFCI.HARVARD.EDU</u>

Infectious Diseases (2 weeks)

During this rotation residents gain experience in the evaluation and diagnosis of patients with a variety of infectious complaints on an inpatient basis. The inpatient facility sees patients with variety of health conditions complicated by infectious diseases. Residents learn how to work up the patient, understand laboratory values and appropriate use of standard antimicrobial medications as well as new agents in the management of localized and systemic infections.

Goals and Objectives:

- Recognize the central role of the infectious disease consult service in the hospital and cancer center
- Gain familiarity with the indications for and interpretation of diagnostic tests in infectious diseases
- Understand the principles of therapy and management in infectious diseases
 Faculty preceptor: Paul Sax, MD (psax@bwh.harvard.edu)
 Coordinator: Angie R. Kelly (AKELLY12@PARTNERS.ORG)



Hematology/Oncology (2 weeks Adult; 2 weeks Pediatric)

Residents observe and participate in the evaluation, diagnosis, and management of patients in the pediatric and adult hematology/oncology inpatient and outpatient clinics at DFCI, Brigham and Women's Hospital, and Children's Hospital Boston. Residents gain in-depth practical clinical experience in hematopoietic cell transplantation and graft-versus-host disease. This rotation provides insight into how to interpret hematologic tests, perform a bone marrow biopsy and read blood smears. From observing the interaction between physician and patient in this rotation, residents learn to treat patients with empathy and professionalism.

- Residents attend the Adult Hemophilia Clinic on Wednesday mornings during the adult rotation on Wednesdays 8 AM-12 PM, in workroom of room Y762
- Hematology Clinic with Dr. Aric Parnes, Paula Temoczko, NP, Christine Mitchell, LICSW, and Latoya Lashley, Research Coordinator at Boston Hemophilia Center, Adult Service Clinic, Dana Farber Cancer Institute, Yawkey Building 7th Floor

Patient population:

- Persons with congenital bleeding disorders: hemophilia A, hemophilia B, von Willebrand disease, platelet disorder, Glanzmann thrombasthenia, factor VII deficiency, factor X deficiency, factor XI deficiency, factor XIII deficiency, vascular bleeding disorders.
- Patients with congenital thrombotic disorders: congenital antithrombin III deficiency, protein S deficiency, protein C deficiency
- Patients with acquired thrombotic disorders: lupus anticoagulant, antiphospholipid antibodies

Goals and Objectives:

- Understand the clinical work-up involved in the diagnosis of benign and malignant hematologic conditions
- Understand the role of the various diagnostic tests involved in hematology and hematology/oncology, including molecular and genetic tests
- Develop a strong understanding of the principles of therapy in benign and malignant hematologic conditions, including oral and intravenous medications as well as the roles for autologous and allogeneic hematopoietic stem cell transplantation
- Understand the range of potential oral manifestations and complications that can arise in patients with hematologic conditions, how to conduct an appropriate risk assessment

Faculty preceptors:

Christy Duncan, MD (<u>cduncan@bwh.harvard.edu</u>; Pediatric Hematology/Oncology) Paula Temoczko, NP (<u>ptemoczko@bwh.harvard.edu</u>; Hemophilia Clinic) Corey Cutler, MD (<u>cscutler@dfci.harvard.edu</u>; Adult Hematology/Oncology)

Contacts:

Katie Kupferberg (<u>kkupferberg@bwh.harvard.edu</u>; Adult Hematology/Oncology) Marlisa Frederick (<u>Marlisa_frederick@dfci.harvard.edu</u>; Adult Hematology/Oncology) Inez McCarthy (<u>Inez_Mccarthy@dfci.harvard.edu</u>; Pediatric Hematology/Oncology)



Headache Clinic (1 week)

Residents observe the diagnosis and management of patients referred for a variety of orofacial pain and headache disorders. Residents learn the principles of proper use of pharmacological agents as well as alternative therapies for the treatment of chronic pain.

Goals and Objectives:

- Review the clinical spectrum of headache disorders
- Understand the clinical work-up of a patient with headache symptoms
- Become familiar with the principles of therapy of the most common headache disorders

Location: Headache Clinic, Faulkner Hospital

Contact:

Paul B. Rizzoli, MD (<u>prizzoli@bwh.harvard.edu</u>) Melissa Kimble (mkimble@bwh.harvard.edu)

Pain Clinic (1 week)

Residents learn about the fundamental principles of acute and chronic pain assessment and management in both the inpatient and outpatient settings.

Goals and Objectives

- Understand the role of the pain service in a hospital and cancer center
- Learn the basic principles of clinical pain assessment
- Become familiar with the range of available pharmacologic and non-pharmacologic therapeutic options in the management of chronic pain
- Recognize the role of therapy and counseling in management of chronic pain

Contacts:

Mohammed Issa, MD (missa1@bwh.harvard.edu)

Radiation Oncology Clinic (2 weeks)

Objectives:

To acquaint the resident with the basic concepts and practice of radiotherapy. Residents will learn to apply principles of radiation physics, radiobiology, and radiation safety in clinical care, evaluate clinical staging of the patient with head and neck cancer, learn the importance of a multidisciplinary approach to cancer management, and observe the treatment planning session.

Contacts:

Danielle Margalit, MD (Danielle_Margalit@dfci.harvard.edu)



Externships (Elective)

Domestic and foreign Oral Medicine externships of up to 1 month can be arranged and are encouraged. Any time taken for externship will count towards E rotation. Externships must be planned **at least 6 months in advance**. Residents must write a proposal of the externship, consisting of the purposes, preceptor's name, activities, and evaluation plans, and discuss with the Program Director at least 4 months in advance. Residents are responsible for travel and accommodations unless otherwise notified with fund availability.



RESIDENT RESPONSIBILITIES

The program is structured so that responsibility for organizing activities is delegated to the residents, allowing residents to develop administrative/organizational and leadership skills. Tasks are assigned in early April to allow sufficient time to prepare activities starting in Mid-June to July.

ALL RESIDENTS

The following responsibilities are delegated to all residents:

1. Certifications

It is the resident's responsibility to keep their **CPR**, **ACLS certifications**, **and OSHA certification** current and to provide copies of their certifications to the program coordinator. Review courses are available. Residents must maintain an active **dental license** and provide the program coordinator with a copy. Foreign residents must renew a Limited Dental License annually.

Certificate track

• ACLS course is offered to new incoming residents during their initial orientation to the hospital. Residents must have a current CPR card, which needs to be renewed every two years. It is the resident responsibility to renew the CPR. OSHA certification is obtained during orientation and renewed in HealthStream every year.

Certificate/MMSc track and Certificate/DMSc track

- OSHA and ACLS/CPR courses are offered to residents during the initial orientation to HSDM. OSHA recertification is done on an annual basis, whereas CPR is every two years. Residents receive email reminders for renewal from HSDM. Renewal classes are held at HSDM.
- 2. Teaching Responsibilities Teaching is a small but integral component of the residency program.
 - Residents participate in the HSDM Objective Structured Clinical Examinations (OSCE) given to 3rd and 4th-year predoctoral students. This teaching opportunity is coordinated by Dr. Bernard Friedland (bernard friedland@hms.harvard.edu).
 - Residents are involved in teaching HSDM students when on their Clinical Oral Medicine and Pathology rotations.
 - Clinical consultations may also be provided at HSDM with faculty supervision.
 - When in C rotation, residents will provide a continuing education class to the dental assistants during the lunch hour. Each resident will teach this class one time per year.
 - Any other requests from Course Director outside of the Oral Medicine Residency program must be directed to the Program Director before the resident commits to such teaching opportunity.
- 3. <u>Clinical Responsibilities</u> in addition to all rotations as part of the training, residents must perform these roles
 - a) <u>Maintain patient log</u> in New Innovations (NI) Software. Residents must keep this log updated. It is recommended to be updated every day. See instructions in <u>the Appendix</u>.
 - "A" Resident (resident on "A" rotation) is responsible for completing the New Innovations patient log for all inpatients (cardiac, tower patients, etc.), ED consults, and outpatient dental visits (initial and follow-up). <u>This also applies to the resident on-call</u> (pager's holder).



- "B" Resident is responsible for completing the NI patient log for all pre-HSCT and oral oncology patients seen at DFCI. The B resident is also responsible for uploading the clinical photos for the Oral Oncology Clinic patients. "B" Resident is responsible for logging the Oral Medicine visits when there is no "C" resident.
- "C" Resident is responsible for completing the NI patient log for Oral Medicine outpatient visits (initial and follow-up) and uploading the clinical photos for the Oral Medicine Clinic patients. See instructions in the <u>Appendix</u>.

b) Taking Calls and Incoming Messages

- All BWH patient related concerns (i.e., prescription refills, symptoms call, etc.) will be triaged according to the resident's responsibility (i.e., if a prescription call comes in it will be triaged to the C resident) and if anyone is out, messages will be triaged according to guidelines addressed above.
- All DFCI patient calls would be triaged to the attending who may inquire the B resident to respond.
- Telephone calls from patients wanting advice are to be handled in the following manner:
 - If the patient was seen during your shift and has a question regarding a prescription or instructions, the questions may be handled over the telephone. If the patient is a patient of the faculty AND you are able to consult with that attending about the case by phone, you may be able to give advice/call in a prescription with the advice of the faculty person. If the patient's condition is worse, the patient is to be instructed to come to the BWH ED immediately.

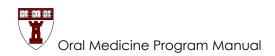
OTHERWISE, NO PRESCRIPTIONS OR ADVICE ARE TO BE GIVEN OVER THE TELEPHONE. IF PATIENTS CALL FOR ADVICE THEY ARE TO BE INSTRUCTED TO COME TO THE ED FOR CARE OR SCHEDULE FOR A VISIT.

4. Professional Activities

- All residents attend a mandatory annual Professionalism course at BWH and a course at HSDM at the beginning of their program.
- American Academy of Oral Medicine (AAOM) All residents automatically become members of the American Academy of Oral Medicine upon matriculation and throughout their training.
- Bulletin Board of Oral and Maxillofacial Pathology (BBOP) Residents should subscribe to the Bulletin Board of Oral and Maxillofacial Pathology, which is a very active listserv that discusses oral medicine and pathology related topics and events. To subscribe, send an email to the following address: aguirr@BUFFALO.EDU.

5. Contact Information

• All residents must have an email account at the dental school (@hsdm.harvard.edu) and check it daily. Once the MGB (Partners) Outlook account has been established, the Partners email address (@bwh.harvard.edu) must be checked regularly as this will be the primary mode of communication within the hospital. Emails should be replied to promptly, generally within 24 hours of receipt, or sooner, especially when clinical matters are involved.



• Residents must keep the department administrator updated with their current home and lab/day addresses, telephone and cell phone numbers.

6. American Board of Oral Medicine (ABOM) Examination

Residents are expected to take the certifying board examination prior to graduation. Part A (written) of the board examination can be taken in the spring of the second year (both tracks). A candidate for Part B Board certification must have engaged in the practice of the specialty of oral medicine for a minimum of eighteen (18) months after receiving the certificate in oral medicine before applying for the examination. The examination is offered at the annual AAOM meeting, typically held in April. Please visit the AAOM website for additional information. A review course is offered at the AAOM annual meeting.

7. Conferences and Travel

From the second year of the program (and during the first if feasible for Certificate/MMSc track and Certificate/DMSc residents), residents are expected to attend the AAOM annual meeting. This is an important venue for meeting other residents and post-doctoral students, as well as meeting leaders in the profession. The continuing education courses are also helpful in preparing for the board examination. Stipend support is provided to help supplement the costs of attending the meeting when the resident presents an abstract. The time spent at the meeting (or any other approved academic conference) is <u>not</u> considered vacation time.

8. Publications

The Program Director must be notified when an abstract or manuscript is submitted and/or when a decision has been received.

CHIEF RESIDENT(S)

Residents in their final year of clinical training may be selected to serve as Chief Resident. Chief resident will act as a liaison between the residents, the program coordinator, and the program director. Also, the chief resident will assume important administrative roles including (but not necessarily limited to) the following:

- Resident Clinical Rotation and On-Call scheduling. Chief resident to review schedules with the program director and coordinator in April-May
- Radiology and Internal Medicine monthly review sessions scheduling and coordination
- HSDM oral medicine rotation scheduling (ECE). Chief resident to send the C rotation schedule to the ECE program director at the beginning of the AY. The ECE program director will send the list and schedule of the HSDM student rotation to Chief Resident and Program Director. This schedule will be incorporated into the Clinic Shared Outlook Calendar.



- <u>Oral Medicine Seminar scheduling.</u> In addition to preparing the curriculum, the chief resident is responsible for assigning presentations, medications as well as maintaining the **Oral Medicine Seminar** conference in the Dropbox shared drive.
- Oral Medicine Grand Rounds scheduling and coordination. It is the chief resident's responsibility to 1) maintain the Oral Medicine Grand Rounds Excel spreadsheet log (by contacting each presenter for the date, MRN of the case, and diagnosis), 2) create a new folder in Dropbox for each session (Year-Month-Day), 3) ensure that the presenters upload their PowerPoint presentations to the folder, and 4) maintain a database of suggested cases to be presented approved by the oral medicine faculty.
- Oral Medicine Literature Review journal assignment and curriculum. In addition, the chief resident is responsible for maintaining the *Oral Medicine Literature Review* folder in the Dropbox shared drive.
- Internal Medicine Seminar Series scheduling and coordination
- Advanced Topics in Oral Medicine Series scheduling and coordination
- Oral Medicine/Orofacial Pain Interdisciplinary Clinic Rounds in coordination with Dr. Shruti Handa (<u>SHANDA1@MGH.HARVARD.EDU</u>), Orofacial Pain Program/MGH
- Orientation session with new OM residents
- Orientation session with the 4th year HSDM student chosen for the elective rotation in Oral Medicine
- CE scheduling for the dental assistants
- Scheduling for Community Outreach activities and lectures within the hospital (e.g., emergency department, community health centers, Boston communities). All scheduling and coordination will be approved by the PD. The PC will manage the Outlook Calendar invitations.
- The chief resident(s) meet monthly with the Program Director and Program Coordinator. In addition to the progress meetings (every four months) with the Program Director. Junior residents will meet individually with the chief resident(s) twice a year to review progress.

ON-CALL DUTY (with Pager)

The On-Call schedule is created at the beginning of the academic year by the chief resident, program coordinator and program director. Any changes can be made among residents and the program coordinator must be informed in advance.

The final on-call schedule may vary slightly depending on the total number of residents in the program in any given year. The following three schedules represent years with no, one, or two *combined Certificate/Degree tracks* residents included in the on-call schedule. <u>These schedules are best estimates and subject to changes by</u> the program director.



Residents take primary calls for the Oral Medicine & Dentistry Consultation Service from 5 PM to 7 AM. A PGY-3 resident is on the second call and an attending is on the third call. Please refer to the <u>In Patient Consultations</u> for more details.

First and Second On-Call Schedule

Some of this information is also available through the Partners Telephone Directory which is available online. Alternatively, you can call the BWH page operator at 617-732-5500 to find out who is on call.

Availability of the On-Call Resident

The on-call resident is required to be within a 15-minute travel distance from the hospital when on call. Residents can be reimbursed for cab fare for travel from home to hospital and back if they are called in to the ED at night. The BWH Oral Medicine and Dentistry service shares a call room in the resident suite in 4D-2 (females) and 4D-14 (males). Security code and access will be provided by the program coordinator. Your badge will give you access. If the room is already occupied, you will need to stay in the Oral Medicine and Dentistry clinic or go home.

FAILURE TO BE AVAILABLE FOR SCHEDULED COVERAGE IS GROUNDS FOR DISMISSAL.

For BWH ED COVERAGE, residents are to be available (on page) according to the following schedule:

Mon, Tue, Wed, and Thurs – 5:00 PM to 7:00 AM next day Fri – 5:00 PM to 8:00 AM Saturday Sat – 8:00 AM to 8:00 AM Sunday Sun – 8:00 AM to 7:00 AM Monday

Weekday holiday coverage hours depend on whether there is a workday just before or just after the weekday holiday. For example, for a Monday holiday, the Sunday person would cover until 8AM Monday and the Monday person would cover until 7AM Tuesday. For a Friday holiday, the Thursday person would cover until 8AM Friday and the Friday person would cover until 8AM Saturday.

UNDER NO CIRCUMSTANCES ARE ON-CALL RESIDENTS TO MAKE THEMSELVES UNAVAILABLE BEFORE THE END OF THEIR SHIFT, OR, IN THE CASE OF WEEKENDS AND HOLIDAYS, BEFORE THE SUCCEEDING RESIDENTS HAVE ASSUMED RESPONSIBILITY.

RESIDENTS COVERING GUIDELINES

For resident scheduled time off:

- Resident will fill out the "Program Coordinator and Personal Time Request" form and send to the program director and they will forward to the program coordinator if time was approved.
- The program coordinator will update the shared calendar, scan forms into shared folder and let affected providers and front desk know who will be out
- If B resident is out, the program coordinator will be responsible for informing Marlisa Frederick at DFCI (Marlisa Frederick@DFCI.HARVARD.EDU) of absence as well as which resident will be covering with contact information.



For residents with unscheduled time off:

- All residents who will be out unexpectedly (i.e., sick, emergency, etc.) must first email the program director and program coordinator making them aware of the absence
- The program coordinator will send out blast email to entire group informing them of absence

There may be instances where certain resident tasks will need to be distributed amongst the remaining residents on the A, B and C rotations. For example, if there is a lack of resident coverage due to absences or illness, some of the time-sensitive B resident tasks may fall to the A or C residents.

If A resident is out, C resident will cover patients and pager (on-call).

If B resident is out, C resident will see patients at DFCI with attending. Will also cover all BMT letters. Marlisa Frederick will triage all incoming calls (i.e., prescription refills, symptom call and any other DFCI pt. related matters)

If C resident is out, A resident is covering in-basket communication only.

If B and C residents are out, attending will see patients on their own and C work (emails and call)) will be escalated to the patient's attending physician.

If A and C resident are out, the front desk will reschedule A patients for the day

If one resident is asked to cover a different service when someone is out – the resident will cover that service only and not switch to another service later.



ORAL MEDICINE RESIDENCY POLICY ON SUPERVISION OF RESIDENTS

- 1. Residents will treat patients only under the supervision of staff attending dentists who are independently licensed and credentialed by the Brigham and Women's Hospital.
- 2. Each outpatient will have an attending staff dentist of record who is responsible for reviewing all notes and radiographs, countersigning all notes and treatment plans, determining, and implementing the appropriate level of supervision of the resident, and performing a clinical and written evaluation of the care provided at the completion of comprehensive care of the patient.
- 3. Inpatient consultations will be responded to by the resident within 15 minutes. Each inpatient consultation will have an attending staff dentist of record who is responsible for examining the patient either together with the resident or at a separate time, reviewing radiographs, and reviewing and countersigning the inpatient consultation. This attending dentist will determine and implement the appropriate level of supervision of the resident. The attending dentist will also see follow-up patients as needed, either together with the resident or at a separate time and will countersign the resident's notes or document his/her evaluation separately as needed.
- 4. Patients shall be notified of the name of the attending dentist responsible for their care, of the respective roles of the residents and attending dentists involved in their care, and that residents participating in their care are supervised by such staff dentists.
- 5. In providing clinical supervision to residents, the attending dentist shall liberally provide advice and support, shall encourage residents to freely seek their input and should delegate portions of care to residents, based on the residents' skills and the needs of the patient.
- 6. The faculty must devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities, and to demonstrate a strong interest in the education of residents.
- 7. Faculty supervision assignments should be of sufficient duration to assess the knowledge and skills of each resident and delegate to him/her the appropriate level of patient care authority and responsibility.
- 8. Residents are expected to make liberal use of the supervisory resources available to them and are encouraged to seek advice and input from attending dentists and more senior residents or fellows, as appropriate. Residents are expected to seek advice for any question involving patient care, including dental/medical therapeutics, diagnostics, safety, documentation, privacy, and behavior management, and for any questions on practice and staff management and operational protocols.
- 9. Each resident's clinical responsibilities will be based on PGY-level and resident education, patient safety, severity and complexity of patient illness/condition, and available support services.
- 10. Residents shall consult with their supervising attending dentist, and the attending dentist shall, in turn, be always available to provide guidance and support to the resident. The availability of the attending dentist to the resident must include a) carrying a beeper or cell phone to provide telephone consultation and b) being in reasonable proximity to the hospital to provide, as needed, on-site supervision and consultation to the resident. If not available for a period, the attending dentist is responsible for arranging and communicating appropriate attending coverage to the resident.
- 11. During regularly scheduled office hours, residents will have at least <u>indirect supervision with direct</u> <u>supervision immediately available</u> (the supervising dentist is physically within the clinic or hospital and is immediately available to provide direct supervision by being physically present with the resident and the patient.) When performing advanced outpatient procedures, residents will pre-



arrange with the appropriate attending for <u>direct supervision</u> (the supervising dentist is physically present with the resident and the patient).

- 12. During patient care in the Emergency Department, ED staff will provide direct supervision or indirect supervision with direct supervision immediately available. Oral Medicine faculty on second call for emergency coverage will provide indirect supervision with direct supervision available (the supervising dentist is not physically present within the hospital or other site of patient care but is immediately available by means of telephone and/or electronic modalities and is available to provide direct supervision.)
- 13. All faculty with supervisory responsibilities will be given a written copy of the specific requirements of being the attending of record as outlined above at the beginning of his/her appointment at the BWH. At the beginning of his/her rotation, each resident will be given a written copy of these requirements, the covering attending dentist schedule, and instructions on how to reach each attending dentist.
- 14. If an attending dentist of record does not answer a page/phone call in a timely fashion and is not signed out to a covering staff dentist, or if immediate help is required in the office or hospital while waiting for a response from the supervising dentist, the resident should contact any of the other staff attending dentists, the program coordinator, or the program director.
- 15. If the resident a) experiences a patient volume or acuity that becomes greater than s/he can appropriately handle, b) becomes ill while on duty or experiences fatigue interfering with performance, or c) is otherwise unable to perform his/her patient care duties, the resident should contact the attending dentist or the program coordinator.
- 16. At least annually, a report shall be made to the Board of Trustees of the Hospital regarding the activities of the residents and GME training programs.

MANDATORY PROGRESS MEETINGS with Program Director

Residents will meet every four months (October, January, June) with the Program Director to review their progress. Residents must complete a self-evaluation one week before the meeting. The evaluation form can be found in Dropbox folder 'Forms'.

PROGRESS EXAMINATIONS

Written examination

A comprehensive **written examination** will be administered twice a year (December and May). Questions will be based primarily on the **Oral Medicine Seminar** including Case Reviews. Questions will be both case based (short answer) and multiple-choice formats. Last year MMSc and DMSc residents are <u>exempt</u> from this exam. A minimum passing score of 70% is required to complete the program requirements. Those failing to achieve a passing grade will take a makeup test.

Annual oral qualifying examination

The annual oral qualifying examination occurs in late May of each year. The examination is conducted by the oral medicine faculty, in a group format. The purpose of this examination is to assess the resident's overall knowledge base, progress, and communication skills, and to help prepare for the American Board of Oral Medicine board examination. Residents must receive a Pass in "overall score" from at least 80% of the faculty



who sit in the examination to complete the program requirements. Those failing to achieve these criteria will take a makeup test.

MENTORING PROGRAM

The mission of the Oral Medicine Residency Program is to "train experts and future leaders and innovators in the field of Oral Medicine from the perspective of patient care, education and research."

- Residents develop strong clinical skills and expertise for the diagnoses and management of mucosal diseases, orofacial pain conditions and salivary gland disorders, and become well-versed in the management of the medically complex patient. Their training provides them with the skills to act as primary providers of care for oral disease as well as consultants.
- Residents develop interprofessional and communication skills so that they can work effectively and collaboratively in an academic environment as well as in the community, with both dental and medical colleagues.
- Residents engage either in basic science or clinical research to elucidate the etiopathogenesis of oral diseases or improve management.

Program goals

The goal of the *Oral Medicine Mentoring Program* is to provide residents with a supportive and positive learning environment, to offer guidance for the resident's professional and personal growth, and to facilitate networking within Harvard's rich academic environment and Oral Medicine realm throughout the duration of the residency.

Upon entering the residency program, each resident is matched to a faculty member or members and a senior resident for peer-to-peer mentorship. Senior residents (PGY-2 level and above) will advise junior residents (PGY-1) with practical insights that complement the Oral Medicine faculty mentorship program.

Faculty are committed to advising and mentoring residents with respect to both day-to-day work/activities as well as broader professional interests and career goals.

In addition to the Mentoring Program, each trainee receives close one-on-one mentorship from the program director during training through individual progress meetings to ensure that residents meet personal and professional goals.

Program structure

- Faculty members will be assigned one resident at the beginning of their residency. The decision to accept an additional mentee is at the discretion of the faculty mentor. The program director will discuss the mentorship pairing with the resident at the first progress meeting.
- Residents and mentors meet at least <u>4</u> times/year. Residents and faculty mentors should establish a mutually agreed frequency of meeting and set of goals at first meeting.
- Residents should provide their faculty mentor with copies of updated CV (HMS format; https://fa.hms.harvard.edu/faculty-medicine-cv-guidelines) at the beginning of each academic year.



CLINICAL GUIDELINES GUIDELINES FOR INPATIENT CONSULTATIONS

The Oral Medicine and Dentistry consultation service assists the inpatient medical team in the care of the hospitalized patient. It is important that your interactions with physicians and fellow house staff are always helpful and courteous. The following sections describe the consultation service and the responsibilities of the residents.

A. HOSPITALS

The Oral Medicine and Dentistry Consultation Service provides dental consults **ONLY** to inpatients of Brigham and Women's Hospital. Consults for BWH and DFCI outpatients with urgent needs may also be fielded.

Residents are NOT credentialed to evaluate patients at Boston Children's Hospital, the Beth Israel Deaconess Medical Center, the Faulkner Hospital, or any other institutions other than BWH and DFCI.

B. CONSULTATION REQUESTS

- Consultations must be requested by either the attending physician, house officer or nurse. NO
 PATIENT IS TO BE EVALUATED WITHOUT A CONSULTATION REQUEST. It must be an official request.
 If it is not available, ask the referring physician to fill it.
- 2. The request for a consultation is initiated by written orders from either the attending physician or responsible house officer into EPIC. Then, either the nursing staff or the house officer pages the BWH Resident (Pager #11560).
- 3. The resident must record the following information in the consult logbook/sheet:
 - 1) Hospital
 - 2) Floor/Pod/Room Number
 - 3) Patient's Name and Hospital Number
 - 4) Medical Diagnosis
 - 5) Reason for consultation
 - 6) Referring Doctor or H.O.

C. RESIDENT ASSIGNMENTS FOR CONSULTATIONS

The **"A" Resident** is responsible for inpatient consultations Monday through Friday, from 7 AM - 5 PM. It is the assigned resident's responsibility to complete the consultations.

CONSULTATIONS MUST BE COMPLETED THE DAY THEY ARE REQUESTED

Consultations called in between 5 PM - 7 AM on weeknights and anytime on weekends or holidays are to be completed by the **"on-call resident"**, who will forward pages from consult beeper #11560 to their own beeper. This on-call resident must communicate with the "A" resident so that the patient can be appropriately followed the next day.



D. INPATIENT ROUNDS

The A resident is expected to round on any inpatients before meeting with the AM attending to discuss all patients at 8.15 AM and with the PM attending at 12.45 PM. The attendings are available to round on the inpatients with the A resident early morning and at the end of the day.

E. RECORD KEEPING

- 1. It is important to maintain accurate records on all patients evaluated on the Consultation Service.
- 2. The consultation note is presented on rounds that day or the next morning and is not placed in the patient's medical chart until the covering attending dentist reviews and countersigns it. A short note however MUST be entered in the chart to document that the patient has been seen and that a full consult note will be entered.

F. PATIENT EVALUATION and CONSULT NOTE

- 1. The day of the consultation request, the complete hospital chart is to be reviewed and the patient examined. You can check in the BWH documentation systems, **EPIC for patient information**.
 - (a) If it is determined that the reason for consultation does not require immediate attention, the following note should be written in the progress notes of the medical chart:

Dental Note "Mo/Day/Year/Time Asked to evaluate this (____) yr. old (female/male) with (medical problem) for (oral/dental problem) by (referring doctor). Chart reviewed; patient examined."

Signature and pager number:

The resident then completes the consultation write up and reviews it with the covering attending that day or on rounds the next morning.

- (b) If it is determined that the oral/dental problem requires immediate attention, the consultation note is to be written, discussed with the covering attending, co-signed by the attending, and placed in the medical chart the day of the request. After approval of the consultation and recommendations by the attending, the resident should communicate, in most cases by telephone, with the patient's House Officer or other doctor that initiated the consultation request.
- All patients must have a complete oral examination at the bedside the day of the consultation request. Residents are required to carry and maintain a light of sufficient quality to perform bedside oral examinations.



It is important to be thorough but succinct in writing the consultation note. After review of the consult with an attending and an examination of the patient by the attending, the attending will review, edit, and finalize the note and place a printed and signed copy in the medical chart.

The following format is to be used when writing consultation notes:

	9	ORAL MEDICIN	E AND DEN	ISTRY CO	NSULTAT	ION
Patient:						
MRN:						
Date:						
Time:						
Location	•					
	egin with the ving form.	reason for the	consultation	n. The intr	oductory	paragraph always takes
Asked to see this year old <i>sex</i> admitted on(<i>date</i>) with(<i>admitting dx</i>). Dental evaluation requested for(<i>reason</i>)						
HPI: Prose description of events leading up to this admission/illness. Also include events during admission up to the point of your evaluation. If you are being asked to evaluate oral/dental/facial pain you must describe the pain in the usual fashion – onset, duration, triggers, character/sharp/dull, radiation, spontaneous or not, analgesics needed, and patient's description of pain on a scale from 1-10 with 10 being the worst pain s/he has experienced.						
(HPI for a	dmission)					
(HPI for o	(HPI for oral complaint)					
Pain scor	ain score currently: XX/10					
Pain scor	e at worst: XX	K/10				
applicabl	2.		·		·	cluding oncologic history if e medications on
admissio	٦.					
ALL: List	allergies and	reactions or w	rite "NKDA/I	NKA" if noi	ne.	
LABS:	Date:					_
	WBC/diff:					
	HGB		PT			
	HCT		INR			
	PLT		PTT			
	Blood Cx F	Results/Dates:				



PDH:

Last dental visit and reason for visit	
Sporadic/routine visits	
Extraoral or intraoral symptoms	
Other	

The examination should include a complete head and neck examination before focusing in on the specific dental problem. All significant positive and <u>negative</u> findings should be noted.

GE: Alert and oriented; wheelchair bound, etc.

Extraoral Examination:

Extraoral swelling/asymmetry	
TMJ pain, clicking, popping, crepitus	
Lymphadenopathy	
Trismus, other	

Intraoral Examination:

Soft Tissue:

Buccal, labial mucosa	
Palate/pharynx	
Tongue	
Floor of mouth	
Gingiva (inflammation, purulence, recession)	
Other	

Hard Tissue:

Teeth Present	
Caries	
Fractures/Root Tips	
Percussion Sensitivity	
Mobility	
Plaque/Calculus	
Other	

Prosthesis:

Type/Condition



RADIOGRAPHIC INTERPRETATION: Radiographs are typically obtained at bedside with a portable x-ray unit. If the patient requires a panoramic radiograph or multiple radiographs, then the radiographic exam should be done on a separate visit to the Oral Medicine and Dentistry clinic after the initial bedside exam. In such a case you can just write "Pending" for the radiographic exam, and the actual radiographic interpretation can be written on a separate note after the radiographs are taken. Never call down an inpatient to the dental clinic unless you have cleared with the H.O. that the patient is medically stable enough to travel.

Panoramic radiograph and ... (*how many*) intraoral periapical radiographs obtained on (*date*).

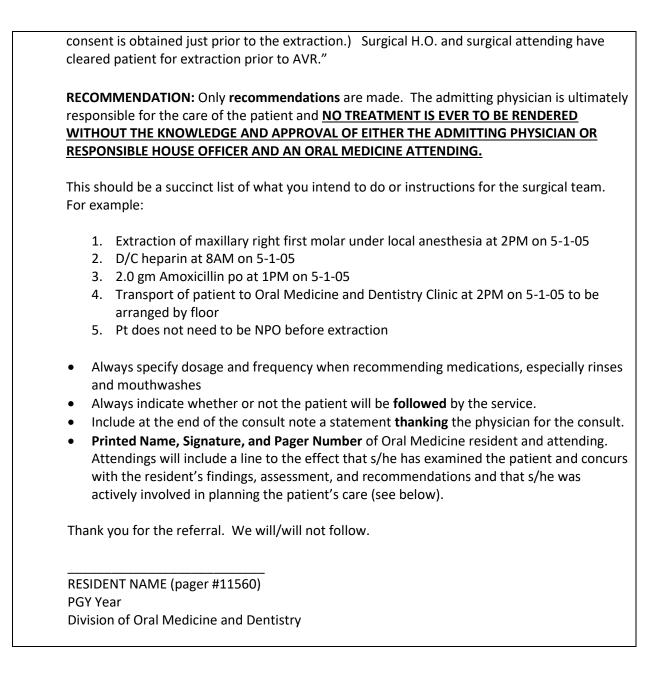
Maxillary sinuses	
Bony pathology	
Maxillary or mandibular	
fractures	
Trabeculation pattern	
Alveolar crestal height	
decrease	
Teeth present	
Impactions/supernumeraries	
Gross caries	
Caries	
Root tips/fractures	
Apical pathology	
Root Canals/Other	

ASSESSMENT: The first item to address is always the issue that you were asked to consult on. Any other diagnosis you make should also be listed. Any pathology you find, whether related or unrelated to the reason for consult, should have a differential diagnosis with the most likely diagnosis listed first. This is also the section where you can write any prose explanation and document discussions with the patient or medical staff. The assessment always takes the following form:

"(Age) y.o. male/female admitted on (date) with (medical diagnosis) awaiting (e.g., aortic valve replacement scheduled for tomorrow) presents with:

- 1. Maxillary right first molar with gross caries and chronic apical periodontitis that is a source of infection
- 2. Multiple small carious lesions
- 3. Mild alveolar crestal bone loss consistent with mild periodontitis

Discussed with patient and H.O. risk of bacteremia from chronic infection of non-salvageable maxillary right first molar. Patient agrees to extraction under local anesthesia. (Actual written



G. <u>FOLLOW-UP</u> It is the "A" resident's responsibility to contact the house officer and follow up on the recommendations listed in the consultation note.

H. FOLLOW-UP PROGRESS NOTE

Whenever a patient is evaluated or treatment is rendered, whether on the floor or in the Oral Medicine and Dentistry clinic, a note must be written in the Progress Note section of the patient's hospital chart. The progress notes should be written using the following SOAP format:



ORAL MEDICINE AND DENTISTRY FOLLOW-UP

Patient: MRN: Date: Time: Location:

Subjective: Mr/Ms XX is a XX-year-old male/female with XX. He/She reports

Pain score currently: XX/10 Pain score at worst: XX/10

Labs:

Date:

WBC	PT	
HGB	PTT	
НСТ	INR	
PLT		

h/o + blood cultures since admission (if yes, list): Yes/No

Objective:

She/he has

Assessment:

XX year-old male/female with history of XXX presents with:

1.

2.

Plan:

1.

2.

Thank you for the referral. We will/will not follow.

RESIDENT NAME, DMD (pager #11560) PGY Year Division of Oral Medicine and Dentistry

All progress notes written by a resident must be countersigned by the covering attending dentist. Attach a copy of the follow up note to the copy of the original consult note and keep on file in the Oral Medicine staff room.



I. <u>WEEKEND FOLLOW-UP</u> Two groups of patients require follow-up on weekends:

- 1. In-patients who need post-operative follow-up after a procedure (e.g., dental extraction)
- 2. Patients already being followed daily for their oral condition.

On Friday, the covering attending will review the patients on the service and designate which patients need to be followed over the weekend. This will be conveyed by the "A" resident to the weekend on-call resident.

GUIDELINES FOR EMERGENCY ORAL MEDICINE & DENTISTRY SERVICES

The Emergency Oral Medicine and Dentistry Service of Brigham & Women's Hospital (BWH) is administered through the Division of Oral Medicine and Dentistry, in conjunction with the Department of Emergency Medicine (ED). The goals of the service are to provide: 1) emergency dental care to the community; and 2) dental care and consultation services to in-patients.

1. EMERGENCY DENTAL CARE TO THE COMMUNITY

The Emergency Oral Medicine and Dentistry Service is committed to meet the needs of patients whenever possible. However, the major objective of the service is for the relief of pain and management of acute infections.

PATIENT AGE

Brigham and Women's Hospital is an adult care facility. **Only patients 14 years of age or older are to be treated in the ED.** Patients 13 years of age or younger should be referred to Children's Hospital Boston for care.

INFORMED CONSENT

Patients admitted to the ED give a general consent for treatment when they register. The general consent covers most diagnostic and treatment procedures including routine I & D. However, for surgical procedures such as tooth extraction, written informed consent is to be obtained from the patient or legal guardian.

A parent or legal guardian must give consent for all patients under age 18 or adult patients who are judged to be unable to provide informed consent. Any questions regarding a patient's age or ability to provide informed consent should be discussed with the ED attending physician.

If the patient's condition is life-threatening and consent cannot be obtained, a hospital administrator can authorize the necessary treatment. The case should be discussed with the ED attending-on-duty.

EMERGENCY DENTAL CARE PATIENT FLOW



Generally, patients who present to the ED are first triaged by the nurse and then assessed by the on-call attending ED physician, who will then request a dental consult as needed. The patient's record is generally filed in a bin according to the patient's assigned exam room number. The patients are to be examined by the Oral Medicine resident in the ED, using the exam room provided for that purpose. Unless a patient has a serious condition, patients are to be treated in the order in which they arrive. **KEEP IN MIND THAT THE PATIENT IS THE PATIENT OF THE ED PHYSICIAN AND YOU ARE THE CONSULTANT**. Therefore, the on-call Oral Medicine resident is to examine the patient, provide a diagnosis, inform the ED physician, and treat the patients with the consent of the ED physician. For patients who have complex multi-disciplinary needs or who need admission to the hospital for either trauma or infection, the ED physician must be consulted. If admission is needed, the on-call plastic surgery or ENT resident will be contacted to do the admission. The Division of Oral Medicine and Dentistry does not have privileges to admit patients.

The on-call resident should feel free to contact the **on-call attending dentist** whenever the diagnosis or treatment of a patient is in question. Before contacting the attending dentist on call, the resident should have already reviewed the case, examined the patient, and considered possible differential diagnoses and courses of treatment.

Generally, all dental treatment should be provided in the ED exam room. In the very rare situation where it is determined that the patient needs emergent dental care beyond the scope of what can be provided in the ED exam room, the patient may be brought up to the Oral Medicine clinic, accompanied by one of the ED physician care assistants (PCA's), or a BWH Security Officer, as appropriate. **UNDER NO CIRCUMSTANCES SHOULD A RESIDENT BRING A PATIENT TO THE CLINIC UNACCOMPANIED BY EITHER A PCA OR SECURITY OFFICER**.

When treatment is completed, the resident should review instructions with the patient. The resident should also inform the ED nurse and physician of any instructions. The patient will then be discharged by the ED physician.

DENTAL EQUIPMENT FOR THE ED

An ED dental equipment box is available to bring to the ED and is stored in the Oral Medicine and Dentistry clinic. It is the responsibility of the Oral Medicine resident who uses it to return it to the Oral Medicine and Dentistry clinic and restock the supplies and equipment in the box. This is critical as the next resident who needs it must be assured that whatever equipment is needed is available in the box. The A resident will always have to check the expiration dates of the equipment and medications before taking it to the floor or ED.

2. INPATIENT CONSULTS

If there is an acute oral problem with an inpatient, an on-call resident is to examine the patient and then contact the second on-call resident, and the appropriate on-call attending dentist before any treatment is rendered. The on-call resident should provide full report of any consults to the resident assigned to the inpatient consult service, so that the patient can be appropriately followed on morning rounds during the week. If consults occur over the weekend, the on-call resident for Sunday should ensure that



a report is given for all weekend consults so that the patients can be followed on Monday morning rounds.

Resident Assignments

- 1. If the A resident is paged on their time (7AM- 5PM), they must see this page/consult and complete the consult before the end of their shift. If the on-call resident gets paged on their time (5PM-7AM), they must see this page/consult and complete the consult before the end of their shift.
- 2. It is the responsibility of the A resident to address all pages/consult prior to 5PM. Any outstanding consults should be communicated with the primary team about when the patient will be seen next (e.g., in the next hour or the next morning etc...).
- 3. If the resident on-call sees a patient who requires a follow up or is a non-cardiac inpatient, they must provide a summary of the case to the A resident and the preceptor via e-mail.

ED Records

The on-call resident is to write up the dental consult note in EPIC and forward it in EPIC to the attending on call for the day, who will then review the write up and sign it electronically. Any important patient information and potential immediate follow-up should be e-mailed or communicated to the resident and attending on service the next day. Residents need to keep the dental ED/Consult log up to date. This log is a white three-ring binder in the Oral Medicine and Dentistry clinic staff room. Residents must enter the date of service, patient name, and medical record number in the log.

<u>Patient identification/Chief complaint (ID/CC)</u>: Age and gender presents with (state the complaint in patient's own words).

History of present illness (HPI):

- Date of onset for each complaint
- Describe the pain (acute or chronic, duration, what makes it better or worse, severity on a scale of 1-10, spontaneous or not, triggers, radiation/localized)
- Remark on h/o swelling, pus/foul taste, trismus, fever, N/V
- H/O similar episodes
- Referral source
- If trauma: describe the accident, LOC, pain, radiation of pain, occlusion

Past Medical History (PMH):

- State significant findings, as well as pertinent negatives. If there are significant findings, you must elaborate, e.g. Is it well controlled, how they control it, frequency of episodes?
- History of hospitalizations or surgeries (or lack of) should be stated
- Ask re: endocrine/DM, thyroid, asthma, bronchitis, pneumonia, SOB, TB, heart murmur, angina, HTN, MI, hematopoietic disorders, GI, Liv/Hep, kidney, musc/skel, neuro/sz, skin, psych, cancer, STD/HIV/AIDS, transfusions, trauma, pregnancy, tobacco, EtOH and recreational drug use. These are all pertinent negatives.



Medications:

• List medication and dosage. Use generic names, if possible.

Allergies:

• NKDA or list allergies and reactions

Past Dental History (PDH):

• Last dental visit (LDV), h/o care, dental phobias.

General Exam (GE):

- State level of consciousness (A&Ox3) alert and oriented x 3
- ETOH on breath, MJ on breath, agitated, hostile/aggressive behavior, anxious in appearance. You should state what you witnessed objectively as opposed to accusations. For instance, write "ETOH on breath", instead of "pt was drunk."

Extraoral Exam (EO):

- Remark on NC/AT vs swelling/hematomas, TMJ status, LAD, erythema, palpation tenderness. Describe any lesions found (size, color, consistency, etc.)
- If there is an obvious swelling, draw it out.

Intraoral Exam (IO):

- Soft tissue exam, including palate, pharynx, tongue, floor of mouth, labial and buccal mucosa, gingival. Describe any lesions found (size, color, consistency, location, etc.)
- Dentition in general and specific to cc (e.g., Mobility, caries, fx, percussion sensitivity, etc.)

Radiographic Exam (RE):

- If NOT obtained, you must state why, i.e., not needed, pt declined, pt brought radiograph in. All patients with swelling EO/IO, LAD, mobility, pus, percussion sensitivity should have a radiograph taken unless they refuse or brought their own in.
- If pt refuses, state "pt refused radiograph AMA (against medical advice)".
- ALL trauma patients should have a Panorex &/or PA's obtained (if so, you must state what was obtained and what you found).

Assessment:

- State tooth/teeth
- ADA diagnosis i.e., acute exacerbation of chronic periapical periodontitis, necrotic pulp, irreversible pulpitis, reversible pulpitis, osteitis, generalized severe periodontitis...

Plan:

- If no treatment is done, you must state a clear referral.
- If treatment was offered but patient declined, you must state that it was offered, and pt. declined &/or refused AMA.
- If treatment is done, clearly state what was done and follow-up referrals.
- All Rx should be written here with the # dispensed, dosage and instructions

Instructions to Patient:



- Instructions should be listed in the language that the patient can understand. The patient is to sign the form followed by the dentist's signature, printed **legible** name, and I.D.
- The blue copy of the discharge form is given to the patient and the patient is discharged.



MANAGEMENT OF COMMON DENTAL EMERGENCIES

DENTAL CARIES

- A. Reversible Pulpitis
 - 1. Without Pulp Exposure
 - Excavate the dental caries and place Dycal and temporary restoration.
 - 2. With Pulp Exposure
 - If it is a small pinpoint bleeding exposure (< 1mm) place Dycal and temporary restoration (IRM)
 - If the exposure is large (> 1mm) proceed with a pulpectomy
- B. Irreversible Pulpitis
 - Perform a pulpotomy or pulpectomy with rubber dam isolation
 - Place a cotton pellet in the chamber and close with Cavit

APICAL PERIODONTITIS

- A. Without Root Canal Filling
 - Perform a pulpectomy with rubber dam isolation
 - Place a cotton pellet in the chamber and close with Cavit
- B. With Root Canal Filling
 - Adjust the occlusion
 - Give the patient an injection of long-acting local anesthetic (0.5% Marcaine w/ 1:200,000 epi)
 - Place the patient on pain medication

ACUTE APICAL ABSCESS

- 1. Open into the pulp chamber and instrument the length of the canals. Leave the pulp chamber open for drainage.
- 2. If there is an area of fluctuance, I&D the swelling and obtain **both** aerobic and anaerobic cultures if drainage is established. WHENEVER CULTURES ARE OBTAINED, IT IS THE RESPONSIBILITY OF THE RESIDENT WHO OBTAINED THE CULTURE TO CHECK THE RESULTS WITHIN 48 HOURS. IF THIS IS NOT POSSIBLE, THE RESIDENT MUST HAVE ONE OF HIS/HER COLLEAGUES CHECK THE CULTURE RESULT AND CHANGE THE PATIENT'S ANTIBIOTIC REGIMEN IF NECESSARY. THIS IS VERY IMPORTANT!
- 3. Prescribe antibiotics and pain medication.

RESTORATIVE PROBLEMS

- Permanent restorations are not to be placed in the ED. Lost or broken restorations are to be replaced with a temporary restoration.
- Temporary crowns or bridges are to be repaired or replaced using temporary cement. Permanent crowns or bridges are to be recemented with temporary cement. Patients must be informed that temporary cement was used and that they must be followed up by their private dentists.



PROSTHODONTIC PROBLEMS

- A. Denture Repairs/Relines: Denture repairs are not considered an emergency procedure.
- B. Denture Sores: Examine the patient to determine if the problem is due to the denture base. If it is determined that the problem is a denture sore, adjust the denture base. If the adjustments are extensive, advise the patient to leave the denture out until a regular dental appointment can be scheduled.

ORTHODONTIC PROBLEMS

• For broken ligature wires either remove or bend to prevent irritation of soft tissues.

PERIODONTAL EMERGENCIES

- A. Acute Necrotizing Ulcerative Gingivitis: Using topical or local anesthetic, scale supragingival area with hand scalers. Irrigate the area well and give the patient oral hygiene instructions. Prescribe penicillin or clindamycin if the patient is febrile or has adenopathy.
- B. Periodontal Abscess:
 - Verify the diagnosis with a complete examination including pulp testing of the involved teeth.
 - Debride the area with subgingival scaling. If necessary, I&D the abscess and obtain cultures.
 - Prescribe antibiotics.
 - Prescribe pain medication if necessary.
- C. Pericoronitis:
 - 1. Moderate Pericoronitis: Gently irrigate with sterile saline. Reduce occlusion of opposing tooth if it is traumatizing soft tissue. Prescribe antibiotics and pain medication. Instruct the patient to irrigate the area with saline (provide patient with a Monoject plastic syringe). Instruct the patient to return if swelling increases.
 - 2. Severe Pericoronitis: Gently irrigate with sterile saline. I&D if fluctuance is present **and obtain cultures**. Reduce the occlusion of the opposing tooth if it is traumatizing soft tissue. Prescribe antibiotics and pain medication. Check carefully to assure that the patient has no deviation of the soft palate or swelling of oral pharynx before discharging the patient. If the patient is febrile, has trismus, or deviation of the soft palate, the ENT resident is to be consulted.

DENTAL ALVEOLAR ABSCESS

- 1. Determine the source of the abscess.
- 2. Determine the extent of the infection.
- 3. If there is an area of fluctuance, the abscess is to be incised and drained. **Consider obtaining cultures.**
- 4. Prescribe antibiotic and pain medication.
- 5. Refer the patient to either an endodontist or oral and maxillofacial surgeon for treatment.
- 6. If the infection has involved facial spaces beyond the buccal space or there is peri-orbital edema or swelling of the floor of the mouth or the oropharynx, the on-call ENT resident is to be contacted.



- 7. The patient should be considered for admission and the on-call ENT resident should be contacted when the following situations are present:
 - a. Temperature > 100
 - b. Increased WBC
 - c. Swelling of the facial spaces other than the buccal space.
 - d. Functional changes (difficulty swallowing or compromised airway; peri-orbital edema; trismus)
 - e. Systemic conditions which might place the patient at high risk of complications (e.g. chemotherapy, HIV).
 - f. Infections which are refractory to a current antibiotic regimen.

TRAUMA

When there is trauma to the face, facial fractures must be ruled out.

A. Dental Alveolar Fractures:

- Take occlusal and/or periapical radiographs.
- Examine the area by digital manipulation.
- Splint all displaced teeth in a satisfactory arch relationship.
- Prescribe oral antibiotic, pain medication, and a blendered, soft diet.
- B. Fractures of the Maxilla and Mandible:
 - First determine if the patient's airway is patent. Remove dentures, broken teeth and foreign objects from the patient's mouth. If teeth or dentures cannot be accounted for, order a chest x-ray.
 - Perform a complete clinical examination.
 - If fractures are suspected, inform the ED attending and contact the trauma service for the day, either plastics or ENT. A CT scan (axial and coronal images) will be ordered.
 - If the trauma is significant, there may be cervical spine fractures. An examination of the cervical spine includes palpation of the neck in a stable position and C-spine films. It is likely that this will already have taken place before the patient is triaged to you, but you should always be sure. Any questions should be directed to the on-call attending ED physician.

FRACTURED TEETH

- A. Ellis Class I Fracture: Not an emergency smooth sharp edges and take periapical radiograph to rule out root fracture and/or pulpal involvement.
- B. Ellis Class II Fracture: Take a radiograph, as above. Cover dentin with Dycal and temporize.
- C. Ellis Class III Fracture: Take a radiograph, as above. If pulp exposure is less than 1 mm in diameter, cover with Dycal and temporize. If greater than 1 mm in diameter, perform pulpectomy.
- D. Ellis Class IV Fracture: Perform pulpectomy.
- E. Root Fractures: assessed radiographically
 - a. If crown is very mobile and the fracture is in the coronal 1/3 of the root, remove the coronal fragment and perform pulpectomy on the apical portion. Instruct patient to schedule an appointment with an oral & maxillofacial surgeon for the removal of the apical fragment.



- b. If the tooth is mobile and the fracture is in the middle 1/3, reposition the crown and splint the tooth in place. Instruct the patient to schedule an appointment with a general dentist or endodontist for treatment and/or prognostication.
- c. If the root fracture is in the apical 1/3 of the root, reposition the tooth and splint if necessary. Instruct the patient to schedule an appointment with a general dentist or endodontist for care.

THE BLEEDING PATIENT*

Throughout the year, you are sure to encounter patients with postoperative or gingival bleeding problems. It is important to first sort out the potential etiology behind the bleeding. A complete history is necessary. After the history is obtained, careful examination of the bleeding site will direct the appropriate management. It is not expected that you will be able to complete all the steps outlined below without help/input from attending staff, or from staff from another service, such as plastics or ENT. However, you should be very familiar with the management of the different scenarios outlined below.

1. Extraction Site or Bony Surgery Site Bleeds

<u>Etiology</u>

- 1. Loss of suture(s)
- 2. Loss of organized blood clot due to smoking, spitting, rinsing or using a straw within 24 hours of the surgery.
- 3. Reopening of a vessel that was vasoconstricted or closed at the time of surgery.
- 4. The presence of granulation tissue in the socket. This tissue is highly vascular.
- 5. An acquired coagulopathy from aspirin, NSAIDs, coumadin, alcoholic or other liver disease.
- 6. An intrinsic coagulopathy.

Management

- Complete history, especially making note of bleeding abnormalities, blood dyscrasias, and medications (for example, aspirin, coumadin, etc.) Also ask about habits: smoking, rinsing, spitting, straws.
- 2. Under appropriate light, examine for obvious bleeding vessels. If visualized, electrically coagulate or ligate with resorbable suture.
- 3. If bleeding is brisk or pulsatile, inject local with a vasoconstrictor. Debride/irrigate the socket. Look for small bone bleeders. These may be crushed with a metal instrument (like the flat side of a periosteal elevator) or bone wax can be used over the bleeder and pressed into place with the periosteal elevator. Consider packing Surgicel.
- 4. If no vessels are seen, have the patient bite on gauze for 20 minutes, while observing him/her. If this fails, use gauze that has been soaked in topical thrombin. Have the patient bite on the gauze for another 20 minutes.
- 5. Once local causes have been ruled out, order appropriate laboratory tests: a CBC with differential, PT, PTT, INR, bleeding time. Seek medical consultation if abnormalities are found.

B. Gingival Bleeds

<u>Etiology</u>



- 1. Gingivitis or periodontal disease
- 2. Trauma
- 3. Acquired coagulopathy (drugs, alcohol)
- 4. Intrinsic coagulopathy (Factor deficiency/hemophilia)
- 5. Other systemic cause (i.e. acute leukemia)

Management

- 1. Careful history and complete extraoral/intraoral examination
- 2. Obtain appropriate blood tests: CBC, PT/PTT/INR, bleeding time. If abnormalities are found, seek medical advice.
- 3. Use local anesthetic with a vasoconstrictor. Inject into area.
- 4. Use gauze pressure
- 5. Remove granulation tissue associated with periodontitis.
- 6. Repair traumatic injuries

C. Soft Tissue Incision Bleeds

<u>Etiology</u>

- 1. Bleeds from the wound margins
- 2. Hematomas
- 3. Vascular bleed within the wound

Management

- 1. For wound margin bleeders or slow venous bleeders, apply direct pressure and/or sutures. Observe for 20 minutes.
- 2. Arterial (pulsatile) bleeders require the wound to be opened further. The bleeding vessel must be found and coagulated or ligated. Pressure should be applied for 20 minutes, with re-evaluation.
- 3. Hematomas must be evacuated. Open the incision a bit more and probe the tissue with a blunt hemostat. When the hematoma is found, express the blood. Sutures should be placed and pressure should be applied for 20 minutes, with re-evaluation.



GUIDELINES FOR EVALUATING HEMATOPOIETIC STEM CELL TRANSPLANTATION (HSCT) PATIENTS

A. Dental Evaluation Before HSCT

The request for an outpatient dental evaluation of a pre-HSCT patient is initiated by the requesting service. The patient's transplant coordinator will contact the Oral Medicine receptionist or resident to schedule the patient. This is the responsibility of the "A resident". Whenever possible, patients should be scheduled at least two weeks prior to their hospital admission.

CAUTION:

- a) CHECK WHEN THE LAST CYCLE OF CHEMOTHERAPY WAS DELIVERED (IF ANY). Chemotherapy may cause neutropenia and thrombocytopenia. After a cycle of chemotherapy, the nadir for immunosuppression is usually reached in 7-10 days. Blood counts then start to recover. The best time see a patient for dental treatment is when the counts are recovering and just before the next cycle of chemotherapy starts.
- b) CHECK THE MOST RECENT LAB RESULTS. Patients with ANC < 500 or platelets less than 50,000 should not have dental treatment performed. Patients with ANC < 1,000 should receive antibiotic prophylaxis. In RARE instances when a patient with < 30,000 – 50,000 platelets absolutely must have a dental surgical procedure, platelet infusions are necessary.

OBJECTIVE:

The purpose of the pre-HSCT dental evaluation is to eliminate any active or potential sources of infection and to ensure good oral health for an extended period of time. Keep in mind that the patient will be immunosuppressed for up to several months or even longer if graft-versus-host disease (GVHD) develops.

PROCEDURE:

- a) Obtain full PMH, expected medical treatment plan for the patient (chemo, full body irradiation), start date of cancer treatment, previous chemotherapy cycles with start and end dates
- b) Complete dental examination and full mouth series of radiographs. If the patient has third molars, also take a panoramic film. Panoramic radiographs alone are NOT adequate for these patients.
- c) Educate the patient on the significance of oral health and the potential oral complications in chemotherapy, including mucositis, xerostomia, altered taste sensation, odontalgia, bleeding and infection.
- d) Prophylaxis, scaling and root planing if necessary, and oral hygiene instruction.
- e) Extract teeth with a hopeless or guarded prognosis, including root tips, teeth with severe periodontitis, etc.



- f) Perform any needed endodontic treatment only if there is enough time before the BMT to ensure endodontic success.
- g) Third molars in pre-HSCT patients:
 - Should be extracted if they are full soft tissue impacted and have been symptomatic.
 - \circ $\;$ Should be extracted if they are partial soft tissue impacted.
 - If they are erupted with a deep distal pocket, then you should consider extraction or a distal wedge if there is a history of symptoms. Distal wedge procedures have variable success.
- h) Teeth that are symptomatic after endodontic therapy need careful reevaluation and may require retreatment, surgery or extraction.
- i) All teeth that have received direct/indirect pulp caps or have large restorations should have their vitality tested.
- j) Restore all caries, fractures, defective restorations.
- k) Relieve ill-fitting prostheses.
- I) Prosthetic treatment can be deferred until after HSCT.

B. HSCT Inpatient Evaluations on Rounds

- a) When a patient is admitted for HSCT, our service will begin to follow the patient on rounds with the BMT team (i.e. the **"B" rotation**). It is the responsibility of the resident to check the admit list (which is emailed by the attending) prior to rounds each morning to determine if there have been any new HSCT admissions.
- b) Oral care instructions for HSCT patients in house include Peridex rinse bid, Nystatin or Mycelex troches qid, and GelKam. Patients will be given a soft toothbrush and toothpaste.

C. Post HSCT Discharge Instructions

- a) Brush TID with a soft brush softened with hot water. Use fluoridated toothpaste. Brush gently in the beginning.
- b) Floss QD.
- c) Soak dentures qhs in 1:10 bleach dilution.
- d) For routine dental care, patients can see a dentist 6 months after an autologous transplant or 12 months after an allogeneic transplant due to delayed immune reconstitution and concern regarding risk of infection. <u>These are only guidelines and</u> <u>patients that require emergent dental care must be treated</u>.

D. Graft vs. Host Disease (GVHD)

Graft-versus-host disease (GVHD) is a significant complication following allo-HSCT and a major cause of morbidity and mortality. The oral cavity is frequently involved in GVHD, leading to pain, functional impairment, and reduced quality of life. GVHD may occur at about 100 days post HSCT or later. In the mouth it presents as hyperkeratotic reticulations and plaques, ulcers, erythema, and xerostomia. Oral pain can be managed with bland diets, cold foods, viscous



lidocaine, kaopectate/Benadryl/lidocaine rinse, topical steroids, and diluting or eliminating Peridex.

Oral involvement of acute GVHD is rare and must be differentiated from mucositis and infections. Oral features of aGVHD may be the initial manifestation and include nonspecific erythema and ulcerations of keratinized and nonkeratinized mucosa and lips. Intensive topical therapies may help reduce symptoms and promote healing. Xerostomia can be managed with sugar free gum/candy, saliva substitutes, Vaseline to the lips, water spray bottles, and Biotene products.

Chronic oral GVHD is characterized by lichenoid inflammation that can involve all intraoral sites, but particularly affects the tongue and buccal mucosa. It typically develops 6-24 months after allogeneic HSCT and is managed in the outpatient setting with topical steroids being the mainstay of therapy. However, in severe/complicated cases, a patient may be admitted, and a consult may be requested.



GUIDELINES FOR EVALUATING ORGAN TRANSPLANT, CARDIAC VALVE, HEAD AND NECK CANCER, AND CHEMOTHERAPY PATIENTS

You may encounter these patients as inpatients or outpatients. Specific patient management issues that you may have concerning organ transplant, head and neck cancer, and cardiac valve patients should be discussed with an attending.

A. SOLID ORGAN TRANSPLANT PATIENTS

Whether an organ transplant is for heart, lung, liver or kidney, the patient will be immunosuppressed for life on anti-rejection medication. The goals for a dental evaluation prior to organ transplantation are to eliminate all active and potential sources of infection and to restore the patient to good oral health with periodontal, restorative, and endodontic treatment as needed. Ideally, as long as the patient can tolerate dental treatment, the organ transplant patient should have all his/her dental needs addressed while waiting for transplantation. It is important to keep in mind that these patients often cannot seek dental care for several months after transplantation while their immunosuppressive medications are being titrated. With these considerations in mind, the pre-organ transplant work-up and treatment should include:

- 1. Consultation with the patient's physician concerning the patient's medical status, ability to tolerate dental treatment, and other precautions, such as:
 - i. Cardiomyopathy patients often have **artificial cardiac valves** and need antibiotic prophylaxis. Also check for **pacemakers** in which case ultrasonic scalers, pulp testers and other electrical dental equipment may be contraindicated.
 - Renal Dialysis patients patients with vascular access need antibiotic prophylaxis. These
 patients also need to be treated on non-dialysis days because of heparinization during
 dialysis. Precautions are needed when prescribing or administering drugs cleared by the
 kidneys.
 - iii. Liver Failure patients check **coagulation** parameters, CBC, and differential before treatment. Precaution should be taken in prescribing or administering drugs cleared by the liver. These patients may require FFP prior to multiple extractions.
- 2. Complete dental exam and full mouth series of radiographs
- 3. Prophylaxis with scaling and root planing if necessary
- 4. Extraction of all teeth with hopeless or guarded prognosis, such as teeth with severe periodontal disease
- 5. Endodontic treatment
- 6. Restoration of caries, fractures, etc.
- 7. Asymptomatic periapical radiolucencies s/p RCT do not have to be treated unless the radiolucency has increased in size as proven by serial radiographs.
- 8. Fixed and removable prostheses can be deferred until after transplantation. Only necessary dental treatment to eliminate pathology is required before transplantation.

B. CARDIAC VALVE PATIENTS

Patients who require cardiac valve replacement often do not have time before their surgery to undergo comprehensive dental evaluation and treatment. In some cases, patients may not have seen a dentist for several years. Therefore, the objective of pre-cardiac valve dental treatment is to eliminate active and



potential sources of infection. Keep in mind that cardiac valve replacement patients are generally advised by their cardiologists not to seek routine, non-emergent dental care for at least three months after cardiac surgery. Whether you see the patient as an inpatient or outpatient, follow the guidelines below:

- 1. Consult with the patient's physician concerning the patient's medical status, ability to tolerate dental treatment, and ability to travel via wheelchair to the Oral Medicine and Dentistry clinic if the patient is seen as an inpatient.
- 2. Because we are mainly concerned with acute infection before valve replacement, a bedside exam is typically sufficient for evaluation.
- 3. If the bedside exam reveals evidence of acute periapical infection or acute symptomatic teeth, then a radiograph should be obtained at bedside with a portable machine. Extraction should be recommended for teeth with acute odontogenic infection.
- 4. Antibiotic prophylaxis is required for dental treatment.
- 5. There may be instances where the patient is too ill to receive any dental treatment. Discussion with the patient's physician concerning the risks and benefits of dental treatment or deferring of dental treatment is mandatory. Each case will be different.

C. HEAD AND NECK CANCER PATIENTS

There is generally a short window of time to complete the necessary work up and dental treatment for patients who will start radiation/chemotherapy/surgery for head and neck cancer. It is critical that these patients be **evaluated as soon as a request is made for a dental evaluation, even if this means that other patients must be moved in the clinic schedule**. The dental evaluation and treatment should include:

- 1. Full review of PMH and labs as needed.
- 2. Consult with the MD about the plan for treatment of the cancer (single or multi-modality treatment, expected start date of cancer treatment, maxilla or mandible in the field of radiation, dose of radiation, etc.) In a patient undergoing radiation therapy, the radiation oncologist must be contacted if simulation plans have already been completed and the dental treatment plan includes any extractions. Extractions may alter the plan and the patient may need to be re-simulated resulting in potential treatment delays.
- 3. Explanation to the patient of the role of dental health and potential oral complications in cancer treatment. Include in your discussion:
 - Ablative Surgery functional compromise (speech, occlusion, swallowing, nutrition, saliva control), esthetic compromise, possible need for surgical stent, obturator, or other prostheses
 - b. Chemotherapy mucositis, neutropenia and infection, thrombocytopenia and bleeding, altered taste sensation, odontalgia
 - c. Radiation Therapy xerostomia, mucositis, altered taste sensation, radiation caries, osteoradionecrosis
- 4. Complete dental exam and full mouth series of radiographs. A panoramic radiograph is NOT adequate for these patients.
- 5. Prophylaxis, scaling and root planing, oral hygiene instruction
- 6. Extraction of all teeth with a hopeless or guarded prognosis, including:
 - a. Partially erupted teeth
 - b. Teeth with moderate to severe periodontitis
 - c. Root tips



d. Teeth with severe caries or periapical pathology. Endodontic treatment is generally not preferred because of time limitations and the possibility of treatment failure.

THE THRESHOLD FOR EXTRACTION IN THESE PATIENTS MUST BE LOW. TREATMENT IS AGGRESSIVE RELATIVE TO OTHER PATIENTS.

- 7. Restore caries/fractures/defective restorations
- 8. Replace, marginate, or extract all restorations that may cause soft tissue irritation
- 9. Remove orthodontic appliances
- 10. Relieve areas of irritation on ill-fitting prostheses
- 11. Fluoride trays with 0.4% stannous fluoride or 1.1% neutral sodium fluoride for 5 min. qhs to be used for life.

D. MANAGEMENT DURING AND AFTER CANCER THERAPY

- 1. Soft tissue infections antibiotics, antifungals
- 2. Mucositis sucralfate, kaopectate/Benadryl/lidocaine, miracle mouthwash
- 3. Xerostomia water, saliva substitutes, Biotene, pilocarpine, cevimeline
- 4. Diet noncariogenic
- 5. Altered taste sensation spicy foods
- 6. Fluoride trays forever
- 7. Follow up visits every 2-3 months
- 8. Consider root canal therapy instead of extraction. Extractions post-XRT are best done during the hyperemic stage within 5 months of radiation. Thereafter, the risk of ORN increases with time. *HBO therapy is generally NOT recommended due to insufficient evidence for efficacy and associated time/costs. This should be considered on a case-by-case basis with involvement of the radiation oncologist.*

E. CHEMOTHERAPY PATIENTS

Guidelines for managing high-dose chemotherapy patients are generally the same as for managing HSCT patients.



OFF-SITE PRE-HSCT DENTAL SCREENING PROGRAM

As part of the "off-site" pre-hematopoietic stem cell transplantation (HSCT) dental evaluation for patients about to undergo hematopoietic cell (bone marrow) transplantation, dentists are provided standard evaluation forms to complete and return to our office, together with radiographs taken. By reviewing private dentists' evaluations, we are helping to guide them in preparing patients for HSCT. As necessary, residents will speak with the private dentists to confirm or discuss treatment plan issues. Residents will also write a letter to the outside dentist documenting our recommendations on a template. Please do these evaluations in a timely fashion – they add up quickly and time is often short if the patient requires dental treatment.

KEEP IN MIND, THE PURPOSE OF THESE EVALUATIONS IS TO ELIMINATE AREAS OF ACTIVE OR POTENTIALLY ACTIVE INFECTION. IN MOST CASES, THE TREATMENT PLAN SHOULD NOT BE ANY MORE AGGRESSIVE THAN HOW AN OTHERWISE HEALTHY PATIENT WOULD BE OPTIMALLY MANAGED. IN SOME CASES, WHEN PATIENTS HAVE NOT HAD ROUTINE CARE, OR QUESTIONABLE TEETH HAVE BEEN "WATCHED" FOR AN EXTENDED PERIOD OF TIME WITHOUT DEFINITIVE CARE, MORE EXTENSIVE TREATMENT WILL BE RECOMMENDED.

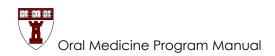
The workflow is as follows:

- 1. Evaluations and radiographs from the local dentist are delivered on a daily basis to the BWH B resident. Yadira Borrero manages the practice e-mail where the evaluations and radiographs are received in the practice.
- 2. Resident reviews chart and radiographs and fills out letter template to local dentist called "BMT Dental Letter" in EPIC. The resident enters the dentist's information and address, makes sure all the information is correct and prints the finalized clearance letter that is mailed back to the dentist. Any discrepancies requiring immediate action or a substantial alteration in treatment plan must be discussed with the treating dentist.
- 3. The resident and the attending on B service meet daily for sign-out rounds. The time and location will vary depending on the attending's schedule.
- 4. Once the letter is finalized it should be printed and mailed back to the treating dentist and forwarded to the oncology team.

REVIEW GUIDELINES

A folder with the private dentist's evaluation and radiographs will be given to you. Look in EPIC to check the patient's diagnosis and oncologist's name (DO NOT rely on the private dentist's paperwork for this information). If there is any outstanding dental treatment needed or a treatment plan that is questionable, it is critical that the resident contact the dentist to discuss the issues. All such discussions should be documented at the bottom of the dentist's evaluation form.

The purposes of our letter to the private dentists are to check and acknowledge the private dentist's findings and to concur with/alter/add to the treatment plan. Specific instructions on how to write your letter to the private dentist using the template are provided after the next section.



OFF-SITE PRE-RADIATION DENTAL SCREENING PROGRAM (PRE-H&N CANCER THERAPY)

As part of the "off-site" pre-radiation dental evaluation for patients about to undergo chemoradiation therapy for head and neck cancer, dentists are provided standard evaluation forms to complete and return to our office, together with radiographs taken. By reviewing private dentists' evaluations, we are helping to guide them in preparing patients for the short- and long-term complications of head and neck cancer therapy. As necessary, residents will speak with the private dentists to confirm or discuss treatment plan issues. Residents will also write a letter to the outside dentist documenting our recommendations on a template in the electronic medical record. Please do these evaluations in a timely fashion – they add up quickly and time is often short if the patient requires dental treatment.

KEEP IN MIND, THE PURPOSE OF THESE EVALUATIONS IS TO ELIMINATE AREAS OF ACTIVE OR POTENTIALLY ACTIVE INFECTION AND PREPARE THE PATIENT FOR THE LONG-TERM CONSEQUENCES OF RADIATION THERAPY LIKE HYPOSALIVATION AND RISK FOR OSTEORADIONECROSIS. IN MOST CASES, THE TREATMENT PLAN SHOULD NOT BE ANY MORE AGGRESSIVE THAN HOW AN OTHERWISE HEALTHY PATIENT WOULD BE OPTIMALLY MANAGED. IN SOME CASES, WHEN PATIENTS HAVE NOT HAD ROUTINE CARE, OR QUESTIONABLE TEETH HAVE BEEN "WATCHED" FOR AN EXTENDED PERIOD OF TIME WITHOUT DEFINITIVE CARE, MORE EXTENSIVE TREATMENT WILL BE RECOMMENDED.

The workflow is as follows:

- 1. Evaluations and radiographs from the local dentist are delivered on a daily basis to the BWH B resident. Yadira Borrero manages the practice e-mail where the evaluations and radiographs are received in the practice.
- 2. Resident reviews chart and radiographs and fills out letter template to local dentist called "BMT Dental Letter" in EPIC. The resident enters the dentist's information and address, makes sure all the information is correct and prints the finalized clearance letter that is mailed back to the dentist. Any discrepancies requiring immediate action or a substantial alteration in treatment plan must be discussed with the treating dentist.
- 3. The resident and the attending on B service meet daily for sign-out rounds. The time and location will vary depending on the attending's schedule.
- 4. Once the letter is finalized it should be printed and mailed back to the treating dentist and forwarded to the oncology team.

REVIEW GUIDELINES

A folder with the private dentist's evaluation and radiographs will be given to you. Look in EPIC to check the patient's diagnosis and oncologist's name (DO NOT rely on the private dentist's paperwork for this information). If there is any outstanding dental treatment needed or a treatment plan that is questionable, it is critical that the resident contact the dentist to discuss the issues. All such discussions should be documented at the bottom of the dentist's evaluation form. The purposes of our letter to the private dentists are to check and acknowledge the private dentist's findings and to concur with/alter/add to the treatment plan. Specific instructions on how to write your letter to the private dentist using the template are provided below.



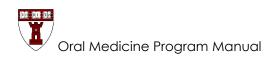
BMT/ HEAD AND NECK LETTERS PROTOCOL

- Follow the format of the letter as it appears in EPIC, this protocol will serve as a guide
- Ensure all the responses you write are aligned and uniform, with adequate spacing.
- Please note: We are concerned only about teeth that are at a risk of being **acutely infected during transplantation and for about 3 months after**. Always ask yourself if the tooth poses a risk. If there is a finding that poses little to no risk e.g., impacted third molar in 55-year-old with no history of pericoronitis, you will note the impacted tooth, but no treatment is necessary. Another example is crown fabrication for a very large 5-surface amalgam restoration on a stable, asymptomatic tooth can be deferred.

Content	Explanation
DATE	Write the " Date" on which you get the letter signed, ensure you also change the date of the note in EPIC
Dr. Dentist's Name Street City, State 12345	Fill in First and Last name of the dentist Street/ PO box/ Suite City/ State
Re.: Patient Last, First DOB://	Re.: Patient Last, First DOB://
Dear Dr,	Dear Dr. Last name
Thank you for sending the dental evaluation and radiographs on Mr/s. This patient's medical record and radiographs were reviewed in consultation at the request of Dr. Oncologist in preparation for hematopoietic stem cell transplantation/H&N cancer treatment	 Include patient's full name Identify the Oncologist using EPIC This is a good time to add the dentist to the cc list In addition, for H&N letters, include??? in the cc and choose the option to email the letter to her



Content	Explanation
Diagnosis: Radiographs received: FMX dated/ Panoramic dated//	 Identify the diagnosis from EPIC. Keep in mind that patients with multiple myeloma might be on bisphosphonates and are at risk for osteonecrosis if they have extractions Write the date when the FMX was taken The radiographs should be current (ideally within 6 months) and of high diagnostic quality. These may include any/all or a combination of the following: Full mouth series Panoramic radiograph with bitewings Panoramic radiograph with select periapical radiographs (as many as clinically indicated) Write the dates of all radiographs if multiple sets were sent. If the tooth periapical area is missing on PA, and you are not able to obtain a new one, please indicate in the letter along with tooth or teeth #(S) if appropriate – the attending can help with this.
Pertinent findings from clinical and radiographic examination: a) caries: b) endodontically- treated teeth: c) apical pathology:	 If you spoke with the dentist, please write as the last phrase in the opening sentence, "and for speaking with my resident, Dr. XY". Before you start to fill this part of the letter, always look at the radiographs first. Make a note of all findings by yourself, and then verify with what the dentist has noted in the evaluation form. Always call the dentist to clarify when in doubt.
d) periodontal bone loss: e) third molars: f) others:	 a) Caries: Write "Caries noted on #X and #Y" if you see them. If you do not see the caries but the dentist has noted it, then write: "You noted caries on #19 O." Occlusal and Class V caries, recurrent caries, or buccal and lingual pit caries are difficult to see on radiographs only. If you notice opacities overlying the pulp chamber it is most likely a buccal composite, but always contact the dentist to reconfirm especially if notice a radiolucency in relation to it. If you think that a particular tooth might be carious which the dentist did not notice, please call the dentist to confirm and update the letter with the correct information.
	 b) Endodontically- treated teeth: Note down all teeth that have had RCT and see if the seal looks good and cross check with the write up to see if any teeth are symptomatic. If the canals look



Content	Explanation
	 reasonably filled and are asymptomatic, write: "Teeth #X and #Y are well-sealed and asymptomatic." Please check for any widening of PDL or radiolucency and move onto the next section
	 c) Apical pathology: For teeth with RCT, note the size of any apical pathology and note if symptomatic or not. If < 5 mm and asymptomatic, write: "There is a X mm radiolucency at the apex of #Z that is asymptomatic; this likely represents a scar". If > 5 mm and asymptomatic, write "There is a Y mm radiolucency at the apex of tooth #Z that is asymptomatic; this may represent a scar, granuloma or radicular cyst." You will note in the Treatment Plan that this tooth needs to be followed up after discharge. If the tooth does NOT have a RCT and has a periapical radiolucency, call the dentist and get it pulp tested, it is probably necrotic. Hopefully, the dentist already noted this and has already pulp tested it. Multi-rooted teeth may test positive for vitality but still be partially necrotic in one root.
	 d) Periodontal bone loss: Use radiographs to identify amount of bone loss. Normal bone height is within 1-2 mm of the CEJ. Note if it is generalized or localized and specify which teeth are involved. Is it horizontal or vertical? Insignificant bone loss: when bone loss is minimal <u>Mild bone loss</u>: Up to 15% root length or ≥2mm and ≤3mm <u>Moderate bone loss</u>: 16%-30% root length or >3mm and ≤ 5 mm <u>Severe bone loss</u>: > 30% root length or >5 mm Note furcation involvements and severity of periodontal disease Teeth exhibiting severe (advanced) periodontitis should have been extracted.
	 e) Third molars: If present, note if it is full bony impacted, partially bony impacted, soft tissue impacted, or fully erupted



Content	Explanation
	 Check the write-up for erupted teeth to see where the distal gingiva is located since this is where food impaction and pericoronitis often originates Third molars that are partially erupted and that have been symptomatic in the past (e.g., pericoronitis) should have been extracted Fully impacted (soft tissue or bone) asymptomatic third molars do not need to be extracted
	 f) Others: Include any other information given by the dentist or that you identify (if relevant) which do not fall into the above categories These can include implants (indicate if periimplant radiolucency is present or not), fractured teeth (note surface of tooth/teeth involved), condensing osteitis, retained root tips
 Treatment Plan: Scaling and prophylaxis were completed on (date) (Put in other dental needs here) (Reminder - Myeloma precautions as necessary) 	 Scaling and prophylaxis need to be completed within 3 months prior to admission and the date when this was completed, or when it has been scheduled for, should be inserted. If the dentist has not included it, call the practice and find out the date. If unable to confirm date of last S/P, write: "Please perform scaling and prophylaxis as soon as possible if this has not been completed within the last three months." Write down the treatment plan and date completed or scheduled such as "Teeth #X and #Y were restored (or are scheduled for restoration) on XXX". It is often a good idea to call to see if the treatment has been completed as opposed to scheduled. Or you can write "Please restore #X (or perform root canal therapy, or extractions) as soon as possible". If any other tooth or teeth need re-evaluation or treatment, please call the dentist and discuss findings and recommendations. Remember to document your call on the letter. If extraction is needed for a patient with multiple myeloma, include myeloma precautions in this section. Contact oncology nurse to find out if the patient is on IV bisphosphonates (you can check on EPIC too and note total of doses received). In such cases, it is always a good idea to call. if appropriate – the attending can help with this.
Thank you for helping to prepare Mr/s for stem cell transplantation.	 Write this when no additional treatment is needed.



Content	Explanation
There are no other immediate dental needs	
When treatment has been completed, please fill out and return the attached Treatment Plan form in the addressed envelope. Thank you for helping to prepare Mr/s for stem cell transplantation.	 Include this line if there is any pending treatment plan. Add the treatment plan paragraph (available in EPIC) at the end of the letter. Include entire name of the patient TREATMENT PLAN: Scaling and prophylaxis to be completed within the last 3 months: change this according to the treatment needed e.gRestoration of #X. Treatment was completed on: Treatment was not completed, reason:



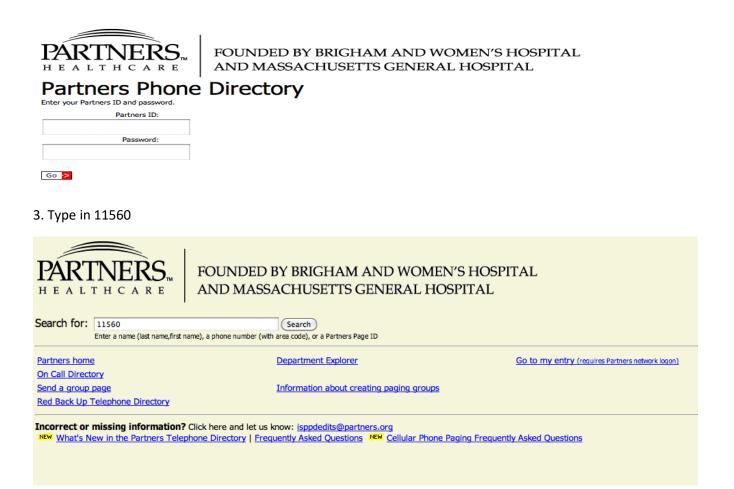
APPENDIX

PAGER INSTRUCTIONS FOR ED/INPATIENT CONSULT ON-CALL RESIDENT

There is one pager for the ED/inpatient consult coverage. It is **beeper #11560**. It is always physically carried by the A resident. However, when another resident is on-call for that night/weekend, they can forward calls from this beeper to their own beeper. IT IS THE RESPONSIBILITY OF THE RESIDENT COMING ON-CALL TO FORWARD CALLS FROM BEEPRER 11560 TO THEIR OWN BEEPER. Below are instructions on how to forward calls from beeper 11560 to another beeper.

1. Type: https://www.ppd.partners.org/ppd/login/login.asp?CTAuthMode=BASIC

2. LOG IN



Oral Medicine Program Manual

4. Click on Dental Consult



FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL AND MASSACHUSETTS GENERAL HOSPITAL

Initiate new search

Search results:

	Previous	
		Displaying matches 1-1 of 1 for 'Partners Personnel Lookup'
Name Department		
	Dental (BWH) Consults (7am -7am)	BWH / Oral Medicine & Dentistry, Division Of / Residency Program
	Previous	

5. Click on Change Paging Status



FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL AND MASSACHUSETTS GENERAL HOSPITAL

Back to search results | Initiate new search

Dental (BWH) (7am -7am)	Consults	Send a Page Change Paging Status
PHS Page ID: PHS Page Status:	<u>11560</u> In Hospital - On Page	Retrieve Messages View Sent Pages
	BWH Oral Medicine & Dentistry, Division Of / Residency Program	

6. Scroll down and choose 'Calls being taken by Page ID'



7. Scroll down and choose 'Specify a start and end time'

FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL AND MASSACHUSETTS GENERAL HOSPITAL				
Change paging status Name:	Dental (BWH) Consults (7am -7a	um)		
Page ID:	11560			
Status:	In Hospital - On Page			
Paging Note:			Add/Edit Note	
-	je paging status to: ion of this change:	7 - Calls being taken by Page ID:		
	(File change)	Cancel		

- 8. Click on Continue
- 9. Insert the Pager ID of the person you want to forward the call to
- 10. Specify time and date



FOUNDED BY BRIGHAM AND WOMEN'S HOSPITAL AND MASSACHUSETTS GENERAL HOSPITAL

Back to Change Status screen | Back to detail screen | Initiate new search



Status	Calls being taken by Page ID:		
Start Date	04/18/2013	Start Time	05:25PM
End Date		End Time	
	File Timed Status	Cance	2

11. Click File Timed Status



CLINICAL PHOTOGRAPHY POLICY AND STEPS

During the A, B, and C rotations, residents are expected to document clinical cases with intraoral (and extraoral when necessary) photographs.

Guidelines:

- 1. If the camera setting has to be changed (e.g., for an extraoral photograph), please remember to return the camera to the normal intraoral setting immediately.
- 2. Please do not photograph the full routing slip as <u>the name is not to be captured</u>.

Steps:

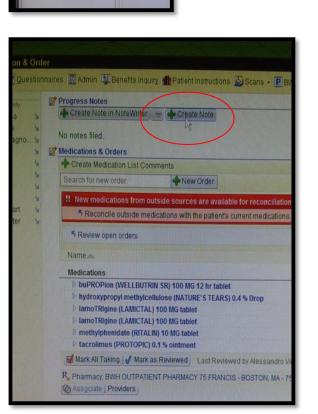
- 1. Please make sure that the card reader is in the camera and make sure that the camera's battery is charged.
- 2. Please capture the MRN from the top right of the routing slip as shown in the image below.

MRN:	22894380
Status:	Comp
Length:	30
Copay:	\$0.00
Department:	BWH ORAL MED DENTISTRY
CSN:	3088699386
Auto Confirm Status:	ANS MACH

- 3. Proceed with taking the clinical images and upload them to EPIC in "documentation" on the same day.
- 4. Follow the steps below as demonstrated in the series of pictures below:



Recent Field Modulation Chart Arrived Schedule	요 Dorder Review	Enc Summary of C
Chan Anned	*	Enc.Summary of C
Arrived		
Schedule	Inday	TAVARES, TIFFANY
	2015 1	Hu Mede Time
Encounter	12 h Fr Sa	The medi time
Patient Care	Ci Chart	
Scheduling	· Ca Addendum	
HIM	· Enter/Edit Real	1
Enterprise Billing	• Fimmonizations	
Radiology	* 🛃 Media Manager	
Reports	· Entert Listo	
Jooia	• 🔐 Schedule	
Help	· J Encounter	
Personatze	· Sr Jelephone Call	
PHSApplications	· O Send Letter	the second s
Change Context	Q.Q. Qrders Only	
Request Correction	Betil Medication	
PExt	Ant-Goag	
	Decenentation	
	H External Admiss	ion
	Emergency	
	Erep for Surgery	the second s
	Besearch Stude	15



ŀ	ł	

B



agan, Kristina (15739774) - Image Selector ra Cléar All Filters Thumbhail View lis Encounter All Images	Detaled View Browly Settings	2) Sefresh
Th rge)	is patient has no attached images,	
Dpen .	▼ Documents ▼	
Favorites Desktop Downloads Character Libraries Documents Documents Documents Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures Districtures	Documents library Includes: 2 locations Name *	
Computer CD/DVD Drive (D CD/DVD Drive (D CD/DVD Drive (D Color Disk (C: on Color Disk (K: on Network Drive (H: on 1 Network Drive (U Removable Disk (<u>W00359531</u>	
ot ec File nar	ne	



D



lame 🔺	Date modified	Туре	Size	
Bayliss, Charles 23791783 09, 02-15 (2).JPG	9/2/2015 6:01 AM	JPEG image	1,347 KB	
Bayliss, Charles 23791783 09_02-15 (3) JPG	9/2/2015 6:02 AM	JPEG image	1,962 KB	
Bayliss, Charles 23791783 09_02-15.JPG	9/2/2015 6:01 AM	JPEG image	1,484 KB	
MG_3598.JPG	9/2/2015 5:41 AM	JPEG image	1,634 KB	
MG_3599.JPG	9/2/2015 5:41 AM	JPEG image	1,535 KB	
MG_3600.JPG	9/2/2015 5:4 AM	JPEG image	1,734 KB	
MG_3601.JPG	9/2/2015 5:41 AM	JPEG image	1,012 KB	
IMG_3602.JPG	9/2/2015 5:41 AM	JPEG image	1,742 KB	
MG_3606.JPG	9/2/2015 6:40 AM	JPEG image	1,823 KB	
IMG_3607.JPG	9/2/2015 :08 AM	JPEG image	1,433 KB	
IMG_3608.JPG	9/2/2015 7:08 AM	JPEG image	1,745 KB	
me: IMG_3606.JPG			All Image	Files

Е



Start Start Barton Barton	?
n Orders 💸 Care Teams 🍻 Print AVS 🖉 Preview AVS 🛔	Pt Declined AVs Media Manager A Dictations •
Browse Settings Refresh	× -
	Selected images:
no attached images.	
	Insert size.
	To Fit Cancel Inter
Insert s	Inti
10 mg, Oral, 2 times daily Topical, 2 times daily	Change Reorder Discontinue
on 9/2/2015 at 11.26 AM [[Patient Preferred] 👕 617-732-6225	% Orde
	ctick to

F



Need Interp. No Dextroamphet CSN: 0000410537 Health Municenance (D Code: Not on file 10 Patient Mesages: 23 Patient Galeway: Panding
Order
and and an
stionnaires 🔝 Admin 🖳 Benefits Inquiry 🏥 Patient Instructions 🗟 Scans - 💽 BWH Rad 🐇 Open Orders 💥 Care 1
😰 Progress Notes (F3 to enlarge)
😵 😕 🖉 🍄 😰 💠 Insert SmartText 📇 😓 😅 🛃 🚱
Construction of the second sec
Sign at close encounter
033 Resto Close F9 X Cancel
Medications & Ordens
Create Medication List Comments
Search for new order
1 New medications from outside sources are available for reconciliation.
5 Reconcile outside medications with the patient's current medications.
5 Review open orders
Name.a
Medications
buPROPion (WELLBUTRIN SR) 100 MG 12 hr tablet
hydroxypropyl methylcellulose (NATURE'S TEARS) 0.4 % Drop
lamoTRigine (LAMICTAL) 100 MG tablet
methylphenidate (RITALIN) 10 MG tablet
In tacrolimus (PROTOPIC) 0.1 % ointment

G



		2 Resize	C THUNKER	MU Objectives Close Encounter
nnt AVS Proview A/S Pi Decime	d AVS 🛃 Media Man	ager A Dictations -		
The second second		click to open		
		i je		
Concernation and the second second second		ate 00/02/2015 5 28 PM		
a second s		Bookmark Copy		
Carl Carl Control of State				
Letter and the first of the				
The Property of the				
			1.000	
				Good To Go!
Sand State Torold				Good To Goi
and the second second			•	
and a second second				
- The second second			1 to and	
and the second se				
		click to open		
		Options (8)		
Contraction of the local division of the loc				
and the second of the			10000	
, Frequency	a			
And the second second	The Charge	Reorder Discontinue		
st, Daily n Eye, 3 times daily PRN	Change	Reorder Discontinue		
	Change	Reorder Discontinue Reorder Discontinue		
I, 2 times daily	r 🟠 Change	Reorder Discontinue	1	This visit is ready to be signed
imes daily	r P Reorder	Discontinue		
		S Order Entry	Lastvice	Sign Vinit Sign and Next Sign
32-6225	and the second	- Cidel Entry		



5. Remember to delete the MRN photo from the card reader when finished.



MAINTAINING THE PATIENT LOG IN NEW INNOVATIONS SOFTWARE

- "A" Resident (resident on "A" rotation) Resident A is responsible for completing the NI patient log for all inpatients (cardiac, tower patients, etc.), ED consults and outpatient dental visits (initial and follow-up). This also applies to the resident on-call.
- "B" Resident is responsible for completing the NI patient log for all pre-HSCT and pre-XRT dental evaluations and the oral oncology patients seen at DFCI. <u>"B" Resident is responsible for logging the Oral</u> <u>Medicine visits when there is no "C" resident.</u>
- **"C" Resident** is responsible for completing the NI patient log for Oral Medicine outpatient visits (initial and follow-up).
- Patient encounters during "D" rotations are also included in the NI patient log.

Instructions:

Select the "Partners Application" icon on the lower left panel.



Select the "New Innovations" icon.





Click continue on "BWH-SURG-Oral Medicine (CODA)".

🗢 🕼 🖬 🖬 https://www.new-innov.com/Login/Host.sp://Cont./P = 🔒 New Innovations, Inc. (USI/C 🛛 🖬 New Innovations Residency X	n * ¤
Partners Health Care System	BWH - SURG - Oral Medicine (CODA) Ahmed Sultan 🥶 Help
🕆 Administration Schedules Evaluations Duty Hours Logger Conferences Portfolio More	
Change Department	
Choose Department	
BWH - SURG - Oral Medicine (CODA) 🗸	
Continue Cancel	
New Innovations, Inc. 01395-2015	

Select "Logger".

tions, Inc. (US) C	New Innovations Residency ×			Pi		l Madicina 27	COAL Abov	* *
ences Portfolio M					min - auno - un	n wielandine (c		ru sumari 🤍 r
nees rendend in								
							Notices & Set	tup Save Page Lay
	BWH - Dept. of Surgery/BWH - SURG - Oral Medicine (CODA)	-	My Duty Hours					
				10/	11/2015 - 11/2/2	1015		
				Week	Hours	٧	Calls	
				Oct 11 - Oct 17				
	and the second sec			Oct 25 - Oct 31		0.0 0		
				Nov 01 - Nov 02		0.0 0		
	nces Portfolio M	nces Partfalio More	nces Portfolio More	nces Portfolio More	COS Portfolio More	nces Portfolio More	Image: Sportfolio More Image: Sportfolio More Image: Sportfolio More More Image: Sportfolio More Image: Sportfolio More More Image: Sportfolio Image: Sportfolio Image: Sportfolio More More Image: Sportfolio Image: Sportfolio Image: Sportfolio More Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio More Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio Image: Sportfolio <	Image: Source Source PWH - SURG - Out/ Medicine (COOA) Annu Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source My Daty Neurin Notices & Source Image: Source Source Source My Daty Neurin Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source Image: Source Source Source Notices & Source Notices & Source

Select "Procedures".

🦕 🛞 🖪 Ni https://www.new-innov.com/Login/Home.sops 🛛 🔎 - 🍙 New Innovations. Inc. (US) 🖒 N	New Innovations Residency ×					n * ¤
Partners Health Care System			8	WH - SURG - Ora	Medicine (CODA)	Ahmed Sultan 🤤 Help
Administration Schedules Evaluations Duty Hours Logger Conferences Portfolio	Aore					=
Procedures Privilege Report Resident Reports Extract Data Continuity Clinic	s Log Books					
						5.4
Weicome: Ahmed Suttan D.D.S.	BWH - Dept. of Surgery/BWH - SURG - Oral Medicine (CODA)	- My Duty Hours				
NI Alerts and Information			10/	11/2015 - 11/2/2	015	
Recent Enhancements (updated on 10/16/2015)			Week	Hours	V Calls	
NI Conferences			Oct 11 - Oct 17	No Hours	0.0 0 0	
			Oct 18 - Oct 24 Oct 25 - Oct 31	No Hours	0.0 0 0	
	and the second second		00025-00031	No Houri		



The patient log screen will be displayed as below.

— Patient –	NAME OF THE OWNER			
Patient ID:	lo names please	*Last Name:		*First Name:
Date of				
irth:				
 Procedure 	es/Diagnoses			(8)
* Date		Location: 💊	7	
Performed:	11/2/2015	Location:	1	
* Procedure:				-
Supervisor:	V			
Supervisor:	· V			
Group:	All Diagnoses	~		
* Diagnosis:				•
	+ Add Diagnosis			
	+ Add Diagnosis			
Examined B	y:	-	Diagnosis Detail:	
				~
* Patient Encounter T	vpe:		J	~
Presentation				Remaining Characters: 5,000
			* Cancer-	All None Invert
			Related?:	No
				Yes
			* Session:	
			" Session:	💌
+ Add Proce	dure			
- Comment				
commente				
				^
				~
			25/74/25181546/1	
emaining Char	ractores 2 500			

Enter the patient's BWH MRN into "Patient ID" and enter the patient's D.O.B. and name.

- Patient	(<u></u>	<u></u>		Contraction of			
*Patient ID:	202939393		*Last Name:	Villa	*First Name:	Alex	
*Date of Birth:	1/10/1980						



Input the date of the visit into "Date Performed" and the location into "Location". Select the "Procedure" followed by the "Supervisor".

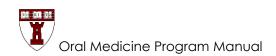
atus: γ	IP 3	~			BWH - Dept. of Surg		
_	02939393	*	Last Name: Villa		*First Name:	Alex	
Date of irth:	1/10/1980						
11 6114							
— Procedure	es/Diagnoses ———						
	es/Diagnoses	Location:	Oral Medicine Clini	ic V			
 Procedure * Date 	11/2/2015	Location:	Oral Medicine Clini	ic V			

Select the "Diagnosis" from the drop-down menu.

atus:	YIP 3	~	Department:	BWH - Dept. of Sur	gery/BWH - SURG - Oral Medicine (CODA)
- Patient -	and the second second				
Patient ID:	202939393	*Last Name:	Villa	*First Name:	Alex
Date of irth:	1/10/1980				
- Procedur	es/Diagnoses			SHE SHE	
* Date	11/2/2015	Location: Oral Medi	cine Clinic 💙		
	11/2/2015	Location: Oral Medi	cine Clinic 💙	•	
* Date Performed:	11/2/2015		cine Clinic 💙	•	
* Date Performed:	11/2/2015 m Biopsy 0 Logged 0 Confirmed		cine Clinic 🗸	•	
* Date Performed: * Procedure	11/2/2015 Em Biopsy 0 Logged 0 Confirmed		cine Clinic 💙	•	
* Date Performed: * Procedure Supervisor:	11/2/2015 Biopsy 0 Logged 0 Confirmed Villa, Alessandro All Diagnoses		cine Clinic 💙	•	

Complete the "Examined By", "Patient Encounter Type" and choose whether you feel this case should be presented for the monthly "OMGR" (oral medicine grand rounds) session or the monthly "Case Review" or select "No" if not suitable for presentation.

Check the box if the patient has an active cancer diagnosis.



Select the "Session" from the drop-down menu.

1.000

Examined By:	Attending & Resident	~	Diagnosis Detail:		~
* Patient Encounter Type:	OM-1	•			\sim
Presentation:	Case Review	•		Remaining Characters: 5000	
			* Cancer-	All None Invert	
			Related?:	✓ No	
				□ Yes	
			* Session:	AM	•

Before the monthly case review session, the C resident must email the program coordinator who will generate a report of all residents NI log