# The OHNEP Interprofessional Oral Health Faculty Tool Kit

# Adult Gerontology Acute Care Nurse Practitioner Program

## CURRICULUM INTEGRATION OF INTERPROFESSIONAL ORAL HEALTH CORE COMPETENCIES:

- Advanced Physical Assessment Across the Lifespan
- Principles of Adult Gerontology Acute Care I-II
- Principles of Adult Gerontology Acute Care III
- Resources





The Oral Health Nursing Education and Practice Program (OHNEP) is pleased to launch a new edition of the Interprofessional Oral Health Faculty Tool Kit to provide you with user-friendly curriculum templates and teaching-learning resources to use when integrating oral health and its links to overall health in your Adult Gerontology Acute Care Nurse Practitioner (AGACNP) program.

Oral health and its links to overall health has been identified as an important population health issue in <u>Oral Health in America: Advances</u> and <u>Challenges</u> (2021). <u>Healthy People 2030</u> (2020). The <u>HRSA Interprofessional Oral Health Core Competencies</u> (2014), <u>NONPF Nurse</u> <u>Practitioner Role Core Competencies</u> (2022), <u>The Essentials: Core Competencies for Professional Nursing Education</u> (AACN, 2021) and the <u>IPEC Core Competencies for Interprofessional Collaborative Practice</u> (2016) provide a framework for the innovative oral health curriculum templates and exciting resources that illustrate how oral health and its links to overall health provide strategies that expose students to interprofessional experiences by integrating oral health "bytes" into courses across the AGACNP curriculum.

Exciting teaching-learning strategies that take students from **Exposure** to **Immersion** to **Competence** can begin in or out of the classroom, link to simulated or live clinical experiences and involve interprofessional community-based service learning, advocacy and policy initiatives as venues you can easily use to integrate oral health into your existing AGACNP curriculum. The curriculum templates illustrate how oral health can be integrated into health promotion, health assessment and clinical management courses.

The new edition of the <u>Smiles for Life</u> (2020) interprofessional oral health curriculum provides a robust web-based resource for you to use along with the oral health curriculum template for each course. A good place to begin oral health integration is by transitioning the HEENT component of the history and physical exam to the HEENOT approach. In that way, you and your students will NOT forget about including oral health in patient encounters.

Research evidence continues to reveal an integral relationship between oral and overall health. Chronic diseases managed by Adult Gerontology Acute Care Nurse Practitioners, such as Diabetes, Cardiovascular Disease, Cancer and Respiratory conditions, are but a few of the health problems that have oral manifestations that can be treated by NPs or referred to our dental colleagues. It is important for AGACNPs on the frontlines of acute care to have the oral health competencies necessary to recognize both normal and abnormal oral conditions and provide gender-affirming care to patients with education, prevention, diagnosis, treatment and referral as needed.

We encourage you and your students to explore the resources in the templates as you "weave" oral health and its links to overall health into your Adult Gerontology Acute Care Nurse Practitioner program. If you need additional technical assistance, please feel free to contact us at **OHNEP@nyu.edu**.



**OPTIMIZATION OF PATIENT HEALTH OUTCOMES** 

### AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Advanced Physical Assessment

ADVANCED	1) EXPOSURE: INTRODUCTION	2) IMMERSION: DEVELOPMENT	3) COMPETENCE: ENTRY-TO-PRACTICE	
PHYSICAL ASSESSMENT ACROSS THE LIFESPAN HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Realth Preventive Intervention, Communication and Education AACN Essentials: Person-centered		<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Describe best practices in dental caries management across the lifespan</li> <li>Review ADA Adult Caries Risk Assessment Tool for patients over age 6 (Appendix 1)</li> <li>Read and discuss CAMBRA resources :</li> <li>Tooth Disease and Treatment (Appendix 2)</li> <li>Caries Risk Assessment Form (Appendix 3)</li> <li>Practice integrating oral health into health history and performing intra- and extra-oral exam using the HEENOT approach for patients in acute care clinical experiences</li> </ul>	SKILL/BEHAVIOR         Goal: Demonstrate integration of HEENOT         • Collaborate with DDS, DH, medical and pharmacy students in a simulation experience. Using an SP, demonstrate competency in oral health history (including frequency of sugar/tobacco/alcohol intake), risk assessment and physical exam of adult in acute setting, identifying any oral abnormalities.         • Each student will compare acute care oral health assessment skills with classmate         SKILL/BEHAVIOR         Goal: Describe oral health practices of different cultures	COLLABORATIVE PRACTICE FOR
Care, Population health, Inter- professional partnerships, Knowledge for nursing practice, Scholarship for nursing discipline NONPF Competencies:	Complete <u>Smiles for Life (SFL)</u> Modules #1 &     including Clinical Cases and submit	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Identify oral pathologies</li> <li>Review Oral Abnormalities in the SFL Photo Gallery on the mobile app</li> <li>Discuss oral health diagnoses and links to acute and chronic diseases – related risk factors, pathophysiology and management strategies</li> </ul>	<ul> <li>SKILL/BEHAVIOR Goal: Describe oral health practices of different cultures</li> <li>Read Tooth loss among older adults according to poverty status in the United States (Dye et al., 2019)</li> <li>Collaborate with students from dentistry, medicine, pharmacy, social work, and nutrition to identify social determinants of health and their impact on access to oral health and overall health care for adults and older adults</li> </ul>	త
Competencies: Knowledge of Practice, Person- centered care, Population health, Interprofessional collaboration and practice, Technology and information literacy	<ul> <li>KNOWLEDGE: ORAL CARE OF OLDER ADULT Goal: Understand oral care of older adults in acute care</li> <li>Complete <u>Smiles for Life (SFL)</u> Module #8, including Clinical Cases, and submit Certificate of Completion</li> <li>Read <u>Oral Health Patient Facts</u>: Older Adult</li> <li><u>Oral Health in America: Older Adults</u> (NIDCR, 2021)</li> </ul>	SKILL/BEHAVIOR         Goal: Documentation of oral health         • Review Dry Mouth Effects of Top 50         Prescription Medications (Appendix 4)         • Develop an electronic health record entry for assessment data of an older adult with an acute care health condition (e.g., diabetes, pneumonia, congestive heart failure, dementia), which includes oral health history, risk assessment, physical exam (HEENOT) and management plan         • Discuss medication related oral side effects	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Understand Issues related to oral health of older adults in acute care settings</li> <li>Read Dose-dependent association between xerostomia and number of medications among older adults (Storbeck et al., 2022)</li> <li>Post and explain causes of xerostomia in older adults and management strategies on discussion board</li> </ul>	INTERPROFESSIONAL PARTNERSHIP

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# Smiles for Life: A National Oral Health Curriculum

https://smilesforlifeoralhealth.org

<u>Click here</u> to download materials for implementing modules in a classroom setting.





# Smiles for Life: A National Oral Health Curriculum

### **Recognizing Oral Abnormalities**

Download the Smiles for Life mobile app to access the Photo Gallery.

ACNP Students should find and review the following oral abnormalities:

- Linea Alba
- Geographic tongue
- Fissured tongue
- Apthous ulcers
- Oral papilloma from HPV
- Candidiasis
- Herpes
- Denture Stomatitis
- Angular chelitis

- Dental caries
- GERD
- Gingival Recession
- Gingivitis
- Periodontitis
- Abscess
- Hairy Leukoplakia
- Oral malignancy
- Melanoma





### American Dental Association Caries Risk Assessment Form (Age >6)

	-		-			
lirti	h Date:		Date:			
Age: Initials:						
		Low Risk	Moderate Risk	High Risk		
	Contributing Conditions			nat apply		
L	Fluoride Exposure (through drinking water, supplements, professional applications, toothpaste)	□Yes	No			
L	Sugary Foods or Drinks (including juice, carbonated or non-carbonated soft drinks, energy drinks, medicinal syrups)	Primarily at mealtimes		Frequent or prolonged between meal exposures/day		
	Caries Experience of Mother, Caregiver and/or other Siblings (for patients ages 6-14)	No carious lesions in last 24 months	Carious lesions in last 7-23 months	Carious lesions in last 6 months		
N.	Dental Home: established patient of record, receiving regular dental care in a dental office	Yes	No			
	General Health Conditions	Check o	Check or Circle the conditions that apply			
L	Special Health Care Needs (developmental, physical, medi- cal or mental disabilities that prevent or limit performance of adequate oral health care by themselves or caregivers)	□No	Yes (over age 14)	Yes (ages 6-14)		
I.	Chemo/Radiation Therapy	No		Yes		
П.	Eating Disorders	No	Ves			
V.	Medications that Reduce Salivary Flow	No	Ves			
V.	Drug/Alcohol Abuse	No	Yes			
	Clinical Conditions	Check o	r Circle the conditions th	sat apply		
L	Cavitated or Non-Cavitated (incipient) Carious Lesions or Restorations (visually or radiographically evident)	No new carious lesions or restorations in last 36 months	1 or 2 new carious lesions or restorations in last 36 months	3 or more carious lesions or restoration in last 36 months		
I.	Teeth Missing Due to Caries in past 36 months	No		Yes		
П.	Visible Plaque	No	Ves			
V.	Unusual Tooth Morphology that compromises oral hygiene	No	□Yes			
V.	Interproximal Restorations - 1 or more	□No	Ves			
VI.	Exposed Root Surfaces Present	No	Ves			
/11.	Restorations with Overhangs and/or Open Margins; Open Contacts with Food Impaction	No	Ves			
/111.	Dental/Orthodontic Appliances (fixed or removable)	No	Ves			
х.	Severe Dry Mouth (Xerostomia)	No		Yes		



#### CAMBRA Tooth Disease and Treatment

## **Tooth Disease** and Treatment

#### Tooth decay is a serious disease!

- · Starts on the surface of the teeth and continues to get worse
- · Can cause permanent damage in as little as 6 months1
- Can cause sensitivity
- · Ultimately may mean drilling, fillings and crowns

#### What causes tooth decay?

- · Not flossing and brushing every day at home
- · "Dry mouth" from medicines that reduce saliva flow
- · Foods with too much sugar
- · Fillings that you already have can wear away · Braces, retainers and bridges you already have can attract bacteria that causes decay
- · Putting infants to bed with drinks containing sugar
- . Moms can pass on the bacteria that causes decay to their kids . Using any form of tobacco

#### Stage One Disease: Pre-Cavities

- · Your tooth loses minerals on the outer surface
- . This is usually invisible to the naked eve
- · Areas where teeth touch are really vulnerable

#### Stage Two Disease: White Spots

- . These are the first visible signs They appear near your gum line or near your braces
- . Think of them as "hot spots"

#### Stage Three Disease: Cavities

- **Regular Cavities**
- · Part of the healthy tooth is destroyed
- · Has to be cleared of decay and filled
- . If decay gets too deep, the tooth and root have to be removed and you'll need a crown, bridge or implant

1 Diagnosis and Management of Dental Carles Throughout Life ence Statement, March 26-28, 2001. titutes of Health Con:

#### **Root Cavities**

- . Start on the tooth surface near the gums
- · Faster growing than regular cavities
- · More common in adults
- · Can make teeth sensitive and painful when eating or drinking cold or hot beverages

#### Secondary Cavities

- Over time, older fillings can crack or chip
- · Plague and bacteria get under them and cause new decay · Need to be refilled or replaced with a crown, bridge or implant

#### Fight tooth decay with proper care.

- · Avoid drilling, filling and tooth loss with early detection · Learn to remove plaque by brushing properly without damaging enamel
- · Your dental professional may recommend using:
- A power toothbrush
- A special toothpaste
- A special oral rinse
- · Floss every day to remove plaque between your teeth
- · Don't miss appointments with your dental professional

#### You may also need stronger medicines or more frequent visits to the dental office.

- · High-strength fluoride varnishes, gels or rinses applied during your dental offi ce visit can help, even for adults
- · Prescription fluoride toothpaste or rinse may need to be used between visits
- · Prescription sensitivity toothpaste can be helpful for people with root cavities
- · More office visits may be needed to remove plaque and tartar build-up that you are missing at home

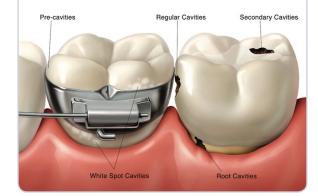


Avoid drilling, filling and loss





Dental professionals can spot early signs of problems and recommend home care treatments.



#### **3M ESPE**

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### CAMBRA Caries Risk Assessment Form

OHNEI Oral Health Nursin Education and Pract

### Dry Mouth Effects of Top 50 Prescription Medications

Science. Applied to Life.™

#### Dry Mouth Effects of Top 50 Prescription Medications

Drug (Brand Name)	Generic Name	May Cause Dry Mouth
Abilify aripiprazole		No
Advair Diskus fluticasone and salmeterol		No
Afluria	influenza virus vaccine	No
Benicar	hydrochlorothiazide and olmesartan	Yes
Benicar HCT	hydrochlorothiazide and olmesartan	Yes
Bystolic	nebivolol	No
Celebrex	celecoxib	Yes
Cialis	tadalafil	Yes
Crestor	rosuvastatin	No
Cymbalta	duloxetine	Yes
Dexilant	dexlansoprazole	No
Diovan	hydrochlorothiazide and valsartan	Yes
Flovent HFA	fluticasone inhalation	Yes
Focalin XR	dexmethylphenidate	No
Humalog	insulin lispro	No
Janumet	metformin/sitagliptin	No
Januvia	sitagliptin	No
Lantus	insulin glargine	No
Lantus Solostar	insulin glargine	No
Levemir	insulin detemir	No
Lo Loestrin Fe	ethinyl estradiol/norethindrone	No
Lumigan	bimatoprost ophthalmic	No
Lunesta	eszopiclone	Yes
Lyrica	pregabalin	Yes
Namenda	memantine	No

se h	Drug (Brand Name)	Generic Name	May Cause Dry Mouth
	Nasonex	mometasone nasal	No
	Nexium	esomeprazole	Yes
	Novolog	insulin aspart	No
	Novolog Flexpen	insulin aspart	No
	Nuvaring	ethinyl estradiol/etonogestrel	No
	Ortho-Tri-Cy Lo 28	ethinyl estradiol/norgestimate	No
	Oxycontin	oxycodone	Yes
	Premarin	conjugated estrogens topical	No
	Pristiq	desvenlafaxine	No
	Proventil HFA	albuterol inhalation	Yes
	Spiriva Handihaler	Tiotropium Bromide	Yes
	Suboxone	buprenorphine/naloxone	No
	Symbicort	budesonide and formoterol	Yes
	Synthroid	levothyroxine	No
	Tamiflu	oseltamivir	No
	Toprol-XL	metoprolol	Yes
	Travatan Z	travoprost ophthalmic	No
	Ventolin HFA	albuterol inhalation	Yes
	Vesicare	solifenacin succinate	Yes
	Viagra	sildenafil	Yes
	Voltaren	diclofenac	Yes
	Vytorin	ezetimibe/simvastatin	No
	Vyvanse	lisdexamfetamine	Yes
	Xarelto	rivaroxaban	No
	Zetia	ezetimibe	No

 Top 100 Drug List http://www.medscape.com/viewarticle/825053#vp\_2
 Dry Mouth List http://wadha.com/clientuploads/pdfs/Public%20Info/Seniors/DryMouthMet 3. http://www.drugs.com

3M Oral Care 2510 Conway Avenue St. Paul, MN 55144-1000 USA Phone 1-800-634-2249 Web 3M.com/dental

3M Canada Post Office Box 5757 ISA London, Ontario N6A 4T1 Canada Phone 1-888-363-3685 entuplead/parts/Public%20linto/beniors/DryMouttiMedication m 3M is a trademark of 3M. Used under license in Canac Printed in USA @ 3M 2017

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**OPTIMIZATION OF PATIENT HEALTH OUTCOMES** 

### AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Principles of Adult Gerontology Acute Care I- II

PRINCIPLES OF	1) EXPOSURE: INTRODUCTION	2) IMMERSION: DEVELOPMENT	3) COMPETENCE: ENTRY-TO-PRACTICE	
ADULT GERONTOLOGY ACUTE CARE I-II	KNOWLEDGE: ORAL HEALTH EDUCATION Goal: Understand importance of maintaining oral health throughout hospitalization	<b>SKILL/BEHAVIOR</b> <i>Goal</i> : Provide comprehensive health maintenance services to patients in acute care	<b>SKILL/BEHAVIOR</b> <i>Goal</i> : Advocate for smoking cessation programs in your acute care setting	FOR
HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education	<ul> <li>Complete <u>Smiles for Life (SFL)</u> Module #1 &amp; 8, including Clinical Cases, and submit Certificate of Completion Read:</li> <li><u>Changes in Nutrition-Intake Method and Oral Health through a Multidisciplinary Team Approach in Malnourished Older Patients Admitted to an Acute Care Hospital (Suzuki et al., 2022)</u></li> <li><u>Oral health and oral care in short-term care</u> (Koistinen et al., 2019)</li> </ul>	Read: • <u>Oral Care in Hospital Settings: Breaking the</u> <u>Vicious Circle of Older Adult Deconditioning</u> (Oda et al., 2021) • <u>Improving the oral health of older people in</u> <u>hospital</u> (Gibney et al., 2018) • Develop an oral-systemic management plan for patients in acute care settings and include HEENOT in history, risk assessment, physical exam and management plan	<ul> <li>Five Major Steps to Intervention (The "5 A's") (AHRQ)</li> <li>Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons (USPSTF, 2021)</li> <li>Collaborate with students from dentistry, medicine, and pharmacy to develop an evidence- based plan for smoking cessation in older adults with COPD, diabetes, CAD or CVD</li> </ul>	<b>COLLABORATIVE PRACTICE FC</b>
health, Inter- professional partnerships,	<ul> <li>KNOWLEDGE: ORAL CARE MAINTENANCE Goal: Understand relationship of oral care and VAP &amp; HAP Read:</li> <li>A mixed-methods evaluation of the national implementation of the Hospital-Acquired Pneumonia Prevention by Engaging Nurses (HAPPEN) initiative (Stevenson et al., 2022)</li> <li>Implementing Oral Care as a Nursing Intervention to Reduce Hospital-Acquired Pneumonia (Munro et al., 2019)</li> <li>Oral Health in America: Older Adults (NIDCR, 2021)</li> <li>Review Preventing NVHAP with Oral Care (NLN)</li> </ul>	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Provide comprehensive health maintenance services to reduce risk of VAP and NV-HAP</li> <li>Develop an evidence-based oral care protocol for mechanically ventilated patients, include HEENOT in history, risk assessment, physical exam and management plan</li> <li>Develop an evidence-based oral hygiene protocol to prevent NVHAP for patients admitted to an acute care setting for medical and/or surgical care</li> </ul>	E mechanically ventilated patients	INTERPROFESSIONAL PARTNERSHIP & COLLAI
Competencies: Knowledge of Practice, Person- centered care, Population health, Interprofessional collaboration and practice, Technology and information literacy	<ul> <li>KNOWLEDGE: ORAL-SYSTEMIC CONNECTION Goal: Understand importance of oral health care in palliative care settings</li> <li>Watch Oral Health at the End of Life (Wholihan, 2014)</li> <li>Read: Developing an Interprofessional Oral Health Education System That Meets the Needs of Older Adults (Atchison et al., 2019)</li> <li>Assessment of Oral Health-Care Needs for Patients under Palliative Care (Singh et al.,</li> </ul>	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Understand importance of oral health in palliative care settings</li> <li>Develop an evidence-based symptom-focused oral care protocol for a palliative care patient, include HEENOT in history, risk assessment, physical exam and management plan</li> </ul>	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Collaborate interprofessionally to provide comprehensive oral healthcare services to adults in palliative care</li> <li>Collaborate to develop an evidence-based oral care protocol for patients in palliative care</li> <li>Present an interprofessional panel (e.g., AGPCNP, MD, DDS, DH, speech &amp; language pathologist) on oral health and symptom management for a palliative care patient</li> </ul>	INTERPROFESSI

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### AGACNP Curriculum Integration of Interprofessional Oral Health Competencies in Principles of Adult Gerontology Acute Care III

PRINCIPLES OF	1) EXPOSURE: INTRODUCTION	2) IMMERSION: DEVELOPMENT	3) COMPETENCE: ENTRY-TO-PRACTICE
ADULT GERONTOLOGY ACUTE CARE III HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education	<ul> <li>KNOWLEDGE: HOSPITALIZED ADULT WITH CHRONIC DISEASE</li> <li>Goal: Recognize oral health care needs of hospitalized patients with chronic diseases</li> <li>Complete <u>Smiles for Life (SFL)</u> Module #1, 3, 7 &amp; 8, including Clinical Cases, and submit Certificate of Completion Read: <ul> <li>Cardiovascular prevention starts from your mouth (Masi et al., 2019)</li> <li>Association between oral health and cardiovascular outcomes in patients with hypertension (Kim et al., 2022)</li> </ul> </li> </ul>	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Identify oral manifestations of chronic disease in hospitalized adults</li> <li>Read Costs of Oral Complications of Cancer Therapies: Estimates and a Blueprint for Future Study (Elting &amp; Chang, 2019)</li> <li>Develop management plan for patients with cancer and include HEENOT in history, risk assessment, physical exam and management plan (Appendices 1&amp;2)</li> <li>Read Differences in the oral health status in hospitalised stroke patients according to swallowing function (Tian et al., 2022)</li> <li>Develop strategies for managing oral health needs of post-stroke patients with dysphagia</li> </ul>	<ul> <li>COLLABORATIVE PANEL</li> <li>Goal: Collaborate interprofessionally to provide comprehensive oral healthcare services to adults in acute care with chronic diseases and oral health care needs</li> <li>Read Developing an Interprofessional Oral Health Education System That Meets the Needs of Older Adults (Atchison et al., 2019)</li> <li>Collaborate with DDS/DH students on developing a comprehensive oral healthmanagement plan for adult with CVD &amp; periodontal disease (Appendix 3)</li> <li>Students create interprofessional panel to discuss the impact of social determinants of health on older adults with poor oral health and one or more chronic diseases. Students will identify community-based resources and solutions.</li> </ul>
Essentials: Person-centered care, Population health, Inter- professional partnerships, Knowledge for nursing practice, Scholarship for nursing discipline	<ul> <li>KNOWLEDGE: HOSPITALIZED ADULT IN ICU Goal: Recognize oral health care needs of hospitalized patients in ICU</li> <li>Read: <ul> <li>Oral health care for the critically ill: a narrative review (Winning et al., 2021)</li> <li>Prevention practices for nonventilator hospital-acquired pneumonia: A survey of the Society for Healthcare Epidemiology of America (SHEA) Research Network (SRN) (Baker &amp; Giuliano, 2022)</li> </ul> </li> </ul>	SKILL/BEHAVIOR         Goal: Identify oral health care needs of         patients in ICU         • Read Changes in Nutrition-Intake Method         and Oral Health through a Multidisciplinary         Team Approach in Malnourished Older         Patients Admitted to an Acute Care Hospital         (Suzuki et al., 2022)         • Student will develop comprehensive oral         health management plan for adults in ICU,         include HEENOT in history, risk assessment,         physical exam and management plan	
NONPF Competencies: Knowledge of Practice, Person- centered care, Population health, Interprofessional collaboration and practice, Technology and information literacy	KNOWLEDGE: HOSPITALIZED OLDER ADULTS WITH NEUROLOGICAL DISORDERS Goal: Recognize oral health needs of hospitalized older adults with neurologic problems Read: • Randomised clinical trial: Efficacy of strategies to provide oral hygiene activities to nursing home residents with dementia who resist mouth care (Jablonski et al., 2018) • Oral Health of Parkinson's Disease Patients: A Case-Control Study (van Stiphout et al., 2018)	<ul> <li>SKILL/BEHAVIOR</li> <li>Goal: Develop comprehensive oral health plan for older adults with neurologic problems</li> <li>Read Parkinson's Disease Oral Health Module: Interprofessional Coordination of Care (Jeter et al., 2018)</li> <li>Student will develop comprehensive oral health care plan for older adults with Parkinson's disease, include HEENOT in history, risk assessment, physical exam and management plan</li> </ul>	<ul> <li>Comprehensive oral healthcare services to hospitalized adults in ICU</li> <li>Students will create interprofessional panel (e.g., AGACNP, MD, DDS, DH, respiratory therapists) to collaborate on developing an oral-systemic management plan for patients in ICU</li> <li>COLLABORATIVE PANEL Goal: Collaborate interprofessionally on case study of older adult with cognitive decline and oral health needs</li> <li>Read Study protocol for a randomized controlled trial of a care partner assisted intervention to improve oral health of individuals with mild dementia (Wu et al., 2022)</li> <li>Collaborate with DDS/DH students on developing a comprehensive oral health management plan for older adults with dementia and oral health needs</li> </ul>

**OPTIMIZATION OF PATIENT HEALTH OUTCOMES** 

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### Oncology Case Study 1

#### **Chief Complaint**

John, age 50, is in remission for Acute Myelocytic Leukemia. He was diagnosed 3 years ago and has had chemotherapy, radiation, and a stem cell transplant. He has been putting off his needed follow-up dental work due to cost and stating that "it is unaffordable and I have no dental insurance". He reports chronic mouth pain that is affecting his quality of life. His insurance covered his expensive medical treatment, but does not cover dental. His cancer "cure" is impacted by poor quality of life related to his poor oral health.

#### Medications: Tylenol for mouth pain t.i.d.

**Family History:** No family history of cancer. Lives with wife and 2 high school age children; works as an accountant for a small family owned business

**Physical Exam**: Alert, thin, reports difficulty eating b/c of pain on chewing, sleep disturbance, and fatigue. Patient reports, "This is the first time anybody has looked in my mouth"

**HEENOT Exam**: Winces during oral exam; cracked teeth, brown spots on several upper and lower front teeth; redness and swelling along left lower lateral gum line

#### What is the differential? What is your clinical diagnosis(es)? What is your treatment plan? What are your follow-up recommendations?

### **Oncology Case Study 2**

#### **Chief Complaint**

Anne Marie, age 65, is being treated for Non-Hodgkin's Lymphoma. She began her chemotherapy treatment 2 weeks ago. On Day 13 following the beginning of chemotherapy, she is brought to the Emergency Room by her husband, with fever of 103 F, chills and feeling faint. She is admitted to the hospital, started on empiric antibiotics (Vancomycin, Ceftazadime) and 48 hours later strep viridans is identified from the blood culture. When completing the history and physical, including a HEENOT exam, the NP observes that evidence of white coating of her tongue, red inflamed and bleeding gums.

#### Medications: R-CHOP, administered in 3 week cycles

**Family History:** No family history of cancer. Lives with husband; 2 adult children live in the same city. **Physical Exam**: Alert, thin, reports difficulty eating b/c of pain on chewing, has chills, feels weak and faint; BP 96/50, Respirations=28 and Temperature 103F.

**HEENOT Exam**: Winces during oral exam; white coating on tongue, redness and swelling along front gum line. Blood oozing from gums.

### What is the differential? What is your clinical diagnosis(es)? What is your treatment plan? What are your follow-up recommendations?



### Cardiovascular Disease Case Study (Pt. 1)

**HX**: The patient, age 50, presents at an urgent care center complaining of a 6-month history of headaches, fatigue, blurry vision, pain when chewing, and sore bleeding gums associated with brushing. In the past week the patient also noticed that his front bottom teeth wiggle more than usual, causing anxiety about losing his teeth. The patient reports not having seen a primary care provider in 3 years and a dentist in 5 years because the family dentist retired and he does not have health insurance.

**PMH**: Patient reports being diagnosed with "high blood pressure" about 7 years ago, but denies any other past medical history. He stopped taking his blood pressure pills when he lost his insurance.

PSH: Tonsillectomy at age 5 for chronic URIs

**ROS**: Denies fevers, mouth sores, ear pain or throat discomfort. Denies chest pain or shortness of breath. Patient acknowledges being overweight and states that "it is part of getting older"

**FH**: Father and paternal grandfather were diagnosed with HTN in their 50s. Patient's father has HTN and dyslipidemia and receives hemodialysis 3 times a week. Patient's mother has HTN and Alzheimer's disease. Both parents reside in a nursing home. Patient has two siblings who live in distant states. Pt. has 2 young adult children, age 23 and 21, who are healthy and do not live at home. Patient is divorced for 2 years; his ex-spouse lives locally and works as a Teacher Aide in an elementary school.

**Social history**: Lost health insurance when he lost his job as an auto mechanic three years ago during COVID. Pt. has not been able to find employment with health benefits. He has just about exhausted his savings. He has not been to a primary care provider since losing job and health insurance and has not taken medication for his hypertension since losing his health insurance. Pt. denies smoking, alcohol consumption, or illicit drug use.



### Cardiovascular Disease Case Study (Pt. 2)

Oral-Systemic Risk Assessment

- Identify the oral-systemic assessment findings (Hx and PE HEENOT)
- What does the history and physical tell us about this patient?
- What additional data do you need to collect (eg. labs, diet and exercise, etc)?
- Identify oral-systemic risk factors

#### Differential Diagnosis(es)

- Identify the tentative diagnoses for the oral health problems
- Identify the tentative diagnoses for the systemic health problems
- Discuss the important oral-systemic connections

Develop a management plan for the oral-systemic conditions affecting this patient, including:

- Preventive interventions that include screening and behavior change counseling that are fundamental to patient-centered care
- Anticipatory guidance
- Oral health maintenance
- Social determinants of health
- Collaboration and referral

#### **Questions to Guide Your Interprofessional Collaboration**

Roles and Responsibilities: What is the scope of the role and responsibilities of each of the providers on your team today? Collaboration: How can the Nurse Practitioner, Dentist, Physician, Pharmacist, and Social Worker collaborate to promote this patient's health?

Team Building & Communication:

- What do you think are the most effective strategies to help a Nurse Practitioner, Physician, Dentist, Pharmacist, and Social Worker function as a community-based primary care team?
- What are the most effective ways for the IP team to communicate? Referrals and Follow-up:
- How do the social determinants of health influence which referrals need to be made for this patient?
- What providers does this patient need to see? When? Howoften?
- What are the follow up actions for each team memberto maximize coordinated care for this patient?

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