# The OHNEP Interprofessional Oral Health Faculty Tool Kit

# **Adult Gerontology Primary Care Nurse Practitioner Program**

# ORAL HEALTH CORE COMPETENCIES:

- Adult Gerontology Health Assessment
- Adult Gerontology Health Promotion
- Adult Gerontology Primary Care
- Resources





### INTRODUCTION



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 Primary Care (AGPCNP) Nurse Practitioner 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 and Challenges</u> (2021). <u>Healthy People 2030</u> (2020). The <u>HRSA Interprofessional Oral Health Core Competencies</u> (2014), <u>NONPF Nurse 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 AGPCNP 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 AGPCNP 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 Primary Care Nurse Practitioners, such as Diabetes, Cardiovascular Disease, HPV, Cancer and Respiratory conditions, are but a few of the health problems that have oral manifestations that can be treated by AGPCNPs or referred to our dental colleagues. It is important for AGPCNPs on the frontlines of primary 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 Primary Care Nurse Practitioner program. If you need additional technical assistance, please feel free to contact us at **OHNEP@nyu.edu**.



### AGPCNP Curriculum Integration of Interprofessional Oral Health Competencies in Health Assessment

### ADULT-GERONTOLOGY. HEALTH ASSESSMENT

HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive 1 Communication and

### **AACN**

### Essentials:

Person-centered care, Population health. Inter-Knowledge for nursing practice. Scholarship for discipline

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### NONPF

Competencies: Knowledge of Practice. Personcentered care. Population health, Interprofessional collaboration and practice, Technology and information literacy

### CONSTRUCTS

1) EXPOSURE: INTRODUCTION

### KNOWLEDGE: ORAL EXAM

Goal: Understand the oral exam

- Complete Smiles for Life (SFL) Module #7, including Clinical Cases, and submit Certificate of Completion
- Review the materials provided in the ACE.S Teaching Strategies that focus on oral health (NLN)
- Read Oral Health: An Essential Component of Primary Care (Hummel et al., 2016)

### KNOWLEDGE: ORAL CARE OF ADULT

Goal: Understand issues in oral care of adults

- Complete Smiles for Life (SFL) Modules #1, 3, 5, including Clinical Cases, and submit **Certificates of Completion** Read:
- Oral Health Patient Facts: Overview, Diabetes, HPV
- Oral Health in America: Working-Age Adults (NIDCR, 2021)

### KNOWLEDGE: ORAL CARE OF OLDER ADULT

Goal: Understand issues in oral care of older adults

- Complete Smiles for Life (SFL) Module #8, including Clinical Cases, and submit Certificate of Completion
- Watch Geriatric Oral Health Webinar Series (Appendix 5)

### Read:

- Oral Health Patient Facts: Older Adult
- Oral Health in America: Older Adults (NIDCR, 2021)
- Tooth loss among older adults (Dye et al.,
- Older Adults: Unique Challenges at the Interface Between Nutrition and Oral Health (GSA, 2020)
- Senior Oral Health (Greenberg et al., 2020)

2) IMMERSION: DEVELOPMENT

### SKILL/BEHAVIOR

Goal: Describe best practices in dental caries management across the lifespan

Read and discuss CAMBRA resources:

- •Tooth Disease and Treatment (Appendix 1)
- Caries Risk Assessment Form (Appendix 2)
- Review the ADA Caries Risk Assessment Form (Age >6) (Appendix 3)
- Review Oral Abnormalities in the SFL Photo Gallery on the mobile app

#### SKILL/BEHAVIOR

Goal: Demonstrate integration of HEENOT competency in history and physical exam of adult in clinical setting

- · Present sample electronic health record of adult with oral health included in history, risk assessment, exam and plan (HEENOT)
- Complete a health history and physical exam of an adult that integrates oral health in a primary care clinical setting.

### SKILL/BEHAVIOR

Goal: Demonstrate integration of HEENOT in oral health history, risk assessment and physical exam of older adults during simulation lab

- Review Oral Abnormalities in the SFL Photo Gallery on the mobile app
- Assess nutrition challenges related to oral health problems for an older adult client
- Present sample electronic health record of older adult with oral health and nutrition challenges included in history, risk assessment, exam and plan (HEENOT)

### 3) COMPETENCE: ENTRY-TO-PRACTICE

### SKILL/BEHAVIOR

Goal: Demonstrate integration of HEENOT in oral health history, risk assessment and physical exam of adults during simulation lab

- Read Putting the Mouth Back in the Head: **HEENT to HEENOT (Haber et al. 2015)**
- Complete a health history and physical exam of an adult that integrates oral health in clinical simulation experience.

### SKILL/BEHAVIOR

SUMMATIVE

**ASSESSENT** 

Goal: Collaborate with DDS/DH, medical and/or pharmacy students to develop oral health assessment competencies

• Collaborate as a team to complete an oral health history and physical exam of an adult including frequency of sugar/tobacco/alcohol intake and relevant social determinants of health (Appendix 4)

### SKILL/BEHAVIOR

Goal: Demonstrate integration of HEENOT competency in oral health assessments of older adult in clinical experience

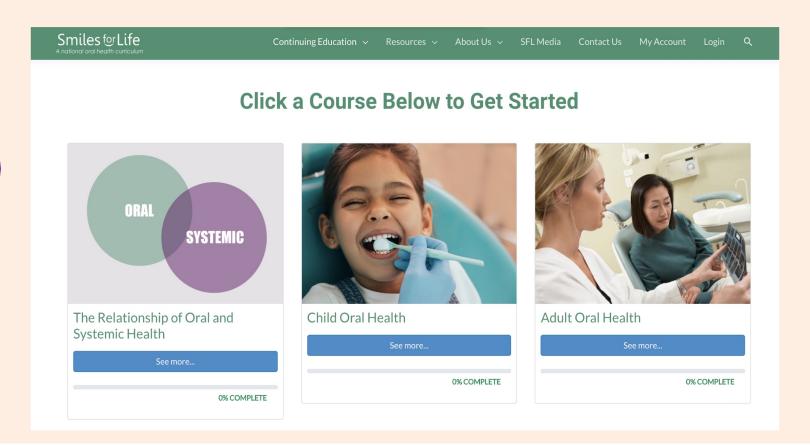
- Perform oral health history, physical exam and complete risk assessment of older adult, with accurate documentation of oral health assessment findings
- Demonstrate interprofessional competencies by collaborating with a nutritionist and speech-language pathologist to address nutrition and oral health challenges for an older adult client



# 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 Oral Health mobile app to access the Photo Gallery.

PCNP Students should find and review the following oral abnormalities:

- Dental caries
- White spots
- Severe caries
- Fluorosis
- Developmental enamel defects
- Healthy teeth
- Iron staining of teeth

- Abscess
- Angular chelitis
- Mucocele
- Eruption hematoma
  - Epstein pearls
- Palate/Mandibular bony tori



## Adult Gerontology Health Assessment



### **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

- · 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

- . 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
- · Plaque and bacteria get under them and cause new decay
- · Need to be refilled or replaced with a crown, bridge or implant

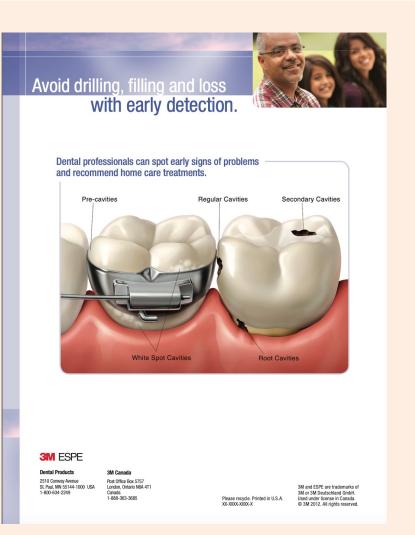
### Fight tooth decay with proper care.

- · 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 hetween visits
- · Prescription sensitivity toothpaste can be helpful for people with root cavities
- More office visits may be needed to remove plague and tartar build-up that you are missing at home



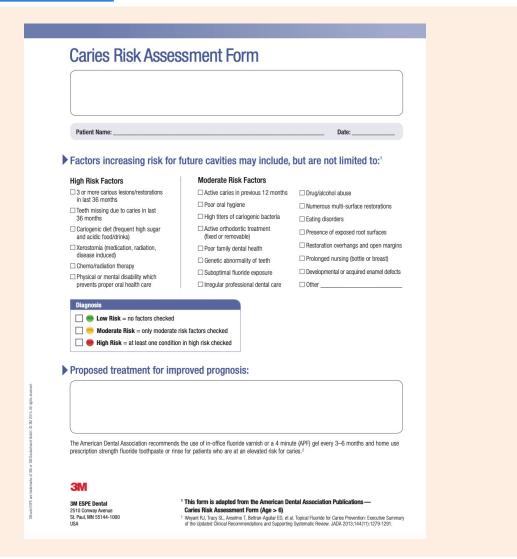


<sup>1</sup> Diagnosis and Management of Dental Caries Throughout Life



# Adult Gerontology Health Assessment

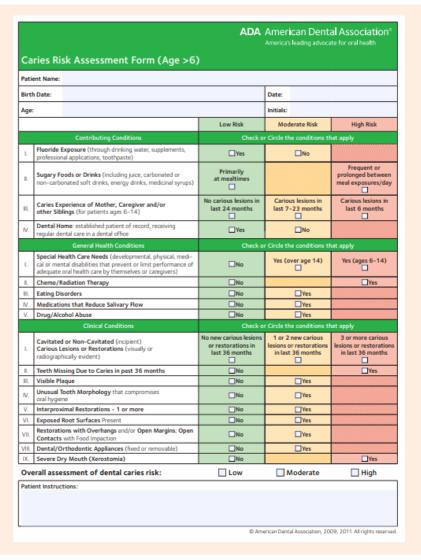
### **CAMBRA Caries Risk Assessment Form**





# Adult Gerontology Health Assessment

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







Diabetes Case Study (Pt. 1)

**HX**: The 70 y.o. patient presents to her primary care provider complaining of a 6-month history of fatigue, increased thirst, frequent urination, blurry vision, pain when chewing, and sore bleeding gums associated with brushing. The patient also noticed that her front bottom teeth wiggle more than usual, causing anxiety about losing her 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 she does not have health insurance.

PMH: Patient denies any past medical history

**PSH:** Appendectomy at age 12

**ROS**: Denies fevers, mouth sores, ear pain or throat discomfort. Denies chest pain or shortness of

breath.

**FH**: Father and paternal grandfather were diagnosed with T2D 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 is an only child. Pt. has 2 adult children who are healthy and do not live at home. Patient is widowed, her spouse died of cancer 2 years ago.

**Social history**: Lost insurance when she changed job three years ago. Pt. was employed as a part-time office manager when she lost her job due to COVID shutdown. Pt. has not been to a primary care provider since losing job and health insurance. Pt. has not enrolled in Medicare even though she is eligible. Pt. denies smoking, alcohol consumption, or illicit drug use and is an active member of her church congregation.





### Diabetes Case Study (Pt. 2)

### Oral-Systemic Risk Assessment

- Identify the oral-systemic assessment findings (Hx and PEHEENOT)
- 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?



# Adult Gerontology Health Assessment



Geriatric Oral Health Webinar Series

Oral Health: Overview for Older Adults

Oral Health in Acute Care Settings

Oral Health In Long-Term and Palliative Care Settings

Oral Health in Dementia





### AGPCNP Curriculum Integration of Interprofessional Oral Health Competencies in Health Promotion

### ADULT-GERONTOLOGY HEALTH PROMOTION

HRSA Oral Health Competencies: Oral Health Risk Assessment, Oral Health Evaluation, Oral Health Preventive Intervention, Communication and Education

### AACN Essentials:

Person-centered care, Population health, Interprofessional partnerships, Knowledge for nursing practice, Scholarship for nursing discipline

### NONPF

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Competencies:
Knowledge of
Practice, Personcentered care,
Population health,
Interprofessional
collaboration and
practice, Technology
and information
literacy

### CONSTRUCTS

### 1) EXPOSURE: INTRODUCTION

KNOWLEDGE: ORAL HEALTH EDUCATION

*Goal*: Understand oral disease and the role that nurses can play in oral care

#### Read:

- <u>Integrating Oral Health into Health Professions</u> <u>School Curricula</u> (Gill et al., 2022)
- Oral health in primary care: Integration of enhanced oral health education (Phillips et al., 2022)
- <u>Integrating oral health curricula into nurse</u> <u>practitioner graduate programs</u> (Dolce et al., 2018)
- The global oral health workforce (Lobbezoo & Aarab, 2021)

#### KNOWLEDGE: ORAL HEALTH MAINTENANCE

*Goal*: Understand importance of maintaining oral health throughout the lifespan

### Read:

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- Oral Health in America: Working-Age Adults (NIDCR, 2021)
- American Cancer Society (ACS) Fact Sheets
- Five Major Steps to Intervention (The "5 A's") (AHRQ)
- Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Persons (USPSTF, 2021)

#### KNOWLEDGE: ORAL-SYSTEMIC CONNECTION

*Goal*: Understand relationship between oral and systemic health

Review <u>Smiles for Life (SFL)</u> Module #1 Read:

- The oral microbiome: Role of key organisms and complex networks in oral health and disease (Sedghi et al., 2021)
- Oral Health in America: Older Adults (NIDCR, 2021)
- Review the materials provided in the <u>ACE.S</u> Teaching Strategies (NLN) that focus on oral health

### 2) IMMERSION: DEVELOPMENT

### SKILL/BEHAVIOR

*Goal*: Critically evaluate current oral health research in the media

- Find news story on oral health and evaluate its accuracy by searching evidence-based literature
- Post copies of media piece and supporting/refuting literature on Discussion Board and lead discussion in class

#### SKILL/BEHAVIOR

*Goal*: Develop primary care oral health literacy program for adults

Plan with DDS/DH students:

- Evidenced-based primary care oral health literacy program for adults
- Evidence-based oral cancer screening program for smoking adults

### SKILL/BEHAVIOR

*Goal*: Develop primary care oral health literacy program for older adults

- Read Older Adults: Unique Challenges at the Interface Between Nutrition and Oral Health (GSA, 2020)
- Plan evidence-based nutrition and oral health education program with DDS/DH students for older adults

### 3) COMPETENCE: ENTRY-TO-PRACTICE

### SKILL/BEHAVIOR

Goal: Advocate for improving oral health care

- Identify an oral health advocacy organization in your state, access your state's resource page and identify oral health issues in your community Read:
- Oral diseases: a global public health challenge (Peres et al., 2019)
- The Lancet Oral Health Series: Implications for Oral and Dental Research (Watt et al., 2019)

### SKILL/BEHAVIOR

SUMMATIVE

**ASSESSENT** 

*Goal*: Advocate for smoking cessation in smoking adults

Review Appendices 1&2:

- First-time therapies for smoking cessation
- Smoking Cessation Guidelines
- Engage smoking adults in evidence-based smoking cessation program
- Implement evidence-based cancer screening program in smoking adults

#### SKILL/BEHAVIOR

*Goal*: Identify Medicaid and sliding scale dental clinics

 Develop list of dental providers in the area to whom you can refer patients who accept Medicaid or sliding scale



# Adult Gerontology Health Assessment

### First-time therapies for smoking cessation

Drug	Advantages	Disadvantages	Contraindications	Dosing
отс				
Nicotine gum	Delays weight gain (4 mg strength)     Faster onset of nicotine delivery	Should not be used in patients with dentures or temporomandibular joint disorders     May cause dyspepsia, mouth irritation, or jaw ache     Patients may misuse like regular gum	Disease-related concerns in patients with acute cardiovascular conditions	2 or 4 mg (4 mg for those who smoke 20 or more cigarettes per day)     Do not exceed 24 picces/day     "Chew and park" until taste disappears (about 30 min)
Nicotine lozenge	Delays weight gain (4 mg strength)     Faster onset of nicotine delivery	May cause sore mouth, throat irritation, or coughing     Chewing may cause nausea or headache	Disease-related concerns in patients with acute cardiovascular conditions	2 to 4 mg (4 mg for patients who smoke their first cigarette within 30 min of waking) Do not exceed 20 lozenges per day Let the lozenge dissolve in mouth (takes 10 to 20 min); do not chew
Nicotine patch	Provides consistent nicotine to prevent withdrawal symptoms	Local skin reactions     Insomnia and vivid dreams (can remove patch 1-2 h before bedtime)	Skin problems	Patients should be started on 21 mg patch and behavioral courseling if they smoke more than 10 cigarettes per day     Worn for 24 h     Patch does not need to be removed for sports     Do not cut the patch     Remove the patch before any MRI procedures
Prescription				
Nicotine in haler	Hand-to-mouth action mimics smoking	May cause local irritation of mouth and throat     Short duration of benefit	Caution in patients with severe reactive airway disease	Each cartridge lasts about 20 min with frequent puffing     16 cartridges can be used in a day; each cartridge contains 4 mg of nicotine over 80 inhalations
Nicotine nasal spray	Fastest nicotine replacement therapy delivery system	Rapidly relieves withdrawal symptoms     Highest risk for dependence     May cause taste or smell disturbances	Caution in patients with severe reactive airway disease     Not recommended in patients with nasal disorders     Nasal irritation	1 to 2 doses/h (1 dose = 1 spray in each nostril)     Do not exceed 10 sprays/h or 80 sprays per day (40 doses)
Sustained- released bupropion	Consider for patients with depression     Delays weight gain	Insomnia (second dose should be taken by 3 p.m.)	History of seizure (lowers seizure threshold)     History of eating disorders	150 mg once daily for 3 days, then 150 mg twice daily (take 8 h apart)
Varenicline	Highest cessation rates for single therapy	Most expensive     Concerns in patients with cardiovascular or mental health conditions     Vivid dreams	Recently removed in those with history of neuropsychiatric events	Days 1 to 3: 0.5 mg once daily     Days 4 to 7: 0.5 mg twice daily     Day 8 to week 12: 1 mg twice daily



## Adult Gerontology Health Assessment



### **Smoking Cessation Guidelines**



#### REMINDER METHODS

#### FOR SMOKING STATUS

- · rubber stamps, labels or stickers
- preprinted form
- computerized record
- adding smoking status to vital signs, allergies information or yearly physical forms
- · writing smoking status on inside of chart

#### TALKING TIPS

- "As your physician, I strongly advise you to stop smoking. Quitting smoking is one of the most important ways to stay healthy."
- "I'm here to help you quit when you're ready."
- "Until you are ready, try to protect your family and friends from your smoking by not smoking in your home or car."

#### TALKING TIPS

- "I'm interested in helping you quit. Would you like my help?"
- · "How do you feel about quitting smoking?"
- "Please read this material and come back to discuss it."

#### TALKING TIPS

- "What strategies are you planning to use when you have strong urges to smoke?"
- "It's a good idea to tell your family and friends you're quitting smoking and to ask for their help."
- "Have you thought about using stop-smoking medications like nicotine gum, the 'patch' or bupropion?"

## SMOKING CESSATION GUIDELINES

How to Treat your Patient's Tobacco Addiction

#### Step 1: Ask each patient: "Do you smoke or have you ever smoked?"

- Record in a prominent place in the chart the patient's smoking status—smoker, never-smoker or ex-smoker.
- · Follow up at reasonable intervals.

### Step 2: Ask each smoking patient: "How do you feel about your smoking?"; "Are you thinking about quitting?"

 Tailor your intervention according to the patient's answers (see below) using a patient-centred approach.

### Step 3: How to Intervene

(Adapted from the Stages of Change Model, see page 6)

### Not Thinking About Quitting

Objective: To help the patient reflect on his/ her smoking.

- · Ask about and discuss the impact of smoking on the patient's life.
- · Link every smoking-related illness in the patient to his/ her smoking.
- · Provide a strong personalized message
- . Encourage patient to make his/ her house and car smoke free.
- · Provide relevant educational materials.

### Thinking About Quitting

Objective: To increase patient's motivation to quit.

- · Offer to help your patient.
- Ask about your patient's concerns about quitting and discuss ways
  of dealing with them (see The Pros and Cons of Smoking and
  Quitting, page 7).
- · Provide patient materials (see Patient Handouts, page 16).
- · Suggest a follow-up visit.

#### Ready to Quit

Objective: To help the patient find the right treatment.

Note: A special, longer appointment may be necessary.

- Assess nicotine dependence, past quitting history and comorbidity (see Choosing the Right Intervention, page 5).
- · Ask about other smokers in the patient's home and workplace.

#### Support Strategies

- · Offer your support and optimistic coaching.
- · Encourage patients to seek help from family and friends.
- Assure patient that slips and relapses are normal (see Dealing with Relapse, page 12).



### AGPCNP Curriculum Integration of Interprofessional Oral Health Competencies in Primary Care

### ADULT-**GERONTOLOGY** PRIMARY CARE

HRSA Oral Health Competencies: Oral Health Risk Health Evaluation, Oral Health Communication and Education

### AACN

Essentials: Person-centered care, Population health, Interprofessional

partnerships, Knowledge for nursing practice, Scholarship for discipline

### NONPF

Competencies: Knowledge of Practice. Personcentered care. Population health, Interprofessional collaboration and practice, Technology and information literacy

### CONSTRUCTS

### 1) EXPOSURE: INTRODUCTION

### KNOWLEDGE: ADULT WITH CHRONIC DISEASE

Goal: Recognize oral health manifestations of chronic diseases in adults Review:

- Smiles for Life (SFL) Modules #1, 3, 7, 8
- Oral Abnormalities in the SFL Photo Gallery on the mobile app Read:
- Clinical manifestations of gastrointestinal diseases in the oral cavity (Al-Zahrani et al., 2021)
- Cardiovascular prevention starts from your mouth (Masi et al., 2019)

### KNOWLEDGE: ADULT WITH SEXUALLY TRANSMITTED INFECTION

Goal: Recognize oral health manifestations of STIs in adults

### Read:

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- Sexually Transmitted Diseases and Your Mouth (Mouth Healthy)
- Cancer (Head and Neck) (ADA)
- Improving HPV Vaccine Confidence: An Interprofessional Challenge (Cipollina, 2022)
- Making the case for interprofessional education and practice collaboration to address rising rates of HPV-associated oropharyngeal cancers (Haber et al., 2022)

### KNOWLEDGE: OLDER ADULT PRIMARY CARE

Goal: Recognize oral health needs of older adults Read:

- Influence of oral health on frailty in patients with type 2 diabetes aged 75 years or older (Ishii et al., 2022)
- Diabetes mellitus and periodontal disease: The call for interprofessional education and interprofessional collaborative care (Siddigi et al., 2022)
- Oral Health in America: Older Adults (NIDCR, 2021)
- Review oral health materials in the ACE.S Teaching Strategies (NLN)

### 2) IMMERSION: DEVELOPMENT

### SKILL/BEHAVIOR

Goal: Provide comprehensive health maintenance services to adults with chronic diseases

- Discuss underlying pathophysiology related to association between oral health and CVD
- Develop a primary care management plan for patient with either GERD or CVD and include HEENOT in history, risk assessment, exam and plan

### SKILL/BEHAVIOR

Goal: Identify oral manifestations of infectious diseases in adults

- Read Human papillomavirus infection and oral squamous cell carcinoma - a systematic review (Melo et al., 2021)
- Choose one STI, post photo of oral manifestations on discussion board and lead discussion in class on its oral manifestations: Strep, Thrush, HIV, Syphilis, HPV, Gonorrhea
- Develop talking points to use with adults to decrease HPV vaccine hesitancy

### SKILL/BEHAVIOR

Goal: Provide comprehensive health maintenance services to older adults

- Read Developing an Interprofessional Oral Health Education System That Meets the Needs of Older Adults (Atchison et al., 2019)
- Collaborate on discussion board on case study of older adult with diabetes (Appendix 3)
- · Collaborate on developing an oral health management plan for older adult with diabetes and periodontal disease and include HEENOT in history, risk assessment, exam and plan

### 3) COMPETENCE: ENTRY-TO-PRACTICE

#### COLLABORATIVE CASE STUDY

Goal: Collaborate interprofessionally on adult chronic disease case with oral health needs

- Collaborate with DDS/DH students to develop a management plan for adult with CVD and oral health problems (Appendix 1)
- Collaborate with DDS/DH students to use motivational interviewing to engage patient in identifying oral health CVD risk-reduction lifestyle changes

#### COLLABORATIVE CASE STUDY

Goal: Collaborate interprofessionally on adult STI case with oral health needs

• Collaborate with DDS/DH students on developing a management plan for adult with STI and oral health needs (Appendix 2)

#### **COLLABORATIVE CASE STUDY**

Goal: Collaborate interprofessionally on geriatric case with cognitive decline and oral health needs

#### Read:

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**ASSESSENT** 

- Dry Mouth Effects of Top 50 Prescription
- Dose-dependent association between xerostomia and number of medications among older adults (Storbeck et al., 2021)
- Post and explain medication-related causes of xerostomia in older adults and management strategies on discussion board

- Medications (Appendix 4)





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 PEHEENOT)
- 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?





### STI Case Study

**Chief Complaint:** 35 yo female Lisa presents to clinic complaining of hoarseness of voice, sores in mouth.

### **Current Health Status:**

Lisa has no other health problems.

**Medications:** None

**Sexual History:** multiple partners, intermittent condom use

**Physical Exam:** 

Alert, oriented, 35 yo old female

HEENOT – Eyes, Ears, nose and dentition normal. Scattered papillomas on tongue and pharynx.

Abdomen – soft, nontender

MS - nI

Gyn – No visible lesions – cervical studies pending

Neuro – nl

What else would you like to know?

What is your differential?

What tests will you order?

What is your diagnosis?

What treatment will you prescribe?

Where do you refer patient?

What is your follow-up?





Diabetes Case Study (Pt. 1)

**HX**: The 70 y.o. patient presents to her primary care provider complaining of a 6-month history of fatigue, increased thirst, frequent urination, blurry vision, pain when chewing, and sore bleeding gums associated with brushing. The patient also noticed that her front bottom teeth wiggle more than usual, causing anxiety about losing her 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 she does not have health insurance.

PMH: Patient denies any past medical history

PSH: Appendectomy at age 12

**ROS**: Denies fevers, mouth sores, ear pain or throat discomfort. Denies chest pain or shortness of breath.

**FH**: Father and paternal grandfather were diagnosed with T2D 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 is an only child. Pt. has 2 adult children who are healthy and do not live at home. Patient is widowed, her spouse died of cancer 2 years ago.

**Social history**: Lost insurance when she changed job three years ago. Pt. was employed as a part-time office manager when she lost her job due to COVID shutdown. Pt. has not been to a primary care provider since losing job and health insurance. Pt. has not enrolled in Medicare even though she is eligible. Pt. denies smoking, alcohol consumption, or illicit drug use and is an active member of her church congregation.





### Diabetes Case Study (Pt. 2)

### Oral-Systemic Risk Assessment

- Identify the oral-systemic assessment findings (Hx and PEHEENOT)
- 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:

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- Anticipatory guidance
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# Adult Gerontology Primary Care

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



Drug (Brand Name)	Generic Name	May Cause Dry Mouth	Drug (Brand Name)	Generic Name	May
Abilify	aripiprazole	No	Nasonex	mometasone nasal	No
Advair Diskus	fluticasone and salmeterol	No	Nexium	esomeprazole	Yes
Afluria	influenza virus vaccine		Novolog	insulin aspart	No
Benicar	hydrochlorothiazide and olmesartan		Novolog Flexpen	insulin aspart	No
Benicar HCT	nicar HCT hydrochlorothiazide and olmesartan		Nuvaring	ethinyl estradiol/etonogestrel	No
Bystolic	tolic nebivolol		Ortho-Tri-Cy Lo 28	ethinyl estradiol/norgestimate	No
Celebrex	brex celecoxib		Oxycontin	oxycodone	Yes
Cialis	tadalafil		Premarin	conjugated estrogens topical	No
Crestor	tor rosuvastatin		Pristiq	desvenlafaxine	No
Cymbalta	duloxetine	Yes	Proventil HFA	albuterol inhalation	Yes
Dexilant	dexlansoprazole	No	Spiriva Handihaler	Tiotropium Bromide	Yes
Diovan	hydrochlorothiazide and valsartan	Yes	Suboxone	buprenorphine/naloxone	No
Flovent HFA	fluticasone inhalation	Yes	Symbicort	budesonide and formoterol	Yes
Focalin XR	dexmethylphenidate	No	Synthroid	levothyroxine	No
Humalog	insulin lispro		Tamiflu	oseltamivir	No
Janumet	net metformin/sitagliptin		Toprol-XL	metoprolol	Yes
Januvia	nuvia sitagliptin		Travatan Z	travoprost ophthalmic	No
Lantus	us insulin glargine		Ventolin HFA	albuterol inhalation	Yes
Lantus Solostar	us Solostar insulin glargine		Vesicare	solifenacin succinate	Yes
Levemir	emir insulin detemir		Viagra	sildenafil	Yes
Lo Loestrin Fe	ethinyl estradiol/norethindrone	No	Voltaren	diclofenac	Yes
Lumigan	bimatoprost ophthalmic	No	Vytorin	ezetimibe/simvastatin	No
Lunesta	eszopiclone		Vyvanse	lisdexamfetamine	Yes
Lyrica	ica pregabalin		Xarelto	rivaroxaban	No
Namenda	menda memantine		Zetia	ezetimibe	No

Top 100 Drug List http://www.medscape.com/viewarticle/825053#vp\_
 Dry Mouth List

 Dry Mouth List http://www.drugs.com/clientuploads/pdfs/Public%20Info/Seniors/DryMouthMedications.pd
 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 London, Ontario N6A 4T1 Canada Phone 1-888-363-3685

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**SmilesforLifeOralHealth.org** 

National Oral Health Curriculum

**MCHOralHealth.org** 

National Maternal & Child Oral Health

**Resource Center** 

**IPECollaborative.org** 

Interprofessional Educational

Collaborative

www.APTRweb.org/?PHLM 15

Oral Health Across Lifespan Module

HealthyPeople.gov

10-year national health goals for

Americans

**NLN.org** 

National League for Nursing

**AuthorityDental.org** 

Health Resources for Older Adults

www.HIGN.org

Hartford Institute Geriatric Oral Health

www.IPE.UToronto.ca

University of Toronto's Centre for Interprofessional Education

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