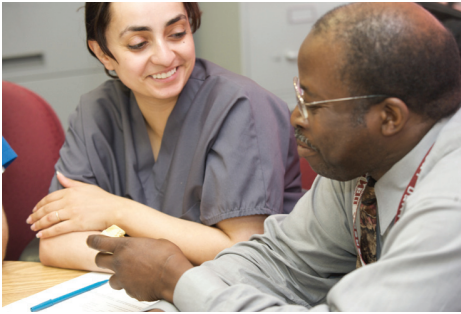


CURRICULUM

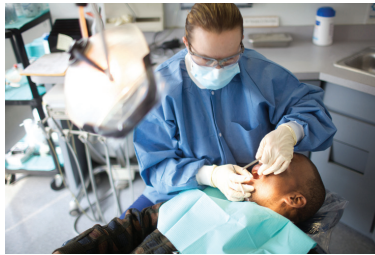


Implementing Oral Health Care into HIV Primary Care Settings

December 2013



U.S. Department of Health and Human Services
Health Resources and Services Administration
HIV/AIDS Bureau
Special Projects of National Significance Program



Curriculum: Implementing Oral Health Care into HIV Primary Care Settings

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The Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB) has developed the Integrating HIV Innovative Practices (IHIP) manuals, curricula, and trainings to assist health care providers and others delivering HIV care in communities heavily impacted by HIV/AIDS with the adoption of Special Projects of National Significance models of care. This IHIP training manual is part of that effort. Additional IHIP materials can be found at www.careacttarget.org/ihip.

SECTION 1

The Importance of Oral Health and the Oral Health Initiative



INTRODUCTION

This Integrating HIV Innovative Practices (IHIP) curriculum provides HIV care providers with guidance on how to replicate models of care developed to improve the delivery of oral health care to people living with HIV/AIDS (PLWHA). These best practices stem from the wealth of research produced by participants in the Special Projects of National Significance (SPNS) Innovations in Oral Health Care Initiative (Oral Health Initiative).

SPNS is the research arm of the Ryan White HIV/AIDS Program, facilitated by the Health Resources and Services Administration (HRSA) HIV/AIDS Bureau (HAB), which supports the demonstration of cutting-edge and replicable approaches to HIV care.

To promote further dissemination and replication of successful models of care, SPNS launched the IHIP project. IHIP includes manuals, curricula, Webinar trainings, pocket guides, and more to assist health care providers and others delivering HIV care with the adoption of evidence-based models of care into their practices. IHIP materials for the Oral Health Initiative and other featured SPNS initiatives can be found on the TARGET Center Web site at www.careacttarget.org/ihip.

This curriculum is designed to provide program-planning information to a target audience of HIV, primary care, and dental providers interested in expanding or replicating innovative models of oral health care for PLWHA. The curriculum comprises nine instructional modules. The modules contain a mix of discussions, activities, resources, and other training guidance designed to help participants build their knowledge, skills, and abilities related to:

- The role of oral health in total patient care of PLWHA,
- Barriers that exist for PLWHA in accessing oral health care,
- Key clinical guidance to integrating oral health care in the HIV medical setting,
- Oral health terminology,
- Dental case management,
- Patient oral health education,
- How to build organizational capacity for oral health care,
- Pros and cons of various organizational models studied in the SPNS Oral Health Initiative, and
- Program sustainability.

The curriculum is designed to deliver hands-on instruction to simplify the implementation of SPNS Oral Health Initiative best practices. The curriculum complements the following tools that are also part of a suite of IHIP oral health resources:

- *Training Manual:* The training manual provides background information about the SPNS Oral Health Initiative and synthesizes the key lessons learned. (Link to training manual).
- *Pocket Guide:* Created by the Florida/Caribbean AIDS Education and Training Center (AETC), the pocket guide is designed to fit inside a lab coat pocket and serve as a condensed implementation guide of the most essential lessons learned from the Oral Health Initiative, with an emphasis on those lessons most relevant for day-to-day practice. (Link to pocket guide).
- *Training Webinars:* A series of training Webinars feature expert speakers sharing successful strategies and lessons from the SPNS Oral Health Initiative. (At time of publication, direct links to the Webinar were not available, but they will be available as recordings on www.careacttarget.org/ihip).

TRAINING DESIGN

The training modules in this curriculum have been set up to accommodate the busy schedules of HIV clinics and agencies. Each module may be taught as a standalone session, which takes between 30 and 60 minutes to complete (although longer sessions may be broken into shorter modules to meet clinic needs and time constraints; where this break could occur is indicated), and includes teacher

instruction, guided group discussion, group activities, and group evaluation components. When longer periods of time are available, sessions may be combined.

Although specialized training is not required, it is highly recommended that Trainers familiarize themselves with the information in this curriculum and the related IHIP training manual and pocket guide. It is also helpful for both Trainers and participants to reference the oral health terminology provided in [Module 4](#) of this curriculum to facilitate comprehension of the topics discussed throughout the training modules.

INSTRUCTIONAL APPROACH

This curriculum is set up as a series of trainings, activities, and handouts designed to teach, engage, and guide staff discussion around the implementation of oral health care in the HIV medical setting.

The staff member(s) heading the implementation process within the clinic ideally should facilitate the trainings. Group discussions and group activities also may include input from other speakers, including (but not limited to) other clinic staff, partnering agency representatives, or other HIV/AIDS-related personnel.

The activities described in the curriculum accommodate up to 20 participants easily and can be modified as needed. The activities encourage learning through interactive discussion, rather than just lecture, in order to familiarize participants with proven approaches to engaging and retaining PLWHA in care.

MATERIALS AND EQUIPMENT

Each module comes with an associated PowerPoint presentation, as well as detailed discussion and activity guides. Handouts are also provided for many of the modules.




Throughout this curriculum, the Trainer will require the following materials for each training session:

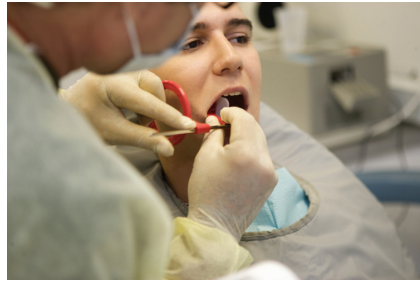
- A computer and compatible LCD projector that can readily play the training sessions' PowerPoint presentations
- Handouts of the material to be reviewed in that day's training session (which are on their own pages to facilitate printing and photocopying)
- Paper and easel(s) or whiteboard
- Colorful markers
- Tape for affixing paper to the wall as necessary.

The Trainer (or a staff member assigned by the Trainer) should neatly log thoughts and questions on the paper during each session, since participants may want to refer to notes from previous sessions. The Trainer may want to transcribe these notes into a Word document to permit production of future reports, work plans, and guidance related to the selected model(s) of care.

MANUAL FORMAT

Throughout the manual are detailed slides with talking points, guided discussions, and group activities to facilitate the learning process. At the start of each module is a breakdown of the training's components, which are marked by the following symbols:

-  Session Length
-  Teaching Presentation
-  PowerPoint Slide
-  Group Discussion
-  Group Activity
-  Video
-  Trainer's Note
-  Handout



MODULE 1

Treating the Whole Patient: The Importance of Oral Health in Total Patient Care of PLWHA



30 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Paper and easel(s) for taking notes
- Colorful markers
- Tape for affixing paper to the wall as necessary
- Hardcopies of the Module 1 PowerPoint slides (if desired, to be used as a handout to distribute and have participants follow along).



POWERPOINT PRESENTATION



SLIDE 1: IMPORTANCE OF ORAL HEALTH CARE IN TREATMENT OF PLWHA

Importance of Oral Health Care in Treatment of PLWHA

“You don’t want a healthy neck-down body. You want a healthy top of the head to the tip of the toe body.”

—Dr. Howell Strauss, Executive Director of AIDS Care Group of Chester, Pennsylvania, a SPNS Oral Health Initiative grantee

This module on “The Importance of Oral Health in Total Patient Care” was adapted, in part, from a presentation prepared by Stephen N. Abel, DDS, MS, for the AETC National Resource Center, and available on the AETC Web site at www.aidsetc.com/aidsetc?page=etres-display&resource=etres-542.

“You don’t want a healthy neck-down body. You want a healthy top of the head to the tip of the toe body.”

—Dr. Howell Strauss, Executive Director of AIDS Care Group of Chester, Pennsylvania, a SPNS Oral Health Initiative grantee

Source Credit: This module on “The Importance of Oral Health in Total Patient Care” was adapted, in part, from a presentation prepared by Stephen N. Abel, DDS, MS, for the AETC National Resource Center, available on the AETC Web site at www.aidsetc.com/aidsetc?page=etres-display&resource=etres-542.



SLIDE 2: ORAL HEALTH AND SYSTEMIC HEALTH



- Emerging research indicates some links between oral health and systemic diseases.
- Recent reports have shown associations between poor oral health—mainly periodontal disease and tooth loss—and increased risk of cardiovascular disease, stroke, pulmonary disease, diabetes, poor pregnancy outcomes, and osteoporosis.
- Poor oral health can make it difficult to chew or swallow and can impede food intake, appetite, and nutrition, leading to poor absorption of HIV medications and leaving PLWHA susceptible to progression of their disease. Poor oral health can also interfere with medication adherence.
- Oral signs suspected to be indications of systemic illness might be confirmed by the presence of rash, fever, headache, malaise, enlarged lymph nodes, or lesions.
- Because there can be a large overlap in the clinical appearance of oral/facial manifestations of various diseases with different etiologies, an accurate diagnosis may require other diagnostic testing.
- More will be explored in [Module 5](#), “Clinical Guide to Integrating Oral Health Care in the Medical Setting.”



SLIDE 3: THE IMPACT OF XEROSTOMIA OR “DRY MOUTH”

The Impact of Xerostomia or “Dry Mouth”

Causes

- Side effect of many medications
- Symptom of cancer therapy, autoimmune disorders, or HIV-associated salivary gland disease.

Effects

- Negative effect on dietary habits, nutritional status, speech, and taste
- Less tolerance to dental prosthesis
- Increased susceptibility to dental and candida infection.

Treatments

- Saliva substitutes
- Salivary stimulants
- Drinking plenty of water.

- Xerostomia, also known as “dry mouth,” is not a disease itself, but can be a symptom of certain diseases and a side effect of many medications.
- Xerostomia can produce serious negative effects on patients’ quality of life—affecting dietary habits, nutritional status, speech, taste, and tolerance to dental prostheses—and increases susceptibility to dental and candida infection.
- Common causes for xerostomia include many medications, cancer therapy, autoimmune disorders, or HIV-associated salivary gland disease.
- Saliva substitutes, salivary stimulants, and drinking water regularly have all been found to be effective in the management of xerostomia.



SLIDE 4: MORE THAN THE MOUTH: ORAL HEALTH’S IMPACT ON QUALITY OF LIFE

More than the Mouth: Oral Health’s Impact on Quality of Life

“When you’ve got bad teeth, you’re confined.”
SPNS Grantee Patient at Special Health Resources of Texas, about the psychosocial impact of poor oral health, which can cause embarrassment and inhibit social activity for PLWHA.

Poor Oral Health = Poor Quality of Life		
Low Self-Esteem	Chronic Pain	Nutritional Challenges
<ul style="list-style-type: none"> • Caused by concerns over facial appearance and bad odor caused by mouth disease • Limits social contact • Limits career opportunities. 	<ul style="list-style-type: none"> • Causes sleep problems • Can have isolating and depressing effects. 	<ul style="list-style-type: none"> • Can profoundly affect appetite and the ability to eat • PLWHA with impaired oral health often prefer soft, easily chewed foods that may be lower in fiber and nutrient density.

“When you’ve got bad teeth, you’re confined.”

—SPNS Grantee Patient at Special Health Resources of Texas, about the psychosocial impact of poor oral health, which can cause embarrassment and inhibit social activity for PLWHA.

- Poor oral health in PLWHA can adversely affect quality of life, lower self-esteem, and limit career opportunities and social contact as result of facial appearance and odor.
- Oral dysfunction can seriously affect nutritional status because it can profoundly affect appetite and the ability to eat. For example, people with impaired oral health often prefer soft, easily chewed foods that may be lower in fiber and nutrient density.
- Sleep problems associated with oral conditions appear to be most closely related to chronic pain, either directly or indirectly in cases where pain and insomnia are exacerbated by depression.
- Oral health problems can lead to avoiding social contact as a result of concerns over facial appearance and bad odor caused by mouth disease.
- Persistent pain has similar isolating and depressing effects.



SLIDE 5: ORAL HEALTH AND DRUG-REGIMEN COMPLIANCE

Oral Health and Drug-Regimen Compliance

Negative Side Effects of HIV Medications

- Many HIV medications have oral side effects such as xerostomia.
- Predisposes PLWHA to dental decay, periodontal disease, and fungal infections.

Poor Adherence

- Patients who experience oral pain or xerostomia are less likely to strictly adhere to their HIV drug regimen.
- This is due, in part, to the associated psychological effect of depression or pain when swallowing.

Patient Self-Medication

- Patients may even resort to self-medication to reduce the pain of oral disease and symptoms.
- This can include the use of illicit drugs and highly addictive opiates.

- Many HIV medications have oral side effects such as xerostomia, which predisposes PLWHA to dental decay, periodontal disease, and fungal infections.
- Anecdotal reports suggest that patients who experience oral pain or xerostomia are less likely to strictly adhere to their HIV drug regimen, in part due to the associated psychological effect of depression or pain when swallowing.
- In some cases, patients may even resort to self-medication to reduce the pain of oral disease and symptoms, including the use of illicit drugs and highly addictive opiates.



GROUP DISCUSSION

- Have you seen any of these problems in the PLWHA served by our clinic?
- Which of these problems are most prevalent among the populations we serve?



SLIDE 6: ORAL HEALTH CARE AS A GATEWAY TO HIV DIAGNOSIS AND TREATMENT


Oral Health Care as a Gateway to HIV Diagnosis and Treatment

Oral health professionals can help in early diagnosis of HIV infection and referral to care. Oral lesions can be the first overt clinical features of HIV infection.

Early detection can improve prognosis and reduce transmission.

Treatable conditions (e.g., gingivitis or early periodontitis) can become serious quickly if the immune system is weak.

Bacterial infections (i.e., dental decay and periodontal disease) that begin in the mouth can escalate to systemic infections and further stress the immune system and other organs in PLWHA if not treated promptly.



- Oral health professionals can help in early diagnosis of HIV infection and referral to care, as oral lesions can be the first overt clinical features of HIV infection.
- Early detection can improve prognosis and reduce transmission, because infected PLWHA may not know their HIV status.
- PLWHA may find that treatable conditions, such as gingivitis or early periodontitis, can become serious quickly if the immune system is weak. Bacterial infections (i.e., dental decay and periodontal disease) that begin in the mouth can escalate to systemic infections and further stress the immune system and other organs in PLWHA if not treated promptly.



SLIDE 7: MINIMUM RECOMMENDATIONS FOR ORAL HEALTH CARE

 **Minimum Recommendations for Oral Health Care**

Providers should discuss minimum oral health care with patients to reduce occurrence and escalation of treatable conditions.

- **ANNUAL CARE**
 - Annual dental examination and teeth cleaning twice per year if possible.
- **DAILY/AS-NEEDED CARE**
 - Brushing 2 times per day with a fluoride toothpaste and a soft toothbrush
 - Replacing toothbrush every 2 months 
 - Flossing daily (gently, taking into account low platelet counts)
 - Using a nonalcohol mouthwash
 - Avoiding constant snacking
 - Avoiding tobacco products and alcohol
 - Moisturizing/lubricating lips and mucus membranes when needed

- Providers should discuss minimum oral health care with patients to reduce occurrence and escalation of treatable conditions.

ANNUAL CARE

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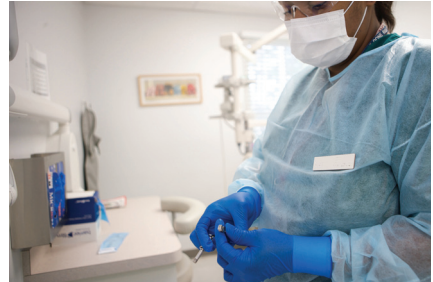
DAILY/AS-NEEDED CARE

- Brushing 2 times per day with a fluoride toothpaste and a soft toothbrush
 - Replacing toothbrush every 2 months
- Flossing daily (gently, taking into account low platelet counts)
- Using a nonalcohol mouthwash
- Avoiding constant snacking
- Avoiding tobacco products and alcohol
- Moisturizing/lubricating lips and mucus membranes when needed.



DISCUSSION ACTIVITY

- Have you seen patients referred to HIV care by dental providers, or had patients whose oral health disease was the first outward manifestation of their HIV disease?
- Have you ever had patients ask for oral health advice? Have you ever offered oral health care guidance to patients? If yes to either question, how did you instruct the patient?
- About what oral health care topic do patients seem to know the least? The most?



MODULE 2

Barriers to Oral Health Care in PLWHA



35–45 minutes

SUMMARY

The primary objective of this module is to increase understanding of common barriers to oral health care encountered by PLWHA, as well as to improve understanding of the important intersection of oral health and HIV disease.

MATERIALS NEEDED:


- A computer and compatible LCD projector to play the PowerPoint presentation
- Markers or pens
- Paper and easel(s), whiteboard, or other means of taking notes.



POWERPOINT PRESENTATION



SLIDE 1: ORAL HEALTH CARE IS A MAJOR UNMET NEED IN PLWHA

 **Oral Health is a Major Unmet Need in PLWHA**

PLWHA are more likely to have an unmet need for oral health care than for medical care.


- 58–64% of PLWHA do not receive regular dental care, according to various studies.
- 32–46% of PLWHA will have at least one major HIV-related oral health problem (e.g., bacterial, viral, and fungal infections as well as cancer and ulcers) in the course of their disease.

Source: Marcus M, Maida CA, Coulter ID, et al. A longitudinal analysis of unmet need for oral treatment in a national sample of medical HIV patients. *Am J Public Health*. Jan 2005;95(1):73-75.

- PLWHA are more likely to have an unmet need for oral health care than for medical care. Fifty-eight to 64 percent of PLWHA do not receive regular dental care, according to various studies.¹
- Between 32 and 46 percent of PLWHA will have at least one major HIV-related oral health problem (e.g., bacterial, viral, and fungal infections as well as cancer and ulcers) in the course of their disease.²




SLIDES 2–4: BARRIERS TO ORAL HEALTH CARE FOR PLWHA

 **Barriers to Oral Health Care for PLWHA**


Many barriers to oral health care for PLWHA are the same barriers they face to HIV medical care.

- **Financial concerns** are the primary barrier to care
 - Absence of dental insurance, insufficient insurance coverage, inability to pay out-of-pocket for care, etc.^{1,3}
 - Dental insurance is not as common in private sector as medical insurance.
 - The number of adults without dental insurance coverage is **3 times** the number of adults without health insurance coverage.






1Marcus M, Maida CA, Coulter ID, et al. A longitudinal analysis of unmet need for oral treatment in a national sample of medical HIV patients. *Am J Public Health*. Jan 2005;95(1):73-75.
2Heslin KC, Cunningham WE, Marcus M, et al. A comparison of unmet needs for dental and medical care among persons with HIV infection receiving care in the United States. *J Public Health Dent*. Winter 2011;61(1):14-21.
3Henry J. Kaiser Family Foundation. *Oral health in the U.S.* [PowerPoint slides]. June 19, 2012. Available at: <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/061912slides.pdf>.

- Many of the same barriers to oral health care for PLWHA are the same barriers that prevent them from engaging and staying in HIV medical care.
 - *Financial concerns* are the primary barrier to care: absence of dental insurance, insufficient insurance coverage, inability to pay out-of-pocket for care, etc.^{3,4}
 - *Dental insurance* is not as common in the private sector as medical insurance. The number of adults without dental coverage is three times as high as the number of adults without health insurance coverage.⁵
 - *Lack of transportation* for patients to attend appointments is a closely related concern, and can be particularly challenging in areas with a scarcity of oral health professionals.

 **Barriers to Oral Health Care for PLWHA, continued**

- **Lack of transportation** for patients to attend appointments
 - Particularly challenging in areas with a scarcity of oral health professionals.
- **Stigma** can occur when trying to find a culturally competent dentist who understands the needs of PLWHA and their concerns about confidentiality.
- **Lack of oral health professionals** trained and willing to treat PLWHA is a problematic, systemic barrier to care.


¹Marcus M, Maida CA, Coulter ID, et al. A longitudinal analysis of unmet need for oral treatment in a national sample of medical HIV patients. *Am J Public Health*. Jan 2005;95(1):73–75.




²Health Resources Services Administration, HIV/AIDS Bureau. Oral Health and HIV. Ryan White HIV/AIDS Program Fact Sheet. Available at: www.hrsa.gov/publichealth/clinical/oralhealth/hivfactsheet.pdf.

³Marcus M, Maida CA, Coulter ID, et al. A longitudinal analysis of unmet need for oral treatment in a national sample of medical HIV patients. *Am J Public Health*. Jan 2005;95(1):73–75.

⁴Heslin KC, Cunningham WE, Marcus M, et al. A comparison of unmet needs for dental and medical care among persons with HIV infection receiving care in the United States. *J Public Health Dent*. Winter 2011;61(1):14–21.

⁵Henry J. Kaiser Family Foundation. *Oral health in the U.S.* [PowerPoint slides]. June 19, 2012. Available at: <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/061912slides.pdf>.

 **Barriers to Oral Health Care for PLWHA, continued**

-  ■ **Patient fear of and discomfort with dentists** remains another significant deterrent to dental care for PLWHA, as with the rest of the population.
-  ■ **Low health literacy and lack of education** of the importance of oral health naturally reduces the likelihood that PLWHA will present for oral health care.
-  ■ **Lack of self-efficacy navigating the health care system** can make seeking oral health care a confusing, difficult, and expensive ordeal for PLWHA.

- *Stigma* can occur when trying to find a culturally competent dentist who understands the needs of PLWHA and their concerns about confidentiality.
- *Lack of oral health professionals* trained and willing to treat PLWHA is a problematic, systemic barrier to care.
- *Patient fear of and discomfort with dentists* remains another significant deterrent to dental care for PLWHA, as with the rest of the population.
- *Low health literacy and lack of education* on the importance of oral health naturally reduces the likelihood that PLWHA will present for oral health care.
- *Lack of self-efficacy navigating the health care system* can make seeking oral health care a confusing, difficult, and expensive ordeal for PLWHA.



GROUP DISCUSSION

- Below are some questions the Trainer can ask to encourage discussion:
 - Do the statistics given about the prevalence of oral health disease in PLWHA surprise you?
 - Did you find any of the barriers to care surprising?
 - What barriers do you think are missing? Why?
 - Would anyone like to share their experiences in helping PLWHA overcome some of these barriers to care? What did you do? What worked and what didn't work?

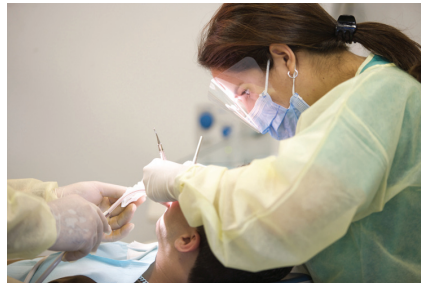


GROUP ACTIVITY

- Trainer should lead participants in a role-playing exercise to address common barriers and stigmas.
- Split the group into pairs of 2, with one group member playing the role of the provider, and the other group member playing the role of the patient. Assign each group one of the following scenarios to act out:
 - Patient suffering from fear of the dentist; provider attempting to alleviate fears
 - Patient with low oral health literacy; provider attempting to educate patient about the benefits of oral health care for overall health and management of HIV disease
 - Patient concerned about being stigmatized by dental provider; health care provider seeking to encourage patient that there are dental providers who understand and are sensitive to needs of PLWHA and to follow up on dental referral.



- After 5 minutes, have the groups report back to the class about revelations from the exercise.
- Below are some questions the Trainer can ask to encourage discussion:
 - Which of these scenarios do you think would be hardest to address with a patient? Why?
 - What resources did you feel you would need in order to effectively address some of these scenarios?
 - Are these resources readily available? If not, what would you or the clinic need to do to access them?



MODULE 3

Organizational Models Studied in the SPNS Oral Health Initiative



60 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Internet connection to access the module video
- Copies of the handout referenced in this module (should be printed out and distributed to each person).



POWERPOINT PRESENTATION



SLIDE 1: BACKGROUND OF THE SPNS INNOVATIONS IN ORAL HEALTH CARE INITIATIVE

 **Background of the SPNS Innovations in Oral Health Care Initiative**


- 15 demonstration sites across the country
- Ran from 2006–2011
- Provided oral health care to underserved HIV-positive individuals in 12 States and one U.S. Territory
- Oral Health Initiative information posted on SPNS site: <http://hab.hrsa.gov/abouthab/special/oralhealth.html>
- Evaluation Center on HIV and Oral Health (ECHO) led by Boston University School of Public Health: <http://echo.hdwg.org/>.



- Sponsored demonstration projects at 15 sites across the country.
- Provided oral health care to underserved HIV-positive individuals in 12 States and one U.S. Territory
- Ran from 2006–2011
- Oral Health Initiative information posted on SPNS site: <http://hab.hrsa.gov/abouthab/special/oralhealth.html>
- The Health and Disability Working Group at the Boston University School of Public Health was chosen to lead the multisite evaluation, which occurred under the project Evaluation Center on HIV and Oral Health (ECHO). The initiative evaluation center Website can be accessed at: <http://echo.hdwg.org/>.



SLIDE 2: OBJECTIVE OF THE SPNS ORAL HEALTH INITIATIVE AND MEDICAL CARE OUTCOMES

 **Objective of the SPNS Oral Health Initiative and Medical Care Outcomes**

- Overall Objective: Expand access to comprehensive oral health care provided in accordance with professional standards to improve oral health outcomes of PLWHA.
- Other Important Objectives:
 - Integrating medical and dental care
 - Sustaining programs beyond the life of the grant.
- Initiative Outcomes:
 - 2,500 PLWHA who had been out of oral health care for 1 year or more were served
 - 14,500 visits occurred
 - 26,000 dental procedures performed.



- The overall goal of the initiative was to expand access to comprehensive oral health care provided in accordance with professional standards to improve oral health outcomes of PLWHA.
- Other important objectives of the SPNS Oral Health Initiative included integrating medical and dental care, and sustaining programs beyond the life of the grant.
- Initiative outcomes
 - 2,500 PLWHA who had been out of oral health care for 1 year or more were served
 - 14,500 visits occurred
 - 26,000 dental procedures were performed



SLIDE 3: PATIENT TESTIMONIAL TO THE BENEFITS OF SPNS ORAL HEALTH CARE

 **Patient Testimonial to the Benefits of SPNS Oral Health Care**

“[Oral health care has] definitely helped me. Because when [the Harbor Health dental staff] did the top teeth, I guess I had an infection in there probably for about a year and a half. **So, my T cells once this was all done jumped 100 points.** So yeah, and I feel a lot better. Now that I don’t have any pain, I’ve been in pain for like, I don’t know 8 years. I was used to it, you know.”

—SPNS Grantee Patient at Harbor Health in Provincetown, Massachusetts

“[Oral health care has] definitely helped me. Because when [the Harbor Health dental staff] did the top teeth, I guess I had an infection in there probably for about a year and a half. So, my T cells once this was all done jumped 100 points. So yeah, and I feel a lot better. Now that I don’t have any pain, I’ve been in pain for like, I don’t know 8 years. I was used to it, you know.”

—SPNS Grantee Patient at Harbor Health in Provincetown, Massachusetts



SLIDE 4: CHANGING LIVES THROUGH GOOD ORAL HEALTH VIDEO

 **Changing Lives Through Good Oral Health Video**

Video:
<http://vimeo.com/13917365>

■ **Post-Video Discussion Questions**

- What was your overall impression of the video?
- Is there anything you learned about the impact of oral health on PLWHA that you did not know before watching this video?




Video

- Watch the video, “Changing Lives Through Good Oral Health”: <http://vimeo.com/13917365>
- After the video, the Trainer should lead the group in discussion of reactions to the video.
 - What was your overall impression of the video? Is there anything you learned about the impact of oral health on PLWHA that you did not know before watching this video?



SLIDE 5: ORGANIZATIONAL MODELS STUDIED


 **Organizational Models Studied**

■ **Six organizational models used:**

- Increasing services at their existing clinics
- Building satellite clinics
- Collaborating with clinics in dental hygiene schools or community colleges
- Fee-for-service dental reimbursement with contracted providers
- Leasing space at existing private offices/clinics, and
- Purchasing mobile dental units.

■ **Each demonstration site had to determine:**

- Which organizational model(s) they would use
- How they would recruit and train clinical staff
- How they would recruit and retain patients into care.



- Each demonstration site had to determine which organizational model(s) they would use, how they would recruit and train clinical staff, and how they would recruit and retain patients into care.
- Six organizational models were used across the sites (many utilized various combinations):
 1. Increasing services at their existing clinics
 2. Building satellite clinics
 3. Collaborating with clinics in dental hygiene schools or community colleges
 4. Fee-for-service dental reimbursement with contracted providers
 5. Leasing space at existing private offices/clinics, and
 6. Purchasing mobile dental units.



HANDOUT



The Trainer should distribute the table of organizational model pros and cons shown below as a handout so that participants can take notes on the models during the following discussion of slides. Please read the pros and cons within the table.

OVERVIEW OF THE SIX SPNS ORGANIZATIONAL MODELS STUDIED

Model	Grantee	Pros	Cons/Caveats
<i>Increasing services at their existing clinics</i>	<ul style="list-style-type: none"> Harbor Health 	<ul style="list-style-type: none"> Most expedient model 	<ul style="list-style-type: none"> Does not necessarily enable clinic to expand oral health care access to new geographic areas or populations
<i>Building satellite clinics</i>	<ul style="list-style-type: none"> AIDS Care Group AIDS Resource Center Wisconsin Special Health Resources for Texas Community Health Center, Inc Tenderloin Health Center 	<ul style="list-style-type: none"> Reduces travel time for some patients, often reducing a huge barrier to care Enables greater patient enrollment Improves likelihood of program sustainability 	<ul style="list-style-type: none"> Can be costly Can take a lot of time to establish, including navigation of regulations and completion of construction
<i>Collaborating with clinics in dental hygiene schools or community colleges</i>	<ul style="list-style-type: none"> HIV Alliance* 	<ul style="list-style-type: none"> High-quality oral health care for PLWHA in a mixed clinic setting Improved training in care of PLWHA and reduced perception of HIV stigma on part of students Enhanced clinical space and equipment Faculty supervision and training 	<ul style="list-style-type: none"> Requires careful coordination and flexibility Ensure that expectations for participating organizations in partnership are clearly and formally spelled out and agreed upon prior to beginning collaboration
<i>Fee-for-service dental reimbursement with contracted providers</i>	<ul style="list-style-type: none"> AIDS Resource Center Wisconsin 	<ul style="list-style-type: none"> Reduced travel time for patients More cost-effective than establishing a formal satellite clinic 	<ul style="list-style-type: none"> Important to ensure that dentists recruited are culturally and clinically competent to serve PLWHA Funding options for fee-for-service varies by State and may be more or less attractive to providers as a result
<i>Leasing space at existing private offices/clinics</i>	<ul style="list-style-type: none"> Center for Comprehensive Care 	<ul style="list-style-type: none"> Increased access to care for patients Less resource-intensive than building a satellite clinic Provision of care in private clinics that are non-HIV-affiliated may reduce risk of stigma for patients 	<ul style="list-style-type: none"> Leased office locations may not qualify as Medicaid-certified providers, limiting ability to bill for dental services in some States Important to ensure that patient caseload is manageable so that patients can be seen at regular intervals for follow-up care to improve retention and clinical outcomes
<i>Purchasing mobile dental units</i>	<ul style="list-style-type: none"> Sandhills Medical Center University of Miami Louisiana State University Montefiore Medical Center 	<ul style="list-style-type: none"> Enables provision of care to patients isolated by geography or with challenges traveling to dental services Ability to serve a high volume of patients 	<ul style="list-style-type: none"> Expensive to purchase** Expensive and time-intensive to maintain both the dental equipment and the unit itself*** Cannot be used anywhere—need open, flat area; proper parking permits; access to electricity to operate van and equipment; etc. Requires research into unique State regulations, infection control procedures, town and county parking ordinances, medical record access and storage, and scheduling and staffing Requires referral of clients to other nonmobile clinics for many dental services, including most x-rays Patient confidentiality may be a concern when using electronic medical records through wireless system Difficult to navigate roads with sensitive dental equipment on board because measures used to hold equipment stable were often insufficient

*While HIV Alliance was the only grantee to use relationship with dental program as their program model, several other grantees established formal or informal relationships with dental professional schools).

**Mobile dental units used by grantees ranged from \$144,000 for a one-chair unit to \$330,000 for 2-chair unit.

***All grantees who employed a mobile dental unit experienced frequent mechanical, electrical, and vacuum system problems.



SLIDES 6–8: OVERVIEW OF PROS, CONS, AND IMPORTANT CONSIDERATIONS FOR THE SIX ORGANIZATIONAL MODELS



The following slides review the pros, cons, and important considerations of each of the six organizational models studied by grantees during the SPNS Oral Health Initiative.



Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (1 of 3)

Model	Grantee	Pros	Cons/Caveats
<i>Increasing services at their existing clinics</i>	<ul style="list-style-type: none"> Harbor Health 	<ul style="list-style-type: none"> Most expedient model 	<ul style="list-style-type: none"> Does not necessarily enable clinic to expand oral health care access to new geographic areas or populations
<i>Building satellite clinics</i>	<ul style="list-style-type: none"> AIDS Care Group AIDS Resource Center Wisconsin Special Health Resources for Texas Community Health Center, Inc Tenderloin Health Center 	<ul style="list-style-type: none"> Reduces travel time for some patients, often reducing a huge barrier to care Enables greater patient enrollment Improves likelihood of program sustainability 	<ul style="list-style-type: none"> Can be costly Can take a lot of time to establish, including as navigation of regulations and completion of construction
<i>Collaborating with clinics in dental hygiene schools or community colleges</i>	<ul style="list-style-type: none"> HIV Alliance* 	<ul style="list-style-type: none"> High quality oral health care for PLWHA in a mixed clinic setting Improved training in care of PLWHA and reduced perception of HIV stigma on part of students Enhanced clinical space and equipment Faculty supervision and training 	<ul style="list-style-type: none"> Requires careful coordination and flexibility Ensure that expectations for participating organizations in partnerships are clearly and formally spelled out and agreed upon prior to beginning collaboration

*While HIV Alliance was the only grantee to use relationship with dental program as their program model, several other grantees established formal or informal relationships with dental professional schools).



Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (2 of 3)

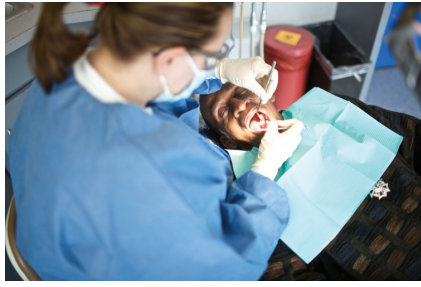
Model	Grantee	Pros	Cons/Caveats
<i>Fee-for-service dental reimbursement with contracted providers</i>	<ul style="list-style-type: none"> AIDS Resource Center Wisconsin 	<ul style="list-style-type: none"> Reduced travel time for patients More cost-effective than establishing a formal satellite clinic 	<ul style="list-style-type: none"> Important to ensure that dentists recruited are culturally and clinically competent to serve PLWHA Funding options for fee-for-service varies by State and may be more or less attractive to providers as a result
<i>Leasing space at existing private offices/clinics</i>	<ul style="list-style-type: none"> Center for Comprehensive Care 	<ul style="list-style-type: none"> Increased access to care for patients Less resource-intensive than building a satellite clinic Provision of care in private clinics that are non-HIV-affiliated may reduce risk of stigma for patients 	<ul style="list-style-type: none"> Leased office locations may not qualify as Medicaid-certified providers, limiting ability to bill for dental services in some States Important to ensure that patient caseload is manageable so that patients can be seen at regular intervals for follow-up care to improve retention and clinical outcomes



Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (3 of 3)

Model	Grantee	Pros	Cons/Caveats
<i>Purchasing mobile dental units</i>	<ul style="list-style-type: none"> Sandhills Medical Center University of Miami Louisiana State University Montefiore Medical Center 	<ul style="list-style-type: none"> Enables provision of care to patients isolated by geography or with challenges traveling to dental services Ability to serve a high volume of patients 	<ul style="list-style-type: none"> Expensive to purchase** Expensive and time-intensive to maintain both the dental equipment and the unit itself*** Cannot be used anywhere—need open, flat area; proper parking permits; access to electricity to operate van and equipment; etc. Requires research into unique State regulations, infection control procedures, town and county parking ordinances, medical record access and storage, and scheduling and staffing Requires referral of clients to other non-mobile clinics for many dental services, including most X-rays Patient confidentiality may be a concern when using electronic medical records through wireless system Difficult to navigate roads with sensitive dental equipment on board because measures used to hold equipment stable were often insufficient

**Mobile dental units used by grantees ranged from \$14,000 for a one-chair unit to \$310,000 for 2-chair unit.
***All grantees who employed a mobile dental unit experienced frequent mechanical, electrical, and vacuum system problems.



MODULE 4

Glossary of Oral Health Terminology

SUMMARY

To increase understanding of the terminology used in oral health care, a glossary has been provided as a handout. The goal of this module is to increase understanding around the terminology of oral health care in general as well as that specific to PLWHA. Many of these terms are referenced throughout the curriculum and thus, this module is a useful reference tool to maximize comprehension and utility as well as improve overall oral health literacy for clinic staff, and improve communication between medical providers and dental clinicians. Where applicable, this handout can be modified and provided to patients to include those terms used in patient-provider conversations.

MATERIALS NEEDED:

Copies of the glossary should be printed for distribution to each person.



HANDOUT

A glossary handout of common oral health terminology begins on the following page to facilitate printing and photocopying.

MODULE 4: GLOSSARY OF ORAL HEALTH TERMINOLOGY

Unless otherwise indicated, the definitions below are from the American Dental Association (ADA). The ADA is a national standards development organization for oral health. Additional oral health terminology is available at: www.ada.org/glossaryforprofessionals.aspx.

A

abscess: Acute or chronic localized inflammation, probably with a collection of pus, associated with tissue destruction and, frequently, swelling; usually secondary to infection.

abscess, acute periradicular or acute apical: An inflammatory reaction to pulpal infection and necrosis characterized by rapid onset, spontaneous pain, tenderness of the tooth to pressure, pus formation and eventual swelling of associated tissues. May also be known as acute periapical abscess, acute alveolar abscess, dentoalveolar abscess, phoenix abscess, recrudescing abscess, and secondary apical abscess.

abscess, chronic periradicular or chronic periapical: An inflammatory reaction to pulpal infection and necrosis characterized by gradual onset, little or no discomfort and the intermittent discharge of pus through an associated sinus tract. May also be known as chronic alveolar abscess, chronic apical abscess, chronic dentoalveolar abscess, suppurative apical periodontitis, and suppurative periradicular periodontitis.

abutment: A tooth or implant fixture used as a support for a prosthesis.

abutment crown: Artificial crown also serving for the retention or support of a dental prosthesis.

accession: Addition of a test specimen, previously collected by a health care provider, to a laboratory specimen collection; recording of essential specimen identification data in a laboratory-maintained file in chronological order of laboratory specimen acquisition; assignment to the specimen of an identification code.

acid etching: Use of an acidic chemical substance to prepare the tooth enamel and/or dentin surface to provide retention for bonding.

adhesion: State in which two surfaces are held together by chemical or physical forces or both with or without the aid of an adhesive. Adhesion is one aspect of bonding.

adhesive: Any substance that joins or creates close adherence of two or more surfaces. Intermediate material that causes two materials to adhere to each other.

adjunctive: A secondary treatment in addition to the primary therapy.

administrative costs: Overhead expenses incurred in the operation of a dental benefit program, exclusive of costs of dental services provided.

administrative services only (ASO): An arrangement under which a third party, for a fee, processes claims and handles paperwork for a self-funded group. This frequently includes all insurance company services (actuarial services, underwriting, benefit description, etc.) except assumption of risk.

administrator: One who manages or directs a dental benefit program on behalf of the program's sponsor. See dental benefit organization: third-party administrator.

adult dentition: The permanent teeth of adulthood that either replace the primary dentition or erupt distally to the primary molars.

adverse selection: A statistical condition within a group when there is a greater demand for dental services and/or more services necessary than the average expected for that group.

allogenic: Belonging to the same species, but genetically different. See graft.

alloplastic: Refers to synthetic material often used for tissue augmentation or replacement.

allowable charge: The maximum dollar amount on which benefit payment is based for each dental procedure as calculated by the third-party payer.

alloy: Compound combining two or more elements having properties not existing in any of the single constituent elements. Sometimes used to refer to amalgam.

alternate benefit: A provision in a dental plan contract that allows the third-party payer to determine the benefit based on an alternative procedure that is generally less expensive than the one provided or proposed.

alternative benefit plan: A plan, other than a traditional (fee-for-service, freedom-of-choice) indemnity or service corporation plan, for reimbursing a participating dentist for providing treatment to an enrolled patient population.

alternative delivery system: An arrangement for the provision of dental services in other than the traditional way (e.g., licensed dentist providing treatment in a fee-for-service dental office).

alveolar: Referring to the bone to which a tooth is attached.

alveoplasty: Surgical procedure for recontouring supporting bone, sometimes in preparation for a prosthesis.

amalgam: An alloy used in direct dental restorations. Typically composed of mercury, silver, tin and copper along with other metallic elements added to improve physical and mechanical properties.

analgesia: The diminution or elimination of pain.

anatomical crown: That portion of tooth normally covered by, and including, enamel.

ancillary: Subordinate or auxiliary to something or someone else; supplementary.

anesthesia, general: general anesthesia—a drug-induced loss of consciousness during which patients are not arousable, even by painful stimulation. The ability to independently maintain ventilatory function is often impaired. Patients often require assistance in maintaining a patent airway, and positive pressure ventilation

may be required because of depressed spontaneous ventilation or drug-induced depression of neuromuscular function. Cardiovascular function may be impaired.

anterior: Mandibular and maxillary centrals, laterals and cuspids. The designation of permanent anterior teeth in the Universal/National tooth numbering system include teeth 6 through 11 (maxillary), and 22 through 27 (mandibular); primary teeth in the Universal/National tooth numbering system are designated C through H (maxillary), and M through R (mandibular). Also refers to the teeth and tissues located toward the front of the mouth.

anterior teeth: The six upper or six lower front teeth.

anxiolysis: The diminution or elimination of anxiety.

apex: The tip or end of the root end of the tooth.

apexification: The process of induced root development to encourage the formation of a calcified barrier in a tooth with immature root formation or an open apex. May involve the placement of an artificial apical barrier prior to nonsurgical endodontic obturation.

apexogenesis: Vital pulp therapy performed to encourage continued physiological formation and development of the tooth root.

apicoectomy: Amputation of the apex of a tooth.

appeal: A formal request that an insurer review denied or unpaid claims for services or supplies provided. An appeal can be filed by a health care provider or a patient in an attempt to recover reimbursement from a third-party payer such as a private insurance company.

arch, dental: The curved composite structure of the natural dentition and the residual ridge, or the remains thereof, after the loss of some or all of the natural teeth.

areas of oral cavity: A two-digit numeric system used to report regions of the oral cavity to third party payers.

- 00 entire oral cavity
- 01 maxillary arch
- 02 mandibular arch
- 10 upper right quadrant
- 20 upper left quadrant
- 30 lower left quadrant
- 40 lower right quadrant

arthrogram: A diagnostic X-ray technique used to view bone structures following injection of a contrast medium into a joint.

artificial crown: Restoration covering or replacing the major part, or the whole of the clinical crown of a tooth, or implant.

avulsion: Separation of tooth from its socket due to trauma.

B

bicuspid: A premolar tooth; a tooth with two cusps.

bilateral: Occurring on, or pertaining to, both right and left sides.

bonding: Process by which two or more components are made integral by mechanical and/or chemical adhesion at their interface.

bridge: See fixed partial denture.

bruxism: The parafunctional grinding of the teeth.

buccal: Pertaining to or toward the cheek (as in the buccal surface of a posterior tooth).

C

calculus: Hard deposit of mineralized substance adhering to crowns and/or roots of teeth or prosthetic devices.

canal: A relatively narrow tubular passage or channel.

canal, mandibular: the passage that transmits vessels and nerves through the jaw to branches that distribute them to the teeth.

canal, root: Space inside the root portion of a tooth containing pulp tissue.

cantilever extension: Part of a fixed prosthesis that extends beyond the abutment to which it is attached and has no additional support.

capitation: A capitation program is one in which a dentist or dentists contract with the program's sponsor or administrator to provide all or most of the dental services covered under the program to subscribers in return for payment on a per-capita basis.

caries: Commonly used term for tooth decay.

carious lesion: A cavity caused by caries.

cavity: Missing tooth structure. A cavity may be due to decay, erosion, or abrasion. If caused by caries, also referred to as carious lesion.

cement base: Material used under a filling to replace lost tooth structure.

cementum: Hard connective tissue covering the outer surface of a tooth root.

ceramic: Non-metal, non-resin inorganic refractory compounds processed at high temperatures (600°C/1112°F and above) and pressed, polished, or milled—including porcelains, glasses, and glass-ceramics. See porcelain/ceramic.

clenching: The clamping and pressing of the jaws and teeth together in centric occlusion, frequently associated with psychological stress or physical effort.

clinical crown: That portion of a tooth not covered by tissues.

closed reduction: The reapproximation of segments of a fractured bone without direct visualization of the bony segments.

Code on Dental Procedures and Nomenclature (Code):

A listing of dental procedure codes and their descriptive terms published by the American Dental Association (ADA); used for recording dental services on the patient record as well as for reporting dental services and procedures to dental benefit plans. The *Code* is printed in a manual titled Current Dental Terminology (CDT).

complete denture: A prosthetic for the edentulous maxillary or mandibular arch, replacing the full dentition. Usually includes six anterior teeth and eight posterior teeth.

complete series: An entire set of radiographs. A set of intraoral radiographs usually consisting of 14 to 22 periapical and posterior bitewing images intended to display the crowns and roots of all teeth, periapical areas and alveolar bone crest (source: FDA/ADA radiographic guidelines).

composite: A dental restorative material made up of disparate or separate parts (e.g., resin and quartz particles).

compound fracture: Break in bone which is exposed to external contamination.

coping: A thin covering of the coronal portion of the tooth, usually without anatomic conformity. Custom-made or pre-fabricated thimble-shaped core or base layer designed to fit over a natural tooth preparation, a post core, or implant abutment so as to act as a substructure onto which other components can be added to give final form to a restoration or prosthesis. It can be used as a definitive restoration or as part of a transfer procedure.

core buildup: the replacement of a part or all of the crown of a tooth whose purpose is to provide a base for the retention of an indirectly fabricated crown.

coronal: Refers to the crown of a tooth.

cracked tooth syndrome: A collection of symptoms characterized by transient acute pain experienced when chewing.

crown: An artificial replacement that restores missing tooth structure by surrounding the remaining coronal tooth structure, or is placed on a dental implant. It is made of metal, ceramic, or polymer materials or a combination of such materials. It is retained by luting cement or mechanical means. (American College of Prosthodontics; The Glossary of Prosthodontic Terms).

crown lengthening: A surgical procedure exposing more tooth for restorative purposes by apically positioning the gingival margin and removing supporting bone.

curettage: Scraping and cleaning the walls of a real or potential space, such as a gingival pocket or bone, to remove pathologic material.

cuspid: Pointed or rounded eminence on or near the masticating surface of a tooth.

cuspid: Single cusped tooth located between the incisors and bicuspid.

cyst: Pathological cavity, usually lined with epithelium, containing fluid or soft matter.

cyst, odontogenic: Cyst derived from the epithelium of odontogenic tissue (developmental, primordial).

cyst, periapical: An apical inflammatory cyst containing a sac-like epithelium-lined cavity that is open to and continuous with the root canal.

D

debridement: Removal of subgingival and/or supragingival plaque and calculus which obstructs the ability to perform an evaluation; removal of contused and devitalized tissue from a wound surface.

dental implant: A device specially designed to be placed surgically within or on the mandibular or maxillary bone as a means of providing for dental replacement.

dentin: Hard tissue which forms the bulk of the tooth and develops from the dental papilla and dental pulp, and in the mature state is mineralized.

dentition: The teeth in the dental arch.

denture: An artificial substitute for some or all of the natural teeth and adjacent tissues.

denture base: That part of a denture that makes contact with soft tissue and retains the artificial teeth.

dry socket: Localized inflammation of the tooth socket following extraction due to infection or loss of blood clot; osteitis.

E

edentulous: Without teeth.

equilibration: Reshaping of the occlusal surfaces of teeth to create harmonious contact relationships between the upper and lower teeth; also known as occlusal adjustment.

evulsion: Separation of the tooth from its socket due to trauma. See avulsion.

excision: Surgical removal of bone or tissue.

exudate: A material usually resulting from inflammation or necrosis that contains fluid, cells, and/or other debris.

F

facial: The surface of a tooth directed toward the cheeks or lips (i.e., the buccal and labial surfaces) and opposite the lingual surface.

fascial: Related to a sheet or band of fibrous connective tissue enveloping, separating, or binding together muscles, organs, and other soft tissue structures of the body.

filling: A lay term used for the restoring of lost tooth structure by using materials such as metal, alloy, plastic, or porcelain.

fixed partial denture: A prosthetic replacement of one or more missing teeth cemented or otherwise attached to the abutment teeth or implant replacements.

foramen: Natural opening into or through bone.

frenum: Muscle fibers covered by a mucous membrane that attaches the cheek, lips, and/or tongue to associated dental mucosa.

G

gingiva: Soft tissues overlying the crowns of unerupted teeth and encircling the necks of those that have erupted.

gingivectomy: The excision or removal of gingiva.

gingivitis: Inflammation of gingival tissue without loss of connective tissue.

I

impacted tooth: An unerupted or partially erupted tooth that is positioned against another tooth, bone, or soft tissue so that complete eruption is unlikely.

M

malar: pertaining to the cheek bone.

maxilla: The upper jaw.

molar: Teeth posterior to the premolars (bicuspid) on either side of the jaw; grinding teeth, having large crowns and broad chewing surfaces.

O

obturate: With reference to endodontics, refers to the sealing of the canal(s) of tooth roots during root canal therapy procedure with an appropriately prescribed material, such as gutta percha in combination with a suitable luting agent.

obturator: A disc or plate which closes an opening; a prosthesis that closes an opening in the palate.

occlusal: Pertaining to the biting surfaces of the premolar and molar teeth or contacting surfaces of opposing teeth or opposing occlusion rims.

odontogenic: Refers to tooth-forming tissues.

odontoplasty: Adjustment of tooth length, size, and/or shape; includes removal of enamel projections.

operculum: The flap of tissue over an unerupted or partially erupted tooth.

oral health literacy: The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate oral health decisions.

P

periodontitis: Gum disease.

R

reline: Process of resurfacing the tissue side of a removable prosthesis with new base material.

removable partial denture: A removable partial denture is a prosthetic replacement of one or more missing teeth that can be removed by the patient.

retainer, orthodontic: Appliance to stabilize teeth following orthodontic treatment.

retainer, prosthodontic: A part of a prosthesis that attaches a restoration to the abutment tooth, implant abutment, or implant.

retrograde filling: A method of sealing the root canal by preparing and filling it from the root apex.

root: The anatomic portion of the tooth that is covered by cementum and is located in the alveolus (socket), where it is attached by the periodontal apparatus; radicular portion of tooth.

root, residual: Remaining root structure following the loss of the major portion (over 75%) of the crown.

root canal: The portion of the pulp cavity inside the root of a tooth; the chamber within the root of the tooth that contains the pulp.

S

stomatitis: Inflammation of the membranes of the mouth.

T

temporomandibular (TMJ): The connecting hinge mechanism between the base of the skull (temporal bone) and the lower jaw (mandible).

temporomandibular joint dysfunction (TMD or TMJD): Abnormal functioning of temporomandibular joint; also refers to symptoms arising in other areas secondary to the dysfunction.

tooth bounded space: A space created by one or more missing teeth that has a tooth on each side.

transosteal (transosseous): Device with threaded posts penetrating both the superior and inferior cortical bone plates of the mandibular symphysis and exiting through the permucosa. It may be intraoral or extraoral.

transseptal: Through or across a septum.

treatment plan: The sequential guide for the patient's care as determined by the dentist's diagnosis and is used by the dentist for the restoration to and/or maintenance of optimal oral health.

trismus: Restricted ability to open the mouth, usually due to inflammation or fibrosis of the muscles of mastication.

tuberosity: A protuberance on a bone.

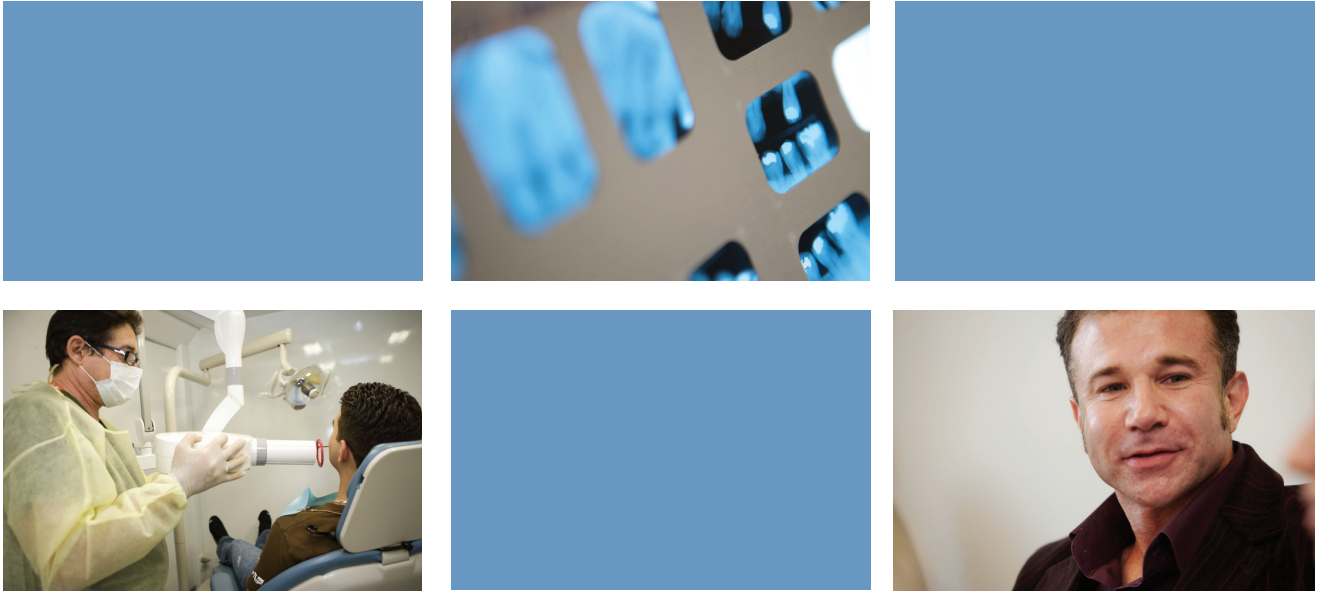
X

xerostomia: Decreased salivary secretion that produces a dry and sometimes burning sensation of the oral mucosa and/or cervical caries.

Z

zygomatic bone: Quadrangular bone on either side of face that forms the cheek prominence.

SECTION 2 Preparing for Clinical Care



MODULE 5 Clinical Guide to Integrating Oral Care in the Medical Setting



Part 1: 60 minutes; Part 2—Optional Webinar (for in-class training or participant homework): 90 minutes

SUMMARY

This module is designed to provide both visual and descriptive examples of common oral health diseases. At the end of this module, medical providers and primary care staff should demonstrate improved ability to find and identify these diseases in PLWHA.

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Internet connection
- Video player, such as QuickTime (will be required to be installed in advance on your computer)
- Copies of the handout referenced in this module (should be printed out and distributed to each person).


PART 1 (60 MINUTES)




POWERPOINT PRESENTATION



SLIDE 1: OBJECTIVE OF THIS CLINICAL GUIDE TO INTEGRATING ORAL CARE IN THE MEDICAL SETTING

 Objective of this Clinical Guide to Integrating Oral Care in the Medical Setting

Empower medical providers and primary care staff to be able to find and identify common oral health diseases in PLWHA.




Source: Adapted from a presentation prepared by Cesar Augusto Migliorati, DDS, MS, PhD, Professor and Director of Oral Medicine in the Department of Biologic and Diagnostic Sciences at the University of Tennessee College of Dentistry. The presentation is entitled "HIV Diagnosis and the Oral Cavity" and was prepared for the AETC National Resource Center. The full presentation is available on the AETC Web site at www.aidsetc.com/aidsetc?page=etres-display&resource=etres-542.

- Empower medical providers and primary care staff to be able to find and identify common oral health diseases in PLWHA.

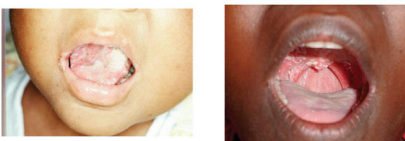
Source: Adapted from a presentation prepared by Cesar Augusto Migliorati, DDS, MS, PhD, Professor and Director of Oral Medicine in the Department of Biologic and Diagnostic Sciences at the University of Tennessee College of Dentistry. The presentation is entitled "HIV Diagnosis and the Oral Cavity" and was prepared for the AETC National Resource Center. The full presentation is available on the AETC Web site at www.aidsetc.com/aidsetc?page=etres-display&resource=etres-542.



SLIDE 2: DISEASES OF THE MOUTH AS INDICATOR FOR HIV INFECTION

 Diseases of the Mouth as Indicator for HIV Infection

- Some oral conditions may lead to suspicion of HIV infection.
- Common Examples:
 - **Oropharyngeal candidiasis**, commonly known as "thrush," is a fungal disease of the oral mucosa and tongue and is the most common intraoral lesion among PLWHA (shown in the images below).



Source: www.hiv.va.gov/presenter/image.library/ent.asp?page=1&slide=137 Source: www.hiv.va.gov/presenter/image.library/ent.asp?page=1&slide=137

- Some oral conditions may lead to suspicion of HIV infection
- Common examples:
 - *Oropharyngeal candidiasis*, commonly known as "thrush," is a fungal disease of the oral mucosa and tongue and is the most common intraoral lesion among PLWHA.



SLIDES 2–3: ESOPHAGEAL CANDIDIASIS

Esophageal Candidiasis

- *Esophageal candidiasis* is candida that infects the esophagus
- Can cause **dysphagia**, or difficulty with swallowing, or **odynophagia**, pain with swallowing.
- Esophageal candidiasis is an **AIDS-defining condition**.
- Generally occurs in individuals with **CD4 counts of <200 cells/μL**.
- It is the most common cause of esophageal infection in PLWHA.




Photo Source: www.hiv.gov/govmedia/ContentLibrary/ContentLibrary.aspx?ContentID=118

- *Esophageal candidiasis* is candida that infects the esophagus, which can cause dysphagia, or difficulty with swallowing, or dynophagia, pain with swallowing.
 - Esophageal candidiasis is an AIDS-defining condition, generally occurring in individuals with CD4 counts of <200 cells/μL.
 - It is the most common cause of esophageal infection in persons with AIDS.

Esophageal Candidiasis, continued

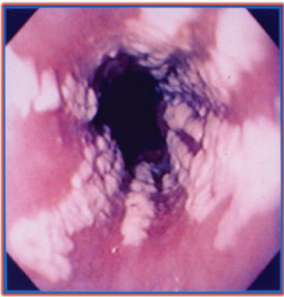



Photo Source: www.hiv.gov/govmedia/ContentLibrary/ContentLibrary.aspx?ContentID=118



SLIDE 4: HAIRY LEUKOPLAKIA

Hairy Leukoplakia

- Before the era of ART, **hairy leukoplakia** was considered one of the most common oral diseases in PLWHA
- Occurred in ~ 15 – 20 % of PLWHA
- Often seen in PLWHA with delayed entry to care¹
- PLWHA with hairy leukoplakia tend to have **moderate to advanced immune suppression**, with a median CD4 count of approximately **235 cells/mm³**.



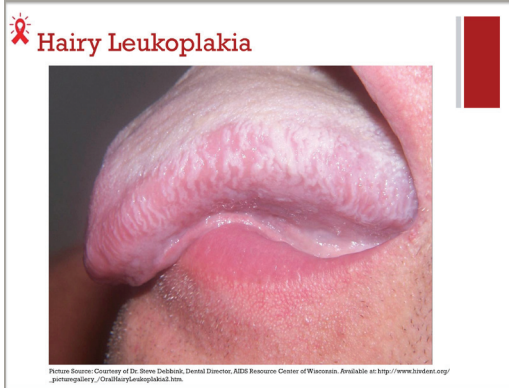
¹ Husak R, Garbe C, Orfanos CE. Oral hairy leukoplakia in 71 HIV-seropositive patients: clinical symptoms, relation to immunologic status, and prognostic significance. *J Am Acad Dermatol.* 1996;35:928–34.

- Before the era of ART, hairy leukoplakia was considered one of the most common oral diseases in PLWHA, occurring in approximately 15 to 20 percent of PLWHA, and is often seen in PLWHA with delayed entry to care.¹
- PLWHA with hairy leukoplakia tend to have moderate to advanced immune suppression, with a median CD4 count of approximately 235 cells/mm³.

¹Husak R, Garbe C, Orfanos CE. Oral hairy leukoplakia in 71 HIV-seropositive patients: clinical symptoms, relation to immunologic status, and prognostic significance. *J Am Acad Dermatol.* 1996;35:928–34.



SLIDE 5: HAIRY LEUKOPLAKIA (CONTINUED)



SLIDES 6–7: KAPOSI SARCOMA

Kaposi Sarcoma

- **Kaposi sarcoma (KS)** is a cancer that develops from cells lining lymph or blood vessels.
 - Usually appears as tumors on the skin or on mucosal surfaces such as the oral cavity.
 - Tumors can also develop in other parts of the body, such as in the lymph nodes or digestive tract.
- ~1/3 of PLWHA with AIDS-associated KS develop oral lesions.
 - AIDS-associated KS is often much more aggressive than classic KS.¹
- KS is considered an “AIDS-defining” illness.²

Memorial Sloan-Kettering Cancer Center. About Kaposi Sarcoma. Available at: www.mskcc.org/cancer-care/adult/aids-associated/about-kaposi-sarcoma.
American Cancer Society. Kaposi Sarcoma. Available at: www.cancer.org/acs/groups/cid/documents/webcontent/003106.pdf.

Kaposi Sarcoma, continued

The abnormal cells of KS form purple, red, or brown blotches or tumors on the skin, also called lesions.¹

Appearance of KS can vary greatly in the oral cavity and, thus, proper recognition is important.

Picture Source: Copyright David Reasid, DDS. All Rights Reserved. Available at <http://www.hivdent.org/journalgallery/RS138.htm>.

Picture Source: Copyright David Reasid, DDS. All Rights Reserved. Available at <http://www.hivdent.org/journalgallery/RS139.htm>.

American Cancer Society. Kaposi Sarcoma. Available at: www.cancer.org/acs/groups/cid/documents/webcontent/003106.pdf.

- Kaposi sarcoma (KS) is a cancer that develops from cells lining lymph or blood vessels. KS usually appears as tumors on the skin or on mucosal surfaces such as the oral cavity, but tumors can also develop in other parts of the body, such as in the lymph nodes or digestive tract. The abnormal cells of KS form purple, red, or brown blotches or tumors on the skin, also called lesions.¹ That said, the appearance of KS can vary greatly in the oral cavity and, thus, proper recognition is important.
- Approximately one-third of PLWHA with AIDS-associated KS develop oral lesions. AIDS-associated KS is often much more aggressive than classic Kaposi sarcoma.²
- KS is considered an “AIDS-defining” illness, which means that when KS occurs in someone infected with HIV, that person officially has AIDS (and is not just HIV-positive).³

¹American Cancer Society. *Kaposi Sarcoma*. Available at: www.cancer.org/acs/groups/cid/documents/webcontent/003106-pdf.pdf.

²Memorial Sloan-Kettering Cancer Center. About Kaposi Sarcoma. Available at: www.mskcc.org/cancer-care/adult/aids-associated/about-kaposi-sarcoma.

³American Cancer Society. *Kaposi Sarcoma*. Available at: www.cancer.org/acs/groups/cid/documents/webcontent/003106-pdf.pdf.



SLIDE 8: OTHER STDs AND THEIR IMPACT ON ORAL HEALTH

Other STDs and Their Impact on Oral Health

- HIV and certain other STDs are common comorbidities in PLWHA.
- Some of these STDs, like *syphilis*, *herpes*, and *gonorrhea*, can manifest in the oral cavity.

Herpes in the Oral Cavity

Picture Source: www.hiv.va.gov/provider/image-library/oral.asp?post:1&slide:120 Picture Source: www.hiv.va.gov/provider/image-library/oral.asp?post:1&slide:124

- HIV and certain other STDs are common comorbidities in PLWHA.
- Some of these STDs, like syphilis, herpes, and gonorrhea, can manifest in the oral cavity.



SLIDE 9: HIV AND SYPHILIS

HIV and Syphilis

- Syphilis* may manifest in the oral cavity presenting with an ulcer-like lesion.
- The lesion may be painful and the only clinical manifestation of the STD.

HIV+ with a Syphilitic Lesion on the Labial Mucosa

Picture Source: www.adaaet.com/adaet?page=ctores-display&source:ctores:561

- Syphilis may manifest in the oral cavity presenting with an ulcer-like lesion.
- The lesion may be painful and the only clinical manifestation of the STD.



SLIDE 10: HIV AND ORAL GONORRHEA

HIV and Oral Gonorrhea

HIV+ with Oral Gonorrhea

Gingival tissues are swollen and necrotic


Soft palate is red and painful

Picture Source: www.adaaet.com/adaet?page=ctores-display&source:ctores:542

- The following patient presented with severe gingival pain and a sore throat. He had oral sex with his partner a few days before. He found out later that his partner had genital gonorrhea.




SLIDE 11: ORAL HEALTH EXAM TRAINING VIDEO FOR CLINICAL STAFF

 **Oral Health Exam Training Video for Clinical Staff**

- This video presentation provides instruction on performing both external and intraoral patient exams.
- Features **Carol Stewart, DDS, MS, MS**, Dental Director of the Florida/Caribbean AETC and Professor and Director of the Division of Oral Diagnostic Sciences, Department of Oral and Maxillofacial Surgery and Diagnostic Sciences at the University of Florida College of Dentistry

Video
www.aidsetc.org/mpeg/archive/oral_health_03.mpg




Video

- *Oral Health Exam Training Video for Clinical Staff* featuring Carol Stewart, DDS, MS, MS, Dental Director of the Florida/Caribbean AETC and Professor and Director of the Division of Oral Diagnostic Sciences, Department of Oral and Maxillofacial Surgery and Diagnostic Sciences at the University of Florida College of Dentistry
- Video: www.aidsetc.org/mpeg/archive/oral_health_03.mpg



- Explain to the class that this video presentation provides instruction on performing both external and intraoral exams.
- Have the class watch the video (~12 minutes in length).



SLIDES 12–58: CASE STUDIES: FLORID HPV AND KAPOSI SARCOMA

The following cases studies were adapted from case studies prepared by J. Kazimiroff, BS, DDS, MS FAGD, FACD, Cert.Ed; and K. Alvarado, DMD. Both Dr. Kazimiroff and Dr. Alvarado are from the Montefiore Medical Center at The University Hospital of Albert Einstein College of Medicine of Yeshiva University.




GROUP ACTIVITY CASE STUDY DISCUSSION



- Pass out handouts of the case studies below to each participant.
- *Kaposi Sarcoma*: <http://echo.hdwg.org/teaching-tools/case-study-kaposi-sarcoma>
- *Florid Human Papillomavirus (HPV) Oral Lesions*: <http://echo.hdwg.org/teaching-tools/case-study-florid-hpv-oral-lesions>
- Break the class into small groups of 3 to 4 people and discuss the presentation and treatment options for the case studies (15 minutes total).

After discussion, assign one person to deliver each group's assessment of the cases with the class.

SLIDES 12-17




ECHO
Evaluation Center on HIV & Oral Health

Case Study #1 Kaposi Sarcoma

J. Kazimiroff, BS, DDS, MS
FAGD, FACD, Cert.Ed
K. Alvarado, DMD
Montefiore Medical Center
The University Hospital of Albert Einstein
College of Medicine of Yeshiva University
Department of Dentistry
May 25, 2010

Slide 12



ECHO
Evaluation Center on HIV & Oral Health

This case study has been produced by the Evaluation Center on HIV & Oral Health (ECHO) at Boston University School of Public Health. Funding for this project has been provided by the Health Resources and Services Administration Special Projects of National Significant Oral Health Initiative award number 5 H97HA07519-03-00.

For additional information regarding the ECHO project go to www.hdwg.org/echo.

Slide 13

Patient Information

- Age at time of Diagnosis: 21 years
- Gender: Male
- Race: African American
- Chief complaint: "My gum is sore."

Slide 14

Medical History

- **Diseases and conditions:**
 - HIV+ due to HIV-1, RF=MSM
 - Dx 3/05, CD4 85, VL < 75 on HAART
 - Lymphadenopathy
- **Medications:**
 - Spectazole™ (Econazole Nitrate, Ortho-Menial Pharmaceutical, Inc.)
 - Peridex™ (Chlorhexidine rinse, 3M ESPE)
 - Zithromax™ (Azithromycin, Pfizer US Pharmaceuticals)
 - Dapsone™ (Diamino Diphenyl Sulfone, Generic)
 - Reyataz™ (Atazanavir, Bristol-Meyers Squibb, USA)
 - Norvir™ (Ritonavir, Abbott Laboratories)
 - Epzicom™ (Abacavir Sulfate Lamivudine, Glaxosmithkline)
 - Ensure™ (Abbott Laboratories)
- **Allergies:** NKA

Slide 15

Pre-Op Labs

• Glucose	73		70-115 u/L
• RBC	4.71		395-1494 /uL
• Hemoglobin	13.9	low	14-17.4 g/dL
• Hematocrit	40.2		36-45.0 %
• Platelet-Count	194	low	150-400.0 k/uL
• WBC	3.3	low	4.8-10.8 k/uL
• GRANULOCYTE	58%		40-70 %
• CD4+T _{help} cells (uL)	177	low	395-1495 /uL

- Viral Load: HIV-1 RNA (bDNA-HIV) <75

Slide 16

Oral Health History

- **Oral hygiene:** Fair
- **Habits:** None
- **Previous dental treatment:** Routine dental care
- **Adverse dental experiences:** None reported

Slide 17

SLIDES 18–23

Social Considerations

- **Psychosocial issues:**
 - Medical complications
 - Fear of the unknown (new provider)
 - Shy, introverted, sensitive about medical status.

Slide 18

Clinical/Radiological Findings

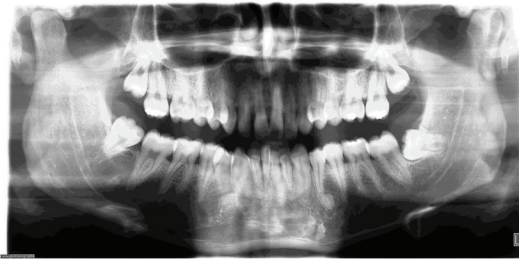
- Pre-treatment clinical photo



Slide 19

Clinical/Radiological Findings

- Pre-treatment radiographs



Slide 20

Clinical/Radiological Findings

- Clinically, the lesion manifested itself as an inflamed hyperplastic looking tissue around Teeth #17 and #18.
Note: It could have easily been mistaken for acute gingival inflammatory conditions such as pericoronitis, ANUG or trauma due to UL wisdom tooth.
- Panoramic X-ray indicated impacted 3rd molar on LL side.

Slide 21

CC: "My gum is sore."

- First line observation of clinical manifestation (We did not recognize lesion as KS)
- Referral to oral surgery for extraction of tooth
- Histopathology performed at time of extraction

Slide 22

Diagnosis

- Kaposi Sarcoma

Slide 23

SLIDES 24-17

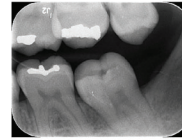
Treatment plans

- **Phase I:**
OHI, Oral Prophylaxis with SRP of UR and LR quadrants
Extractions of Teeth #1, 16, 17, 32
- **Phase II:**
Restorations on teeth #2, 3, 9, 14, 15, 18, 19, 30 and 31
- **Phase III:** n/a
- **Phase IV:**
Recall and Preventative maintenance

Slide 24

Clinical/Radiological Findings

- Post-treatment radiographs:



Slide 25

Post Op Labs: 2/4/2010

- | | | |
|------------------------------------|-------|------------------|
| • Glucose | 75 | 70-115 mg/dL |
| • RBC | 4.92 | 395-1494 /uL |
| • Hemoglobin | 14.1 | 14-17.4 g/dL |
| • Hematocrit | 41.8% | 36-45.0 % |
| • Platelet-Count | 237 | 150-400.0 k/uL |
| • WBC | 5.4 | 4.8-10.8 k/uL |
| • GRANULOCYTE | 57% | 40-70 % |
| • CD4+T _{help} cells (uL) | 242 | low 395-1495 /uL |
- Viral Load: HIV-1 RNA (bDNA-HIV) <75

Slide 26

Patient follow-up/notes

(What was significant regarding access and retention into care?)

- AIDS due to HIV-1
- Recurrence of Kaposi Sarcoma in inguinal lymph node confirmed by biopsy.
- Post operative and re-call follow up at 6 months and 1 year.
- Management of medical status.

Slide 27

Case Study: Florid HPV Oral Lesions

J. Kazimiroff, BS, DDS, MS
FAGD, FACD, Cert.Ed
K. Alvarado, DMD
Montefiore Medical Center
The University Hospital of Albert Einstein
College of Medicine of Yeshiva University
Department of Dentistry
May 25, 2010

Slide 28

Patient Information

- Age: 54
- Gender: Male
- Race: African American
- Chief complaint: "I have oral warts."

Slide 29

SLIDES 30–35

Medical History

- Diseases and conditions:
 - AIDS diagnosed 1990 RF=MSM
 - Bullous Emphysema
 - Chronic Kidney Disease Stage III
- Past medical history:
 - Hx of Tuberculosis, treated at age 4
 - Hx of substance abuse, Cocaine
 - Pneumocystis carinii pneumonia
 - CMV retinitis, b/l implants placed 10 years ago
 - Mycobacterium avium intracellulare infection
 - Cryptosporidiosis
 - Herpes Simplex Type II
- Allergies: Sulfur (causes itching, pruritis)

Slide 30

Medications

- Epzicom™ (Abacavir Sulfate, Glaxosmithkline)
- Dapsone™ (Diamino-diphenyl sulfone, Biovail)
- Prevista™ (Darunavir, Tribotec Laboratories)
- Norvir™ (Ritonavir, Abbott Laboratories)
- Valtrex™ (Valacyclovir Hydrochloride, Cipla)
- Ambien™ (Zolpidem Tartare, Sanofi-aventis US)
- Salivart™ aerosol (Gebauer Company)
- Suplena™ Meal Supplement (Abbott Laboratories)
- Multivitamins
- Zinc Sulfate

Slide 31

Pre-Op Labs: 4/28/2008

- | | | | |
|------------------------------------|-------|-----|-----------------|
| • Glucose | 65 | low | 70-115mg/dL |
| • RBC | 4.69 | | 4.5-5.90 MIL/uL |
| • Hemoglobin | 12.0 | low | 14.0-17.4 g/dL |
| • Hematocrit | 35.4 | low | 36-45.0% |
| • Platelet-Count | 251.0 | | 150-400 k/uL |
| • WBC | 7.8 | | 4.8-10.8 k/uL |
| • GRANULOCYTE | 56 | low | 40-70 % |
| • CD4+T _{help} cells (uL) | 144 | low | 395-1495/uL |
- Viral Load: HIV-I RNA (bDNA-HIV) <75

Slide 32

Oral Health History

- Oral hygiene:
 - Poor
- Habits:
 - Smoker (1 pack/day for 15 yrs.)
- Previous dental treatment:
 - Routine dental care
- Adverse dental experiences:
 - None reported

Slide 33

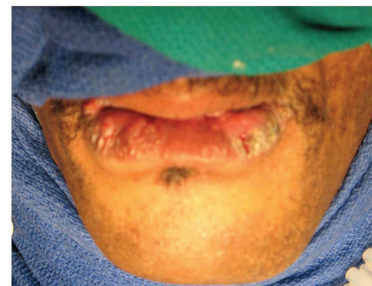
Social Considerations

- **Psychosocial issues:**
 - Multiple medical complications
 - Hx of drug dependency, Cocaine
 - Self-conscious due to appearance of oral lesions

Slide 34

Clinical/Radiological Findings

- Pre-treatment clinical photo



Slide 35

SLIDES 36–41

Clinical/Radiological Findings

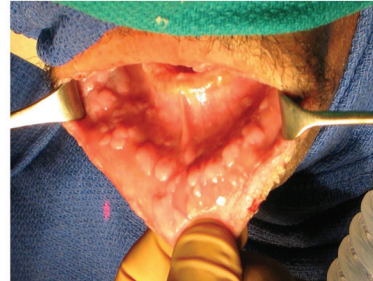
- Pre-treatment clinical photo



Slide 36

Clinical/Radiological Findings

- Pre-treatment clinical photo



Slide 37

Clinical/Radiological Findings

- Pre-treatment radiographs



Slide 38

Diagnosis

- Non-restorable teeth due to extent of decay
- HPV associated oral lesions (warts) located on alveolar mucosa of ridges, palate, tongue and lips

Slide 39

Treatment plans

- **Phase I & II:**
 - Full mouth extraction due to gross decay
 - Laser ablation in OR to remove HPV associated oral lesions
- **Phase III:**
 - Fabrication of CU/CL dentures
- **Phase IV:**
 - F/U every 6 months

Slide 40

Laser Ablation

- Laser Class 4/IV
 - CO₂ 10,600 nm 250mj, 2 ms Pulse Max
 - 60 WMAX

Ultra Pulse Encore
Coherent Medical Group
2400 Condense St.
Santa Clara, CA 95051-0901 USA

Slide 41

SLIDES 42-47

Clinical/Radiological Findings

- Laser Ablation in OR 4/30/2009



Slide 42

Clinical/Radiological Findings

- Laser Ablation in OR 4/30/2009



Slide 43

Clinical/Radiological Findings

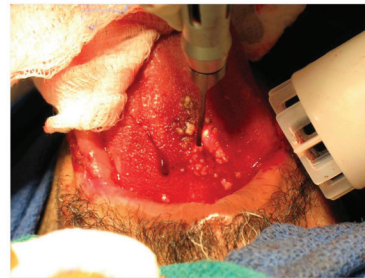
- Laser Ablation in OR 4/30/2009



Slide 44

Clinical/Radiological Findings

- Laser Ablation in OR 4/30/2009



Slide 45

Clinical/Radiological Findings

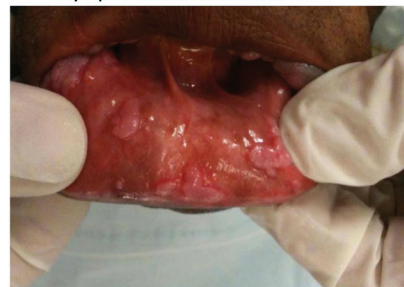
- Post-treatment clinical photos taken on 5/28/2010
 - 1yr post ablation, recurrence



Slide 46

Clinical/Radiological Findings

- Post-treatment clinical photos taken on 5/28/2010
 - 1yr post ablation, recurrence



Slide 47

SLIDES 48–53

Clinical/Radiological Findings

- Post-treatment clinical photos taken on 5/28/2010
 - 1yr post ablation, recurrence



Slide 48

Clinical/Radiological Findings

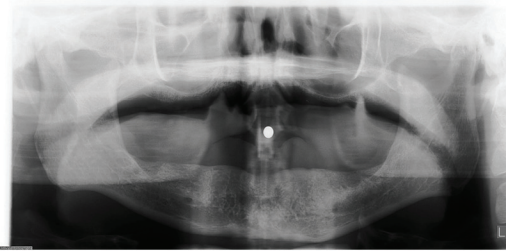
- Post-treatment clinical photos taken on 5/28/2010
 - 1yr post ablation, recurrence



Slide 49

Clinical/Radiological Findings

- Post-treatment clinical radiographs:



Slide 50

Oral Pathology Findings

- Preliminary typing showed HPV-32/42 in at least in one of the lesion samples with a high viral load.
- Given this rather novel type for the oral cavity, we are in the process of confirming these results.

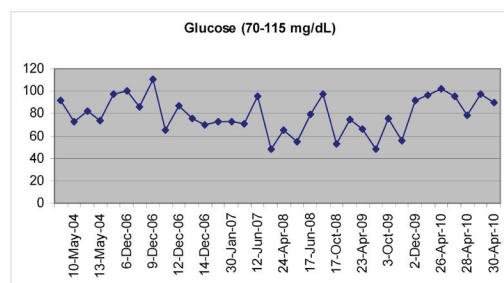
Slide 51

Post-Op Labs: 4/30/2010

- Glucose 90 (70-115 mg/dL)
- RBC 3.85 low (4.5-5.90 MIL/uL)
- Hemoglobin 7.89 low (14.0-17.4 g/dL)
- Hematocrit 25.2 low (36-45.0 %)
- Platelet-Count 106.6 low (150-400 k/uL)
- WBC 5.5 (4.8-10.8 k/uL)
- GRANULOCYTE 56% (40-70 %)
- CD4+T_{help} cells (uL) 45 uL (395-1495/uL)
- Viral Load:HIV-1 RNA (bDNA-HIV) 31,561

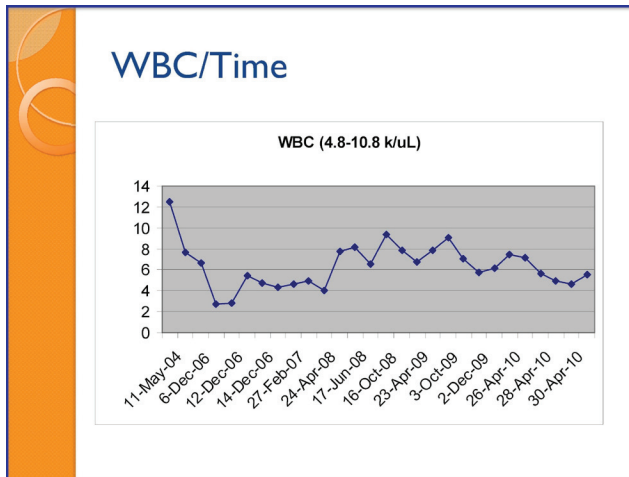
Slide 52

Glucose/Time

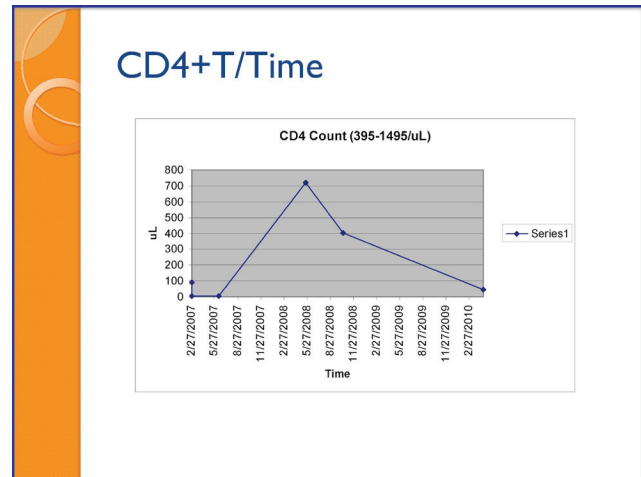


Slide 53

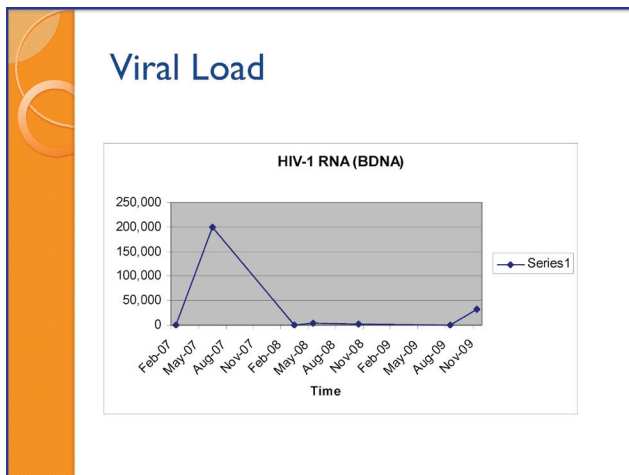
SLIDES 54–57



Slide 54



Slide 55



Slide 56

Patient follow-up/notes

(What was significant regarding access and retention into care?)

- Oral lesions were recurrent and multiple trips to the OR for laser ablation were required.
- Patient states that he has relapsed in smoking and he believes that it has aggravated the recurrence of his lesions.
- Ablation allowed for impression making for fabrication of complete dentures.
- Post operative and re-call follow up at 6 months, 1 y.
- Medical management of HIV status.

Slide 57

PART 2 (90 MINUTES)



SLIDE 59: SUPPLEMENTARY RESOURCE— WEBINAR FOR ORAL HEALTH SCREENING IN PRIMARY CARE SETTING

Webinar for Oral Health Screening in Primary Care Setting

- The Webinar recording is approximately 1.5 hours in length and can thus be watched together in the classroom setting or assigned as “homework” for individual student viewing.
- The Webinar was created for providers by HRSA HIV/AIDS Bureau's Chief Dental Officer, LCDR Mahyar Mofidi, DMD, PhD.

Webinar Recording
<https://careacttarget.org/library/oral-health-screening-primary-medical-care-setting>

<https://careacttarget.org/library/oral-health-screening-primary-medical-care-setting>

- The Webinar recording is approximately 1.5 hours in length and can thus be watched together in the classroom setting or assigned as “homework” for individual student viewing. The Webinar was created for providers by HRSA HIV/AIDS Bureau’s Chief Dental Officer, LCDR Mahyar Mofidi, DMD, PhD.



The objectives of the video are to enable viewers to:

- Describe the impact of oral health disease in PLWHA,
- Perform oral health screenings on HIV-infected patients, and
- Describe strategies for linking patients with HIV to dental care.



HANDOUT

ORAL HEALTH ASSESSMENT TOOL

- Distribute copies of subjective data questionnaire to screen for oral health issues in HIV/AIDS patients at the end of class.

NURSES ORAL ASSESSMENT OF HIV/AIDS PATIENTS

Subjective Data Questions to Ask Patients: Dental History

- How often do you go to the dentist?
- What dental work have you had?
- Have you had any tooth extractions? Any post-op complications?
- Have you had previous orthodontic work?
- How many times a day do you brush or floss?
- Do you use a fluoride toothpaste or mouth rinse?
- Have you experienced any bleeding from your mouth or gums? How long?
- Do your gums bleed when you brush your teeth, floss, or eat?
- Do you wake up with blood on your pillow?
- Do you have dentures/dental appliances or braces?
- How do your dentures fit?
- Are there any areas of irritation in the gums under your dentures?
- How long do you wear your dentures at any one time?
- How do you care for your dentures?
- Have you had problems with speech or breathing?
- Do you have any loose teeth?
- Do you have difficulty chewing?
- Have you lost any teeth? How did it happen?
- Do you have or have you had lumps, redness, swelling, ulcers, blisters, sores, cracking, or pain on your:
 - lips – throat
 - gums – roof of mouth, back of mouth
 - tongue – sides of mouth?
- Have you had any pain in your jaw? When does it occur? Describe it (e.g., severity, duration).
- Have you had any pain/swelling in your head, face, or neck? When? For how long?
- Do you have any swollen glands or lumps in your neck? Are they tender? Are they persistent or do they come and go? How long have you had them?
- Have you had any white patches in your mouth, or on your tongue?
- Do you have problems with food sticking in your throat or being difficult to swallow?
- Do you have or have you ever had a dry mouth, loss of taste, distortion of taste, or burning in your mouth?
- Have you had any trauma or burned your mouth? Describe it—appearance, severity, pain, location.
- What makes it better/worse? How long have you had it?
- What do you take/do to relieve symptoms? Does it help?
- Is it constant or intermittent?
- Does it interfere with eating/drinking, swallowing, opening mouth? What foods do you avoid?
- Have you had any involuntary weight loss?
- Do you have toothaches? Do you have “cavities?” Where? How long? Describe them.
- Do you have any odor on your breath?
- Have you seen any dark spots on your gums, tongue, or other areas of your mouth?
- Where have you lived/traveled?
- Do you smoke or chew tobacco? How much? How long?
- Do you drink alcohol? How much? How long?
- Do you use cocaine/crack? How much? How long?

Source: Adapted from the AIDS Education and Training Center National Resource Center’s “HIV Oral Health Curriculum for Nursing Professionals.” Available at: www.aidsctc.org/pdf/p02-et/et-04-00/oral_health_02.pdf.



MODULE 6

Oral Health Care in PLWHA: Know the Facts



60 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector
- Copies of the handout (should be printed out and distributed to each person)
- Timer or watch with a second hand
- Calculator
- 6 pieces of paper
- 3 pencils or pens
- Prizes and/or a buzzer are optional but recommended.



- *Provide the class with the following instructions for Oral Health Jeopardy Game for Providers:* <http://hdwg.org/sites/default/files/HIV.OralHealth.Provider.Jeopardy%20Instructions.pdf>.
- *Trainer Answer Key and Talking Points:* http://hdwg.org/sites/default/files/HIV.OralHealth.Provider.Jeopardy.Answer.Key_wTalkingPoints.pdf.
 - Trainer should review handout/answer key with talking points before starting Jeopardy group activity, and refer to the accompanying talking points when reviewing answers with the group.



GROUP ACTIVITY

SLIDES 1–37: POWERPOINT SLIDES FOR JEOPARDY GAME FOR PROVIDERS

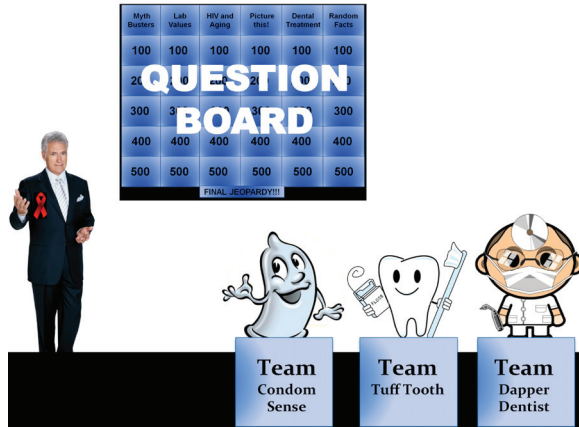


Lead class through Jeopardy game according to instructions provided above. Slides can be found at: <http://echo.hdwg.org/jeopardy>.

SLIDES 1–3



Slide 1



Slide 2

Myth Busters	Lab Values	HIV and Aging	Picture this!	Dental Treatment	Random Facts
100	100	100	100	100	100
200	200	200	200	200	200
300	300	300	300	300	300
400	400	400	400	400	400
500	500	500	500	500	500
FINAL JEOPARDY!!!					

Slide 3

SLIDES 4–9

Which of the following is a myth?

- A. HIV can be transmitted via shared eating utensils
- B. HIV can be transmitted via saliva
- C. HIV can be transmitted in an aerosol
- D. All of the above**

\$100 Scores

Slide 4

The capital of which country has the highest reported prevalence of HIV?

- A. USA**
- B. China
- C. England
- D. Australia

\$200 Scores

Slide 5

Which of the following is TRUE?

- A. Oral HPV will always result in oral warts or oral cancer
- B. HIV medications work by actively destroying HIV
- C. Receptive anal sex has a higher risk of HIV transmission than receptive oral sex**
- D. Standard precautions do not protect against the transmission of HIV

\$300 Scores

Slide 6

Which of the following is TRUE?

- A. Antibiotic prophylaxis is required for all patients with an AIDS diagnosis before invasive dental treatment
- B. HIV is more infectious than viral hepatitis
- C. The majority of HIV cases world-wide are among men who have sex with men
- D. Standard precautions are protective against bloodborne pathogens

\$400 Scores

Slide 7



Daily Double



Slide 8

High speed ultrasonic scalers:

- A. Are always safe to use with a person with an AIDS diagnosis**
- B. Never safe to use with a person with an AIDS diagnosis
- C. Sometimes safe and sometimes not safe, it depends on the patient's viral load
- D. Are not as effective as manual scaling

\$500 Scores

Slide 9

SLIDES 10–15

One definition of AIDS is when a HIV+ person's CD4 count drops below ___?

- A. 200 cells/mm³**
- B. 250 cells/mm³
- C. 300 cells/mm³
- D. 350 cells/mm³

\$100 Scores

Slide 10

Oral manifestations seen in association with HIV disease are more likely to occur when the ...

- A. CD4 Count is greater than 500 cells/mm³
- B. HIV viral load is between 200 and 500 copies/mL
- C. CD4 count is less than 200 cells/mm³ and HIV viral load is greater than 3,000 copies/mL
- D. HIV Viral Load is undetectable**

\$200 Scores

Slide 11

What is the lowest platelet count to safely perform an invasive dental procedure on a PLWHIV?

- A. 30,000
- B. 40,000
- C. 60,000**
- D. 70,000

\$300 Scores

Slide 12

Procedures involving moderate risk of bleeding such as simple extractions of up to 3 teeth can be safely performed on patients on warfarin if the INR is ___ ?

- A. Greater than 3
- B. Less than 3
- C. Greater than 4
- D. Between 1 and 3**

\$400 Scores

Slide 13

Which of the following requires premedication for dental treatment?

- A. A viral load >100,000
- B. An INR of 2
- C. An absolute neutrophil count of 500 cells/mcl**
- D. A and C

\$500 Scores

Slide 14

What is the major modifiable death risk factor among PLWHIV?

- A. Over-eating
- B. Smoking**
- C. Lack of weight-bearing exercise
- D. Lack of dental care

\$100 Scores

Slide 15

SLIDES 16-21

Is the following statement true or false?

It is estimated that by 2017, and possibly 2015, more than half of all individuals with HIV in the U.S. will be 50 and older

TRUE

\$200 Scores

Slide 16

Name 4 out of the 5 A's that are used for smoking cessation programs?

**Ask about smoking,
Advise to quit,
Assess willingness to quit,
Assist to stop,
Arrange for follow up**

\$300 Scores

Slide 17

Which of the following statements about PLWHIV over age 50 is TRUE?

- A. African-American women make up 11% of women over 50 and 65% of HIV infections among older women
- B. Until recently, people in their 50s and 60s did not believe they were at risk for HIV infection
- C. It is estimated that 15% of all new HIV infections occur in people over 50
- D. All of the above

\$400 Scores

Slide 18


Which of the following is TRUE?

- A. Age has a greater impact on bone fractures in PLWHIV than in people not living with HIV
- B. The pre-treatment CD4 count is significantly lower in PLWHIV over the age of 50
- C. PLWHIV over the age of 50 are hospitalized more frequently than other PLWHIV, but not for HIV-related conditions
- D. All of the above

\$500 Scores

Slide 19

What is the most common malignancy associated with HIV that may present like this?



Kaposi's Sarcoma

\$100 Scores

Slide 20

The medical term for the most common fungal infection of the mouth, which includes white patches that wipe away



Oral Pseudomembranous candidiasis

\$200 Scores

Slide 21

SLIDES 22-27


How long should oral candidiasis be treated?

- A. Treatment should continue until symptoms of candidiasis are gone, 3-7 days
- B. 10 days
- C. Two weeks**
- D. The answer depends on whether topical or systemic anti-fungal therapies are used

\$300 Scores

Slide 22

What is this?




Oral Warts

\$400 Scores

Slide 23

Present two weeks, sensitive to spicy foods, first occurrence, this patient has ...



- A. Median rhomboid glossitis
- B. Erythematous (Red thrush)
- C. Trauma
- D. A and B**

\$500 Scores

Slide 24

What are 3 things that can cause Xerostomia?

- Radiation**
- Medication**
- Chemotherapy**
- Alcohol consumption**
- Tobacco use**
- Sjögren's syndrome**

\$100 Scores

Slide 25

What are three ways to help manage dry mouth?

- Drink water**
- Chew on sugarless gum**
- Suck on sugarless gum**
- Artificial saliva**
- Avoid caffeine**
- Avoid sodas and high sugar products**
- Avoid mouth rinses with high alcohol content**

\$200 Scores

Slide 26

Which of the following is TRUE about medical-grade, alcohol-based hand rubs?

- A. They kill micro organisms more effectively than hand washing with soap and water if there is no visible debris**
- B. They are more damaging to skin than soap and water
- C. They are the preferred method of hand hygiene in all situations
- D. All of the above

\$300 Scores

Slide 27

SLIDES 28–33

Which of the following lesion(s) are only seen in PLWHIV?

- A. Kaposi's sarcoma
- B. Oral hairy leukoplakia
- C. A and B
- D. None of the above**

\$400 Scores

Slide 28

Daily Double



Slide 29

Immediately after an exposure, you should...


- A. Milk the wound
- B. Wash the wound with bleach
- C. Wash the wound with soap and water**
- D. Go to the emergency room to access appropriate medical follow up

\$500 Scores

Slide 30

How many Americans experience some anxiety and fear of the dentist?

- A. 1 million
- B. 15 million
- C. 30 million**
- D. 55 million



\$100 Scores

Slide 31

Which statement about saliva is TRUE?

- A. It mostly contains bacteria that are bad for your mouth
- B. It can act as a great lubricant for sex**
- C. It helps with swallowing food, not the digestion of food
- D. All of the above

\$200 Scores

Slide 32

Which of the following is TRUE?

- A. In the U.S., 1 in 5 people living with HIV infection do not know their status**
- B. Saliva is a vehicle for HIV transmission
- C. Kaposi's sarcoma is only seen in people with CD4 count under 200 cells/mm³
- D. HIV is more infectious than hepatitis B or C

\$300 Scores

Slide 33

SLIDES 34–37

Which of the following is TRUE?

A. The risk of HIV seroconversion after a needle stick injury involving a patient with HIV disease is 13%

B. The risk of HBV seroconversion after a needle stick injury involving a patient with hepatitis B is between 6% and 30%

C. There is a vaccine for HIV

D. Hepatitis C transmission only occurs through use of contaminated needles, unprotected sex is not a risk factor

\$400 Scores

Slide 34

Which of the following is FALSE?

A. Prince Charles has someone squeeze toothpaste on his toothbrush every day

B. In 1994, a prison inmate used tooth floss to escape from prison

C. In an average lifetime, a person produces 10,000 gallons of saliva

D. The only cheese that is good for your teeth is feta cheese

\$500 Scores

Slide 35



Slide 36

The number of documented cases of HIV seroconversion among dental health care workers following an exposure involving a patient with HIV disease in the dental setting is ----

Zero

Scores

Slide 37



HANDOUT

ORAL HEALTH MYTH BUSTERS

- http://hdwg.org/sites/default/files/HIV.OralHealth.Provider.Jeopardy.Answer.Key_.wTalkingPoints.pdf
- Handout consists of copies of the answer guide referenced above.



Copies of the handout should be distributed to group members after the game.

SECTION 3 Functional Strategies for Implementation



MODULE 7 Dental Case Management



45 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Copies of the Module 7 handout distributed in advance of training.




POWERPOINT PRESENTATION

DENTAL CASE MANAGEMENT: FILLING IN THE GAPS FOR BETTER HIV CARE



SLIDE 1: DENTAL CASE MANAGEMENT IN THE SPNS ORAL HEALTH INITIATIVE

 **Dental Case Management in the SPNS Oral Health Initiative**

9 out of 15 SPNS demonstration sites employed a dental case manager, patient navigator, or an outreach worker as part of their program model.


Having a dental case manager was a key success factor for SPNS Oral Health Initiative projects.



- As part of the SPNS Initiative, 9 out of 15 demonstration sites employed a dental case manager, patient navigator, or outreach worker as part of their program model.
- Having a dental case manager was a key success factor for SPNS oral health initiative projects.



SLIDE 2: THE VALUE OF A DENTAL CASE MANAGER—TESTIMONIALS

 **The Value of a Dental Case Manager – Testimonials**

Provider

- "It's important to find somebody that has that ability to communicate with patients and be trusting with patients, because I think that once you build that trust with the patient, they will always come back for care."
- Lucy Wright, Patient Navigator and AIDS Dental Case Manager, Native American Health Center

Patient

- "I had bad teeth as a kid, I didn't want to go [to the dentist].... They talk you through it. They are so, so cool. Very, very understanding. I hate to say this, you know I'm 50 plus years old, but I was afraid to go to the dentist." - SPNS Grantee Patient at Harbor Health

Patient

- "You need someone to centrally coordinate, so that one person coordinates what is going on or gives direction on what place to go and this eases the peace of mind." - SPNS Grantee Patient at Harbor Health

- Provider testimonial: *"It's important to find somebody that has that ability to communicate with patients and be trusting with patients, because I think that once you build that trust with the patient, they will always come back for care."*
—Lucy Wright, Patient Navigator and AIDS Dental Case Manager, Native American Health Center
- Patient testimonials about benefits of dental case manager:
 - *"I had bad teeth as a kid, I didn't want to go [to the dentist].... They talk you through it. They are so, so cool. Very, very understanding. I hate to say this, you know I'm 50 plus years old, but I was afraid to go to the dentist."*
—SPNS Grantee Patient at Harbor Health
 - *"You need someone to centrally coordinate, so that one person coordinates what is going on or gives direction on what place to go and this eases the peace of mind."*
—SPNS Grantee Patient at Harbor Health




SLIDE 3: WHAT IS DENTAL CASE MANAGEMENT?

What is Dental Case Management?

Dental case managers ultimately have the same objective as other types of case managers: to increase access to and retention in care.

- Where dental case managers differ, however, is that they are able to address barriers to oral health care in a way that other HIV-care providers cannot.
- Dental case managers enable HIV case managers to focus on other issues within a client's service plan without sacrificing access to oral health care.




- It's common to find HIV case managers working in medical settings (medical case management) or social service organizations (psychosocial case management), but dental case management in the HIV setting is relatively new.
- Dental case managers ultimately have the same objective as other types of case managers: to increase access to and retention in care.
- Where dental case managers differ, however, is that they are able to address barriers to oral health care in a way that other HIV-care providers cannot.
 - Most HIV case managers have a large patient caseload and a series of service areas to address, many of which may be more pressing than oral health care. Oral health often gets pushed to the bottom of the list, if it is on the list to begin with.
 - Dental case managers enable HIV case managers to focus on other issues within a client's service plan without sacrificing access to oral health care.



SLIDE 4: THE ESSENTIAL FUNCTIONS OF A DENTAL CASE MANAGER

The Essential Functions of a Dental Case Manager

- Recruiting patients into care
- Scheduling and arranging patient transportation to appointments
- Following up with patients regarding missed appointments
- Coordinating and referring patients to other services, such as HIV case management, medical care, or support services
- Serving as part of a team that helps educate other providers in the continuum of HIV care on the importance of oral health care and how to refer their patients to dental services
- Retention services
- Language translation services, in some instances.



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- Following up with patients regarding missed appointments
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- Retention services
- Language translation services, in some instances.




SLIDE 5: INTEGRATING DENTAL CASE MANAGEMENT INTO YOUR PRACTICE

Integrating Dental Case Management into Your Practice

- Employing a dedicated dental case manager can be difficult financially, which is why the dental case managers in the SPNS projects had multiple secondary responsibilities outside of their primary responsibility for dental case management.
 - Some of these included:
 - Conducting patient surveys
 - Entering data
 - Driving a mobile van
 - Staffing the front desk/serving as receptionist


While it is not required that a dental case manager have a dental background, those who were dental assistants by training can assist with dental care.



- Employing a dedicated dental case manager can be difficult financially, which is why the dental case managers in the SPNS projects had multiple secondary responsibilities outside of their primary responsibility for dental case management.
- Some of these included:
 - Conducting patient surveys.
 - Entering data.
 - Driving a mobile van.
 - Staffing the front desk/serving as receptionist.
 - While it is not required that a dental case manager have a dental background, those who were dental assistants by training can assist with dental care.



SLIDE 6: OTHER SOLUTIONS FOR INTEGRATING DENTAL CASE MANAGEMENT

 **Other Solutions for Integrating Dental Case Management**

There are a number of ways to integrate dental case management into your organization, no matter your size or resource limitations.

- Consider creating a network of individuals supporting dental case management.
- Have HIV case managers take on dental case management, depending on their existing workload.
- Organizations with multiple case managers can dedicate one case manager to oral health.
- Ryan White nurse case managers could be trained to provide basic oral hygiene education and include oral health as part of their clinical assessments.

- Distribute the various dental case management functions among other staff, such as receptionists, schedulers, translators, dental hygienists, and so forth. Thus, there would not be one dental case manager, but a network of individuals supporting dental case management.
- Organizations that provide both medical and dental care could have their HIV case managers take on dental case management, depending on their existing workload.
- Organizations with multiple case managers can dedicate one case manager to oral health.
- Ryan White nurse case managers could be trained to provide basic oral hygiene education and include oral health as part of their clinical assessments.

Bottom line: There are a number of ways to integrate dental case management into your organization, no matter your size or resource limitations. The most important thing is to make dental case management an integral part of clinic operations.



HANDOUT

SAMPLE DENTAL CASE MANAGER JOB DESCRIPTION

SAMPLE DENTAL CASE MANAGER JOB DESCRIPTION

Adapted from example from Lane HIV Alliance, Eugene, OR

Please use this job description as a reference only. Revisions may be needed to reflect the needs of your organization.

POSITION TITLE: Dental Case Manager

REPORTS TO: Executive Director

POSITION AND BENEFITS

1. Current FTE: Up to .5 FTE (20 hours/week)
2. Paid holidays, vacation time, and discretionary leave prorated to FTE
3. Health insurance (medical, dental, vision) available to employees working .75 FTE and above.
4. This position is salaried & exempt, i.e. not subject to state and federal wage and overtime requirements.

THE POSITION

The dental case manager provides dental case management for people living with HIV including assisting them in receiving services from the Lane HIV Alliance's dental program. The dental case manager assists clients in filling out the necessary paper work, organization of paperwork, making appointments, getting to appointments and any follow up necessary in a timely manner.

RESPONSIBILITIES

1. Maintain an individual client load as Dental Case Manager
2. Familiarity with the Ryan White HIV/AIDS Program
3. Experience coordinating medical and/or dental care
4. Experience with Word, Excel and Access
5. Detail-oriented
6. Self-motivated/self-manager
7. Ability to work with diverse populations
8. Experience working with clients with drug and alcohol, mental health issues
9. Record keeping and organizational skills
10. Team player who is self-motivated, high-energy, enthusiastic
11. Valid Oregon Driver's license, driving record sufficient to be covered by agency auto insurance policy, ability to transport self to job-related events, meetings and locations
12. TB test (provided at agency)
13. Flexible hours required, including some evenings and weekends
14. Ability to pass agency criminal background check

Source: Evaluation Center on HIV and Oral Health. "Increasing Access to Oral Health Care for People Living with HIV/AIDS: The role of dental case managers, patient navigators and outreach workers." Available at: <http://hdwg.org/sites/default/files/resources/ECHODentalCaseManager.pdf>, p. 12.



MODULE 8

Provider-Patient Oral Health Education



60 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Copies of the handout (should be printed out and distributed to each person).

SUMMARY

This module provides recommendations for providers seeking to educate their patients about the components of a basic oral health care plan, the role of proper dental hygiene for oral and total systemic health, the importance of home dental care, and the management of pain related to oral disease and treatment.



POWERPOINT PRESENTATION



SLIDES 1–20: PROVIDER-PATIENT EDUCATION

Other Solutions for Integrating Dental Case Management

There are a number of ways to integrate dental case management into your organization, no matter your size or resource limitations.

- Consider creating a network of individuals supporting dental case management.
- Have HIV case managers take on dental case management, depending on their existing workload.
 - Organizations with multiple case managers can dedicate one case manager to oral health.
- Ryan White nurse case managers could be trained to provide basic oral hygiene education and include oral health as part of their clinical assessments.

- These slides are from the “Oral Health Care Patient Education” PowerPoint presentation prepared for the AIDS Education and Training Center National Resource Center by Diana Travieso Palow, MPH, MS, RN; Jeanne Adler, MSN, ARNP-C; Carol Stewart, DDS, MS; and Claudette Grant, MEd, CCRC, RN. These slides review components of a basic oral care plan, the role of proper dental hygiene for oral and systemic health, the importance of home dental care, and the management of pain. The presentation is available at: www.aidsetc.com/aidsetc?page=etres-display&resource=etres-542.

SLIDES 2–3

Oral Health Care Patient Education

Diana Travieso Palow, MPH, MS, RN

Jeanne Adler, MSN, ARNP-C

Carol Stewart, DDS, MS

Claudette Grant, MEd, CCRC, RN

Slide 2

Goals of the Program

- Review components of basic oral care plan
- Review role of proper dental hygiene for oral and systemic health
- Review home care
 - Mouth
 - Dentures
 - Treatment of dentures or partials for candidiasis
- Review management of pain
- Review management of “dry mouth”
- Review “Fact vs. Fiction”

Slide 3

SLIDES 4–9

Goals of Oral Health Program

1. Treat pain, diagnose pathology, and eliminate sources of infection
2. Stabilize and preserve oral tissues
3. Restore oral function
4. Educate patient regarding maintenance
5. Facilitate maintenance of adequate nutrition
6. Contribute to self-esteem and quality of life

Slide 4

Dental Visits

- All patients should be encouraged to regularly visit the dentist, at least once every 6 months
- Patients should disclose HIV status to their dentists
- Preventive, restorative, palliative, rehabilitative services should be provided



Slide 5

Dental Hygiene

- Reduces possible sources of infection and maintains integrity of teeth and gums
- Promotes a better appetite
- Identifies the correct use of topical and oral medications

Slide 6

Mouth Care

- Involves the teeth, gums, palate and tongue
- Patients should be encouraged to:
 - Brush teeth, at least twice/day or after meals
 - Soft toothbrush, replace every 1 – 2 months
 - Use toothpaste that contains fluoride
 - Floss after meals (be cautious with low platelet counts)
 - Regularly use an alcohol – free mouthwash
 - Moisturize and lubricate lips and mucosa as needed



Slide 7

Oral Care

- Brush 2 times/day with fluoride toothpaste
- Floss daily – (gently but thoroughly)
- Home fluoride program as appropriate
- Avoid constant snacking
- Avoid tobacco products
- Avoid alcohol



Slide 8

Denture Care

- Patients should be instructed to clean dentures and partials as thoroughly and as often as natural teeth, at least twice/day.
- A denture brush or toothbrush should be used and all surfaces brushed with toothpaste.
- Patient should check the mouth and gums after removing dentures for signs of irritation, redness or swelling.
- The entire oral mucosa should be cleaned after removing dentures. If painful or bleeding, oral swabs or saline-soaked gauze should be used.
- Dentures should be soaked (use 1.5 % H₂O₂) for several minutes or overnight.



Slide 9

SLIDES 10-15

Candidiasis Treatment – for Partial and/or Dentures

- Remove and thoroughly clean daily
- Soak in 1:1 dilution of chlorhexidine gluconate (PerioGard or Peridex)
- 1% sodium hypochlorite (if no metal)
- Benzalkonium chloride 1:750 if metal
- May use Fungizone on tissue side of denture or Nystatin powder before insertion

**Get a NEW toothbrush



Slide 10

Nutritional Status

- Promote healing with a diet high in protein and calories.
- The patient should eat multiple small amounts each day.
- Supplement meals with vitamins and minerals
- Avoid foods that are coarse, rough, acidic or spicy.
- Eat warm foods rather than hot.
- Cold or frozen foods such as pops, ice cream, and frozen yogurt are soothing and refreshing.



Slide 11

Xerostomia “Dry mouth”

- Inadequate saliva production - common
- May occur early in the course of the disease
- Dental visit necessary
 - ensure health teeth and gums
 - frequent recalls to avoid tooth loss
 - alcohol-free fluoride rinses



Slide 12

Xerostomia - “Dry Mouth” Signs and symptoms

- Xerostomia is the subjective feeling of oral dryness
 - Patient states they can't eat a meal without water
 - Frequent thirst
- Often accompanied by objective evidence of hyposalivation
 - Gloved hand will stick to mucosa
 - No “pooling” of saliva observed in floor of mouth
 - Significant dental decay
- Salivary gland enlargement sometimes observed

Slide 13

Hyposalivation

- Inadequate saliva production - common
- Due to HIV infection and medications which contribute to impaired salivation
- Treatment with fluorides, good oral hygiene, and frequent recalls are essential to avoid tooth loss



Slide 14

Xerostomia Management

- Saliva stimulants
 - Sugarless gum (Xylitol)
 - Sugarless hard lozenges
- Artificial saliva products -
 - Optimoist, Oral moisturizer
 - Mouth-Kote (OTC)



Slide 15

SLIDES 16–20

Xerostomia Therapies

- Biotene mouthrinses – alcohol free and antibacterial
- Biotene moisturizers for lips, cheeks
- Biotene gum – sugar free



Slide 16

Oral Pain

- Use topical anesthetics as needed but especially before meals

*Note – gag reflex may be diminished or lost

Slide 17

Sedative Mouth Rinse

- For temporary relief or pain from oral ulcers
- Rx: Must be compounded
 - 80 ml 2% viscous xylocaine
 - 80 ml Maalox
 - 100 ml distilled water
- Disp: 260 ml
- Sig: Swish for 1 minute and expectorate



*Note – gag reflex may be diminished or lost

Slide 18

Fact vs. Fiction

Common Products: beneficial vs. harmful:

- 1) Lemon and glycerin swabs
 - Harmful- irritates and dries oral mucosa
- 2) Mouthwashes without alcohol
 - Less beneficial if not formulated with an antiseptic agent (no antimicrobial effect)
 - Can mix non alcohol rinses with saline or H₂O₂ (properly diluted)



Slide 19

Fact vs. Fiction

Common Products: beneficial vs. harmful:

- 3) Moisturizers
 - Petroleum-based cannot be used in the mouth (danger of aspiration) and may cause lip inflammation with open wounds
 - Use of water-soluble moisturizers - absorbed by skin and tissue, provide hydration, and if fortified with Vitamin E can speed healing of ulcers. Saliva substitutes help moisturize the oral cavity.
- 4) Protective Agents
 - Substrates of antacids (e.g. Maalox) can be applied to inflamed or ulcerated areas
 - Carafate dissolved in water can provide a protective coating (swish and swallow)

Slide 20



SLIDE 21: MOTIVATIONAL INTERVIEWING: KNOWLEDGE IS POWER

Motivational Interviewing: Knowledge is Power

- Motivational Interviewing is...
 - An exercise that can inspire change and direct provider-patient education efforts.
 - A way of working with a patient that...
 - Allows the patient to decide what changes they want to make.
 - Puts the burden of change in the patient's hand.
 - Emphasizes the relationship as the primary means of making effective and lasting change.

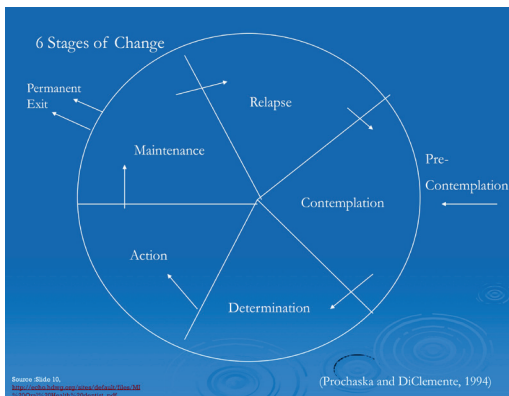
"People change when they hurt enough that they have to, learn enough that they want to, receive enough that they are able to."
—From "Falling Forward" by John Maxwell

Slides 21–42 are adapted from “Motivational Interviewing: A technique for inspiring change,” a PowerPoint presentation prepared as a training for the SPNS Oral Health Initiative grantees by Laura Fizek, LICSW. These slides review the principles and benefits of motivational interviewing as a tool for patient behavior change. The full presentation is available at: <http://echo.hdwg.org/sites/default/files/MI%20Oral%20Health%20dentist.pdf>.



SLIDE 22: 6 STAGES OF CHANGE

This picture illustrates the 6 stages of change that patients will go through when they change health behavior.



SLIDE 23: 6 STAGES OF CHANGE DEFINED

This slide defines each of the 6 stages of change, which are cognitive and behavioral.

Stages of Change

- Precontemplation:** Client is not even aware of problem, or does not think it is a problem. Provider's role is to increase client's awareness.
- Contemplation:** Contemplates Client begins to think about problem. Provider's role is to tip the balance and strengthen client's self-efficacy for change.
- Determination:** Client Decides that he/she wants to make a change and **MAKES A PLAN FOR CHANGING.** (It is very important not to skip this stage!) Provider's role is to help client determine best course of action.
- Action:** Client begins to institute change. Provider's role is to support client in changing. (Don't make the mistake of jumping to this stage too quickly.)
- Maintenance:** Client maintains new, desired change. Provider's role is to help client identify and use strategies to prevent relapse.
- Relapse** Client reverts to previous behavior or functioning. Provider's role is to help client renew process, beginning with whatever stage client is in following the relapse. **RELAPSE IS EXPECTABLE AND NORMAL.**
- Termination** Client is no longer concerned about relapse, and does not have to work at maintenance. Many people never reach this stage, which is fine. Provider's role is to acknowledge all the work client did, and celebrate a successful change effort.

(Adapted from Miller and Rollnick, 2002.)



SLIDES 24–42: MOTIVATIONAL INTERVIEWING

SLIDES 24–26

Motivational Interviewing
consists of five general principles

- Express empathy
- Develop discrepancy
- Avoid argumentation
- Roll with resistance
- Support self-efficacy

Slide 24

Expressing empathy
engages the patient

- Acceptance is key
Accept the patient for whom, what, and where they are, without trying to change them.
Acceptance does not necessarily mean agreement or approval.
Paradoxically, acceptance of people *as they are* frees them to change.
- Empathy is not sympathy
The provider does not join the patient in his or her perspectives, but rather responds to them as understandable, comprehensible, and valid.
- Change is difficult
Provider recognizes (and helps the patient to recognize) that if change were easy it would have happened long ago.

Slide 25

Developing discrepancy
allows the patient to make informed decisions

- Highlight discrepancy between where the patient is and where the patient wants to be, using *the patient's* statements.
- Use ambivalence to help the patient move through the process of change. Ambivalence is normal, and is a valuable tool.
- Acknowledge and support the arguments for change as the patient has expressed them.
- Gently point out consequences of maintaining status quo. Ask how this behavior (or action) will hinder or help the patient in moving towards his or her stated goals.

Slide 26

SLIDES 27–32

Avoiding argumentation

instills trust

- Arguments are counterproductive. Confrontation builds defensiveness, and people tend to dig in their heels further. If you make a statement to a patient about his/her behavior you are in effect asking him/her to argue the other side.
- Resistance is the provider's problem, not the patient's. If you encounter resistance, it signals that you are not doing work appropriate to the identified stage of change, and you are not accepting the patient. **When you meet resistance, do not try to overpower it. Change strategies.**
- Do not label patients. It is unnecessary, and counterproductive, to label patients (e.g. "alcoholic", "smoker", "addict", "in denial"). Behavior is important; labels are not.

Slide 27

Rolling with resistance

makes room for self-determination

- Use the patient's energy and momentum to your advantage. Follow them to an outcome that works for the patient in that particular moment.
- Offer new perspectives. Invite the patient to take what works and leave the rest.
- Utilize the patient's expertise. If you encounter "Yes, but..." ask the patient what solutions s/he sees.

Slide 28

Supporting self-efficacy

actualizes self-determination

- Self-efficacy refers not only to the ability to do something for one's self, but the *belief* that one has the ability to carry out and succeed with a given task.
- People with chronic disease may be particularly at risk for low self-efficacy, and often feel powerless to change their lives, as well as hopeless about the outcome. People cannot change their behaviors until they fully believe in their ability to do so.
- The provider's expectations can have a powerful impact on the outcome. Avoid a self-fulfilling prophecy of failure. Instead, build a collaborative, mutual experience of success.

Slide 29

Supporting self-efficacy

actualizes self-determination

- Use the success of others as a model for positive change, and to encourage patients. Do not use these examples to pressure patients, but rather to support them.
- If a particular approach fails, try another. A wide range of options and approaches to change are available. As long as patients keep trying, they have not failed.
- No one can change anyone else. Remind patients that if they want to change, only they can do it. The work is hard, but the rewards are great.

Slide 30

Motivational Interviewing

includes 5 basic skill techniques

- Open-ended questions
- Affirmations
- Reflective listening
- Summary statements
- Self-motivational statements

Slide 31

Motivational Interviewing

skills open the door for exploration

Open-ended questions:

- ❖ *What would you like to happen?*
- ❖ *Who will be most affected by this change?*
- ❖ *What possibilities do you see?*
- ❖ *How have you made changes in the past?*
- ❖ *What concerns do you have?*
- ❖ *When have you struggled with this?*
- ❖ *How will you know if you have made the change?*
- ❖ *What would happen if you tried something else?*

Avoid "Why" questions, which tend to evoke a defensive response.
Beware of the Question/Answer trap.
Try not to ask Yes/No questions, although sometimes they are useful, and unavoidable.

Slide 32

SLIDES 33–38

Scales

1 _____ 10

On a scale of 1-10

- How important is it to you to make this change?
- How ready are you to make this change?
- How confident are you that you can make this change?

Slide 33

Scales

Some questions to ask:

- How did you choose this number?
- What would it take to get to (a higher number)?
- What might get in the way of going from ____ to ____ (higher number)?

Slide 34

Motivational Interviewing

Affirms the patient's strengths and internal resources, and recognizes the patient's struggles

P: I told a good friend of mine that I decided to stop smoking.
DA: It sounds like **it was important for you** to share a change that you want to make in your life. How did that go?
P: I thought that we might not be friends anymore, because smoking is part of our hanging out together and now, I have to figure out what to do when we are together and he wants to and I want to quit.
DA: That's great. You really identified **what was important to you** and were able to share that with your friend. What are some of the things you are thinking you could do in place of smoking?
P: I thought of having something in my mouth, gum or a toothpick to deal with the feeling and I also thought about doing other stuff with him that is not just hanging out.
DA: Great. What are some of those things you might want to do?

Slide 35

Motivational Interviewing

*skills **Reflect** the meaning behind patient statements.*

Reflective Listening:

In order to offer reflective listening, you need to train yourself to think reflectively.

This includes the realization that what you believe or assume that people mean is not necessarily what they really mean.

Reflective statements are checking out a patient's reality in a neutral way. It is a statement, not a question.

Slide 36

Reflective listening examples:

P: I know that smoking isn't good for me, but I always need a cigarette to relax.
DA: You can't imagine relaxing without smoking.

P: I've heard about the risks of smoking and I know I am hurting my health.
DA: You're concerned about how smoking affects your overall health..

P: They say that exercise will help me feel better, but I just don't have the energy.
DA: It's hard to think about doing something that will take effort.

Slide 37

Motivational interviewing

*utilizes **Summary statements** to reinforce what client has shared and to support patient to move on*

Summary statements reinforce the comments made and allow the provider to hold the patient's ambivalence.

P: I am trying not to smoke as much, but I find it so hard to give up and I am afraid that I won't have a social life without it.
DA: I can hear that you are trying to balance your wish for a healthier lifestyle with a need to connect socially.

Slide 38

SLIDES 39–42

Motivational interviewing

elicits *Self-motivational statements*

- *I feel scared when I come here, but I know that keeping my mouth healthy is part of keeping myself healthy.*
- *My smoking might be a real problem for me.*
- *I don't want to get oral HPV on top of everything else.*
- *After my success over this last month, I am determined to change.*

Slide 39

Decisional matrix

is an effective tool to address the patient's ambivalence

- Benefits of status quo
- Costs of Status quo
- Benefits of change
- Costs of change

Slide 40

Elements that support change and growth

- Non-judgmental atmosphere
- Choice
- Acknowledge and address different ways people take in information
- Personal relevance
- Patience
- Expectations/confidence
- Belief in person's ability to change
- Respect
- Repetition. repetition, repetition



Slide 41

How can you support MI in your practice?

- Case consultation with staff - brainstorm shared messages to patients
- Practice MI during team meeting
- Agree on harm reduction principles as team - *any small change is still change*
- Others?

Slide 42



The Trainer can utilize the full motivational interviewing training for providers accessible at this link [Add additional 45 minutes to training]: [http://echo.hdwg.org/sites/default/files/MI%20Oral%20Health%20dentist .pdf](http://echo.hdwg.org/sites/default/files/MI%20Oral%20Health%20dentist.pdf)

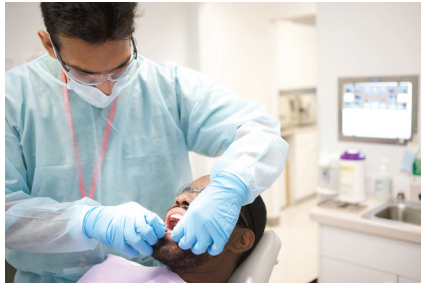


HANDOUTS



Print out copies of these documents and distribute to participants:

- *Key Oral Health Terminology and FAQs for Patients*
http://peer.hdwg.org/training_toolkit/hiv_and_oral_health.
- *Sample Motivational Interviewing Session Script*
<http://targethiv.org/sites/default/files/file-upload/resources/module5-handout1.pdf>
- *Optional Handout: Sample Patient Interview Guide and Base-line Oral Health Intake Survey* (See [appendix](#)).



MODULE 9

Peer-Patient Oral Health Education



30 minutes without playing Peer Jeopardy Group Activity in class;
60 minutes with Peer Jeopardy Group Activity

SUMMARY

Module 9 is intended to be a training for providers, consistent with the rest of the curriculum modules. The module is intended to be for providers to discuss how peers can be helpful in engaging PLWHA in care, and to familiarize themselves with a possible tool to use in peer education and training.

MATERIALS NEEDED:


- Computer and compatible LCD projector to play the PowerPoint presentation
- Copies of the handout (printed out and distributed to each person)
- Timer or watch with a second hand
- Calculator
- Paper for each group
- Pencils or pens for each group
- Prizes and/or a buzzer are recommended but optional.



POWERPOINT PRESENTATION




SLIDE 1: PEERS CAN PLAY IMPORTANT ROLE IN ORAL HEALTH EDUCATION AND CARE

 **Peers Can Play Important Role in Oral Health Education and Care**

■ Peers can encourage oral health care education and entrance into and adherence to HIV and oral health care for PLWHA, including:

- Providing transportation
- Connecting patients with other social services
- Accompanying patients to dental visits
- Talking to them about their oral health care
- Educating them about the importance of oral health care, including sharing their personal experience with oral health care
- Reminding patients about appointments
- Developing patient trust and reducing their fears of dental care.



- Peers can encourage oral health care education and entrance into and adherence to HIV and oral health care for PLWHA, including:
 - Providing transportation
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 - Educating them about the importance of oral health care, including sharing their personal experience with oral health care
 - Reminding patients about appointments
 - Developing patient trust and reducing their fears of dental care.



GROUP ACTIVITY

CASE SCENARIO FOR PEER OUTREACH



- Pass out copies of the handout.
- Have the class read through the case scenario silently.
- Once the class has finished reading the case scenario, have the class split into groups (recommend no more than 5 per group) to discuss the questions and the best way for a peer to approach “Sandra,” the patient in the case scenario below.
- After 5–10 minutes, reconvene the class and lead discussion around the approaches/tactics discussed in the small groups. For each question, encourage the class to think about the kinds of peer training that needs to occur to ensure that appropriate support is given to “Sandra.”

CASE SCENARIO: SANDRA

Background

The dental team introduces a new client named “Sandra” and explains her situation to you. They want you to help with getting her into dental care more regularly since she misses a lot of appointments and seems reluctant to complete her treatments. Sandra is 35 years old and in need of a lot of dental work, including some surgery to remove several teeth. She is a single mom who just got her life back together after being homeless and using alcohol and drugs for many years. It was during that time that Sandra contracted HIV through what she believes was unprotected sex. During this period in her life, she rarely sought dental care, and if she did, it was only when she had pain. Sandra is juggling two jobs and dealing with a legal issue to regain full custody of her daughter. Sandra seems very self-conscious when she speaks to anyone, and she always covers her mouth, as she has some decayed and discolored teeth. She has expressed an interest to go back to school to get her Associate’s Degree and a better paying job but, in her opinion, she doesn’t have the “smarts” or the time to think about school. She smokes about a pack a day to help calm her nerves even though she wants to quit. As you go to approach her outside, in front of the waiting room to the clinic, she is smoking a cigarette sitting on the steps and she does not make eye contact with you.


Discussion Questions

1. What are some of the biggest challenges Sandra faces to getting regular dental care?
2. Before you start talking with Sandra, what do you notice about her nonverbal communication (body language)? What does her body language suggest? How might this affect the way you approach her?
3. What are some ways you can start a conversation with Sandra?
4. Using open-ended style questions, list three questions that you would like to ask Sandra to learn more about her situation.
5. Sandra informs you that she doesn’t want the surgery because she doesn’t want the dentist pulling out her teeth and making her look ugly. She doesn’t want to go to work with missing teeth. How can you respond?
6. Identify three ways you specifically can help Sandra with getting the dental treatment she needs.


Source: Adapted from the Peer Education and Evaluation Center’s “HIV and Oral Health Module.” Available at: <http://peer.hdwg.org/sites/default/files/OralHealthContinuingEducation.pdf>, p. 10.



SLIDE 2: CASE SCENARIO FOR PEER OUTREACH: DISCUSSION QUESTIONS

 **Case Scenario for Peer Outreach: Discussion Questions**

1. What are some of the biggest challenges Sandra faces to getting regular dental care?
2. Before you start talking with Sandra, what do you notice about her nonverbal communication (body language)? What does her body language suggest? How might this affect the way you approach her?
3. What are some ways you can start a conversation with Sandra?
4. Using open-ended style questions, list three questions that you would like to ask Sandra to learn more about her situation.
5. Sandra informs you that she doesn't want the surgery because she doesn't want them pulling out her teeth and making her look ugly. She doesn't want to go to work with missing teeth. How can you respond?
6. Identify three ways you specifically can help Sandra with getting the dental treatment she needs.



1. What are some of the biggest challenges Sandra faces to getting regular dental care?
2. Before you start talking with Sandra, what do you notice about her nonverbal communication (body language)? What does her body language suggest? How might this affect the way you approach her?
3. What are some ways you can start a conversation with Sandra?
4. Using open-ended style questions, list three questions that you would like to ask Sandra to learn more about her situation.
5. Sandra informs you that she doesn't want the surgery because she doesn't want them pulling out her teeth and making her look ugly. She doesn't want to go to work with missing teeth. How can you respond?
6. Identify three ways you specifically can help Sandra with getting the dental treatment she needs.



Keep Slide 2 projected during group discussion and full class discussion as guide.



GROUP ACTIVITY

HIV ORAL HEALTH JEOPARDY GAME FOR PEERS

(http://peer.hdwg.org/training_toolkit/hiv_and_oral_health)



- Provide each participant with an electronic copy of the Jeopardy game PowerPoint presentation and Answer Key handout.
- See page 2 of the handout at <http://peer.hdwg.org/sites/default/files/OralHealthContinuingEducation.pdf>, follow instructions given for the game, and take the class through a few or all questions in the game.
- After reviewing the game materials or playing the game, lead the class in discussion about ways to use this game in peer training:
 - Do you think this game would be an effective teaching tool for peers?
 - If yes, why? How could we incorporate this into our peer training?
 - If not, what could be improved to make it a better fit for peers in our program?



MODULE 10

Taking the First Steps: Building Organizational Capacity for Oral Health Care



45 minutes

MATERIALS NEEDED:

- Computer and compatible LCD projector to play the PowerPoint presentation
- Whiteboard, large paper and easel, or other means of taking notes
- Colorful markers.



POWERPOINT PRESENTATION



SLIDES 1–3: REFRESHER: OVERVIEW OF PROS, CONS, AND IMPORTANT CONSIDERATIONS FOR THE SIX ORGANIZATIONAL MODELS



Briefly review the pros and cons of the 6 organizational models that were first discussed in module 3.

REFRESHER: Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (1 of 3)

Model	Grantee	Pros	Cons/Caveats
Reopening services at their existing clinic	• Harbor Health	• Most expedient model	• Does not necessarily enable clinics to expand oral health care access for new geographic areas or populations
Building satellite clinics	• AIDS Care Group • AIDS Resource Center Wisconsin • Special Health Resources for Texas • Community Health Center, Inc. • Translational Health Center	• Reduces travel time for some patients, often reducing a huge barrier to care • Enables greater patient enrollment • Improves likelihood of program sustainability	• Can be costly • Can take a lot of time to establish, including an navigation of regulations and completion of construction
Collaborating with clinics in dental hygiene schools or community colleges	• HIV Alliance*	• High quality oral health care for PLWHA in a rural clinic setting • Improved training in care of PLWHA and reduced propagation of HIV stigma as part of students • Enhanced clinical space and equipment • Faculty supervision and training	• Requires careful coordination and flexibility • Ensure that organizations for participating in partnership are clearly and formally spelled out and agreed upon prior to beginning collaboration

*While HIV Alliance was the only grantee to use relationship with dental program as their program model, several other grantees established formal or informal relationships with dental professional schools.

REFRESHER: Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (2 of 3)

Model	Grantee	Pros	Cons/Caveats
Fee-for-service dental reimbursement with contracted providers	• AIDS Resource Center Wisconsin	• Reduced travel time for patients • More cost-effective than establishing a formal satellite clinic	• Important to ensure that dentists recruited are culturally and clinically competent to serve PLWHA • Funding options for fee-for-service varies by State and may be more or less attractive to providers as a result
Leasing space at existing private offices/clinics	• Center for Comprehensive Care	• Increased access to care for patients • Less resource-intensive than building a satellite clinic • Provision of care in private clinics that are non-HIV-affiliated may reduce risk of stigma for patients	• Leased office locations may not qualify as Medicaid-certified providers, limiting ability to bill for dental services in some States • Important to ensure that patient caseload is manageable so that patients can be seen at regular intervals for follow-up care to improve retention and clinical outcomes

REFRESHER: Overview of Pros, Cons, and Important Considerations for the Six Organizational Models (3 of 3)

Model	Grantee	Pros	Cons/Caveats
Partnership model/dental vans	• Southville Medical Center • University of Miami • Louisiana State University • Montefiore Medical Center	• Enables provision of care to patients isolated by geography or with challenges traveling to dental service • AHCA serves a high volume of patients	• Expenses to "purchase" equipment to maintain both oral health equipment and the "dental van" • Can be a hard-to-manage program (travel, fuel, etc.) • Requires research into unique State regulations, including parking ordinances, medical waste disposal, and scheduling and staffing • Requires referral of clients to other community-based dental services, including mobile PDPs • PDPs' confidentiality may be a concern when using electronic dental records through wireless systems • DPH will be manage results with sensitive based because resources used to build equipment enable serve other beneficiaries

*Mobile dental vans used by grantee ranged from \$150,000 for a one-chair van to \$30,000 for 2-chair van.
**All grantees who reported mobile oral care experienced frequent mechanical, electrical and software system problems.

OVERVIEW OF THE SIX SPNS ORGANIZATIONAL MODELS STUDIED

Model	Grantee	Pros	Cons/Caveats
<i>Increasing services at their existing clinics</i>	<ul style="list-style-type: none"> Harbor Health 	<ul style="list-style-type: none"> Most expedient model 	<ul style="list-style-type: none"> Does not necessarily enable clinic to expand oral health care access to new geographic areas or populations
<i>Building satellite clinics</i>	<ul style="list-style-type: none"> AIDS Care Group AIDS Resource Center Wisconsin Special Health Resources for Texas Community Health Center, Inc Tenderloin Health Center 	<ul style="list-style-type: none"> Reduces travel time for some patients, often reducing a huge barrier to care Enables greater patient enrollment Improves likelihood of program sustainability 	<ul style="list-style-type: none"> Can be costly Can take a lot of time to establish, including navigation of regulations and completion of construction
<i>Collaborating with clinics in dental hygiene schools or community colleges</i>	<ul style="list-style-type: none"> HIV Alliance* 	<ul style="list-style-type: none"> High-quality oral health care for PLWHA in a mixed clinic setting Improved training in care of PLWHA and reduced perception of HIV stigma on part of students Enhanced clinical space and equipment Faculty supervision and training 	<ul style="list-style-type: none"> Requires careful coordination and flexibility Ensure that expectations for participating organizations in partnership are clearly and formally spelled out and agreed upon prior to beginning collaboration
<i>Fee-for-service dental reimbursement with contracted providers</i>	<ul style="list-style-type: none"> AIDS Resource Center Wisconsin 	<ul style="list-style-type: none"> Reduced travel time for patients More cost-effective than establishing a formal satellite clinic 	<ul style="list-style-type: none"> Important to ensure that dentists recruited are culturally and clinically competent to serve PLWHA Funding options for fee-for-service varies by State and may be more or less attractive to providers as a result
<i>Leasing space at existing private offices/clinics</i>	<ul style="list-style-type: none"> Center for Comprehensive Care 	<ul style="list-style-type: none"> Increased access to care for patients Less resource-intensive than building a satellite clinic Provision of care in private clinics that are non-HIV-affiliated may reduce risk of stigma for patients 	<ul style="list-style-type: none"> Leased office locations may not qualify as Medicaid-certified providers, limiting ability to bill for dental services in some States Important to ensure that patient caseload is manageable so that patients can be seen at regular intervals for follow-up care to improve retention and clinical outcomes
<i>Purchasing mobile dental units</i>	<ul style="list-style-type: none"> Sandhills Medical Center University of Miami Louisiana State University Montefiore Medical Center 	<ul style="list-style-type: none"> Enables provision of care to patients isolated by geography or with challenges traveling to dental services Ability to serve a high volume of patients 	<ul style="list-style-type: none"> Expensive to purchase** Expensive and time-intensive to maintain both the dental equipment and the unit itself*** Cannot be used anywhere—need open, flat area; proper parking permits; access to electricity to operate van and equipment; etc. Requires research into unique State regulations, infection control procedures, town and county parking ordinances, medical record access and storage, and scheduling and staffing Requires referral of clients to other nonmobile clinics for many dental services, including most x-rays Patient confidentiality may be a concern when using electronic medical records through wireless system Difficult to navigate roads with sensitive dental equipment on board because measures used to hold equipment stable were often insufficient

*While HIV Alliance was the only grantee to use relationship with dental program as their program model, several other grantees established formal or informal relationships with dental professional schools).

**Mobile dental units used by grantees ranged from \$144,000 for a one-chair unit to \$330,000 for 2-chair unit.

***All grantees who employed a mobile dental unit experienced frequent mechanical, electrical, and vacuum system problems.



SLIDE 4: FINDING SOLUTIONS TO COMMON BARRIERS TO ORGANIZATIONAL GROWTH

 **Finding Solutions to Common Barriers to Organizational Growth**

- Which of the model(s) of care would be the best fit for our organization and the populations we serve?
- What will be the biggest barriers to care in implementing this/these model(s) of care in our organization from:
 - A systematic/regulatory standpoint?
 - A financial standpoint?
 - A human resources/staffing standpoint?
 - A patient standpoint?
- What strategies or resources are needed to overcome these barriers?
- Do existing staff roles and responsibilities need to be redefined? How?



- Which of the model(s) of care would be the best fit for our organization and the populations we serve?
- What will be the biggest barriers to care in implementing this/these model(s) of care in our organization from:
 - A systematic/regulatory standpoint?
 - A financial standpoint?
 - A human resources/staffing standpoint?
 - A patient standpoint?
- What strategies or resources are needed to overcome these barriers?
- Do existing staff roles and responsibilities need to be redefined? How?



GROUP ACTIVITY



- Divide the class into 2 or 3 groups and provide each group with a large sheet of paper, markers, and an easel or tape to affix the paper to the wall.
- For 20 minutes, have each group address the questions listed in the PowerPoint slide, assigning one person in each group to take notes.
- Once the groups have finished taking notes, go through each question with the class, giving one person from each group the chance to share their group's response to each question.
- At the end of the discussion, have the group vote on the top 3 to 5 initiatives or issues that the organization should undertake. Identify the key action items needed to occur to address these initiatives/issues and assign individuals to lead research into and implementation of the initiatives.
- Designate someone to schedule a followup meeting within the next 1 to 2 months to touch base on progress toward the stated initiatives.



APPENDIX

Patient Interview Guide

INTRODUCTORY SCRIPT [SHOULD BE MODIFIED AS NECESSARY]

Thank you for agreeing to participate in our study. Project MDAP is participating in a national study funded by the Health Resources and Services Administration (HRSA) to improve access and the delivery of oral health care services to people living with HIV/AIDS. We are one of 15 sites across the country participating in this study. As part of this study, we are interviewing our patients to understand their attitudes, beliefs, and practices with oral health care. All your answers are completely confidential and your name will not be shared with other institutions. All narratives will be assigned a pseudonym and be combined with other narratives across the country. The information will be used to guide programs about ways to improve oral health care services for people living with HIV.

If you agree to participate, do we have permission to audiotape our interview?

We are asking participants to record interview so we can accurately capture your experience in your own words. All interviews will be transcribed and all proper names and places will be coded to protect your identity and privacy.

1. Tell me about your experience and history of going to the dentist (prior to testing HIV-positive).
Probes: What are the reasons you have gone in the past? [Specific probes: Did you go for regular check-ups (preventive care)? Did you go to the dentist when you had a problem or experienced pain? Were you concerned with your personal appearance?] How important has oral health care been to you (taking care of your teeth)?
2. Tell me about your oral health care experience since testing HIV-positive.
Probes: Is your experience with dental care providers better, worse, or the same since becoming HIV positive? Can you describe a good experience? Can you describe a bad experience? What are the reasons you have not seen a dentist? [Specific probes: Any fears? Other priorities? Treatment by dental staff? Affordability? How do you feel about the importance of oral health care? Do you have concerns about disclosure or experienced any discrimination/poor treatment?]
- 3a. Please describe your overall quality of life.
- 3b. Please describe your support systems.
Probes: Who helps you manage living with HIV? Who do you talk to when you need support or experience difficult times? Who helps you get services that you need? (i.e., do you have a case manager?) When and how often do you turn to this person for support?
- 3c. Please describe how any oral health problems may have affected your quality of life?
Probes: Have oral health problems caused physical or emotional pain? Please describe. How does living with HIV affect your oral health care? Does taking medication affect your oral health problems?
4. Since testing HIV-positive, have oral health problems affected your participation in any activities? (such as, employment, social activities, daily living). Please give examples.
Probes: Have concerns or worries about your personal appearance affected your participation?
- 5a. Please describe your current personal oral health care practices. (How do you currently take care of your teeth and mouth?)
- 5b. What do you think are good personal oral health care practices (or ways to take care of your teeth and mouth)?
Probes: Has anyone ever demonstrated to you how to take care of your teeth?
6. What would keep you coming back as a regular patient for dental care?
Probes: What do you like about this dental care setting? What don't you like? What can be improved? What would help you come back for dental services? (Note: Sites can add local specific questions).

Demographics

Gender:

Race/ethnicity:

Geographical setting:

Program setting: mobile van _____ clinic _____

community-based organization _____ Other _____

Source: Adapted from the Evaluation Center for HIV and Oral Health's "SPNS Oral Health Care Initiative: Qualitative Research Study Patient Interview Guide." Available at: http://hdwg.org/sites/default/files/resources/SPNS_OH%20Qualitative%20Patient%20Interview%20Guide.pdf.

BASELINE ORAL HEALTH CLIENT INTERVIEW

Screening Instructions: Before administering this interview, all potential multisite study enrollees should be screened to be sure they meet study eligibility criteria, which include: (1) HIV positive and (2) a new patient to the dental practice (not seen in the prior 12 months) unless for an emergency (3) age 18 or older.

Client ID:	Study Site:
Date:	Staff ID:

Location of Survey: Dental clinic Van Other location (specify)

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SCREENING QUESTIONS

1.) When did you first test positive for HIV? *[Interviewer: if client knows both the month and year, enter both. If client only remembers the year, leave the month blank.]*

_____ _____
month year

- I have never tested positive for HIV
- Don't know
- No response

2a.) How long has it been since your last visit for dental care?

- Less than 6 months
- 6 months to 1 year
- More than 1 year up to 2 years
- More than 2 years up to 5 years
- More than 5 years
- Never received dental care
- No response

2b.) If you had a dental visit in the last year, was this visit for an emergency? *[Emergency is defined as treatment for the immediate relief of pain or infection. If no/no response, skip to #3.]*

- No
- Yes
- No response

2c.) If yes to 2b, did you have any other dental visits last year?

- No
- Yes
- No response

2d.) If yes to 2c, please explain _____

3.) When were you born?

Month Day Year

Don't know

No response

Inform client at this point if they are ineligible for local or multisite study.

DEMOGRAPHIC INFORMATION

4.) How long did it take you to get here today?

_____ minutes

Don't know

No response

5.) How did you get here today? [Check all that apply]

Walk

Car

Bus

Van

Taxi

Metro/subway

Other

Don't know

No response

6.) What is your gender?

Male

Female

Transgender

No response

If client is male, skip to #8.

7.) Are you pregnant?

No

Yes

Not sure

No response

8.) How would you describe your race/ethnicity [Select all that apply]

- Black or African American (not Hispanic)
- Asian
- American Indian or Alaska Native
- Native Hawaiian or Pacific Islander
- White (not Hispanic)
- Hispanic or Latino(a)
- Other (specify): _____
- Unknown/Unreported

9.) What language do you speak most of the time, with friends and family? [check only one]

- English
- Spanish
- French
- Other (specify): _____
- No response

10.) In what country/geographic territory were you born?

- USA [50 states or District of Columbia]
- Puerto Rico
- US Virgin Islands or other US territories
- Other (specify): _____
- No response

11. The next question is about your housing. Where do you live right now?

- My own home or apartment
- Someone else's home or apartment
- Temporary housing (Residential program/transitional housing/treatment program/correctional facility/boarding house/single room occupancy hotel, motel)
- Shelter
- On the streets, in a car, in a park, moving around
- No response

12.) How many years of school have you completed? [Interviewer: count elementary school and up. If client finished high school or GED enter 12; vocational school enter 13; college enter 14 or 16 depending on years. Add additional years as necessary.]

- _____
- Don't know
 - No response

13.) Are you currently employed? Full time or part time? [Clarify by focusing on status during the previous week.]

- Employed full time (35+ hours per week)
- Employed part time
- Unemployed
- Disabled, not working
- Other (specify): _____
- No response

14.) What best describes your monthly household income? [Interviewer: this is income that the client, or family members who live with the client, receive each month. Please include cash benefits only, not food stamps or rental assistance. Enter "None" if there is no income. If any portion of household income is unknown, code "No response."]

- None *(Corresponds to Annual Income Level of:)*
- Under \$850 \$10,200
- \$851 to \$1700 \$10,201–\$24,000
- Over \$1700 > \$24,000

HIV STATUS AND MEDICAL CARE

15.) How do you think you were exposed to HIV? [Select all that apply. Note to interviewer: If a person says this way or that way, I'm not sure, then check all that apply rather than don't know. Don't know option is for people who simply have no idea.]

- Men who have sex with men (MSM)
- Injection drug use (IDU)
- MSM and IDU
- Heterosexual contact
- Hemophilia/Coagulation disorder
- Receipt of transfusion of blood, blood components or tissue
- Mother with/at risk for HIV infection (perinatal transmission)
- Other (specify): _____
- Unknown/unreported

16.) Where do you usually see a health care provider for your HIV care? [Check one. Note to interviewer: If in doubt about type of place, write down the name and confer with team or ECHO.]

- Health center or clinic
- Hospital outpatient department/clinic
- Emergency room
- Private physician office or group practice
- VA hospital clinic
- I do not have a regular place of care
- Other (specify): _____
- No response

17.) When was the last time you saw a health care provider for HIV primary care? *[Interviewer: Primary care visit is with a provider who monitors CD4 and viral load counts and prescribes HIV medications if indicated. This is not an HIV specialist unless a specialist also performs these functions.]*

Month Year

- Don't know
- No response

18.) Are you currently taking HIV antiretroviral medications? *[Interviewer: Show pill chart and indicate that these are the pills you are talking about—rather than other medications for OI's or other health conditions.]*

- Yes
- No
- No response

19.) When did you last have a CD4 and viral load test?

Month Year

- Don't know
- No response

20.) What is your last CD4 count?

 Don't know
 No response

21.) What is your last Viral load?

 Undetectable
 Don't know
 No response

22.) In the past 12 months, how many times have you gone to the emergency room for an HIV-related illness?

 Don't know
 No response

23.) In the past 12 months, how many times have you been admitted to the hospital for an HIV-related illness?

 Don't know
 No response

24.) What kind of health insurance do you have for your medical care? [Check all that apply. Note to Interviewer: If person names a health plan, ask if it is a Medicaid health plan? If yes, check Medicaid. If client does not know, write down name of plan and confer with team or ECHO before coding. You may substitute State-specific names for Medicaid, e.g., MediCal in CA, MassHealth in MA.]

- None
- Medicaid
- Medicare
- Other public insurance
- Private insurance
- Don't know
- No response

25a.) Do you have an HIV case manager? [If no, skip next question]

- No
- Yes
- Don't know
- No response

25b.) If yes, did your case manager make a referral for dental care?

- No
- Yes
- Not Applicable
- No response

DENTAL HEALTH

26.) Before today, where did you usually go to get dental care? [Check one]

- I did not have a regular place for dental care
- A dentist's office
- A community health center
- A dental school
- A VA clinic
- An emergency room
- A mobile van
- Some other place
- No response

27.) What kind of dental insurance do you have? [Interviewer: Check all that apply. Note: Ryan White care is not considered dental insurance.]

- Private insurance
- Medicaid
- Other Insurance (specify): _____
- None
- Don't know
- No response

28.) Since you tested positive, was there a time when you needed dental treatment but did not get it?

- No
- Yes
- No response

29.) If you answered yes to #28 above, what were the reasons you did not get the dental care you needed?
[Check all that apply]

- I couldn't afford it.
- I couldn't find an HIV friendly dentist.
- I didn't know where to find dental care.
- I didn't have transportation to get to a dentist.
- I couldn't get an appointment.
- I couldn't get an appointment at a time I could make it.
- I didn't think it was that important.
- I was worried it would hurt.
- I was worried about my privacy.
- I didn't feel well enough to go to a dentist.
- I was afraid of finding out something was wrong.
- I did not want to go to the dentist.
- Family responsibilities were more important.
- Some other reason: _____.

30.) Of all the things you mentioned above, what was the most important reason you did not get dental care? [Check only 1.
Note to Interviewer: Do not repeat all response options, only the ones that the person said "yes" to in the question above.]

- I couldn't afford it.
- I couldn't find an HIV friendly dentist.
- I didn't know where to find dental care.
- I didn't have transportation to get to a dentist.
- I couldn't get an appointment.
- I couldn't get an appointment at a time I could make it.
- I didn't think it was that important.
- I was worried it would hurt.
- I was worried about my privacy.
- I didn't feel well enough to go to a dentist.
- I was afraid of finding out something was wrong.
- I did not want to go to the dentist.
- Family responsibilities were more important.
- Some other reason: _____.

31.) In the past 12 months, have you had any of the following problems? [Check all that apply]

- Sores in your mouth
- Growths or bumps in your mouth
- Bleeding gums
- Toothache
- Tooth decay—cavity
- Loose teeth
- Bad breath
- Sensitivity in your tooth/gums
- Pain in your jaw joints
- Dissatisfied with the appearance of your teeth
- Another problem in your mouth (specify): _____

32.) What brings you here (to the dentist) today? [Check all that apply. Note to Interviewer: Do not read response options, let the client give you an answer and then choose the response option that fits best and read it back to the client to confirm. Then ask if there were any other reasons so the person knows they can report more than one reason, and repeat the response option back again.]

- I don't know
- Cleaning or check up
- Relief of pain
- Teeth filled or replaced (fillings, crowns, bridges)
- Teeth pulled
- Gum treatment
- Denture work
- Improve how I look (braces or bonding)
- My doctor told me to come
- Other: _____
- Nothing

FACTORS AFFECTING ORAL HEALTH STATUS

There are many personal habits that can affect your teeth or mouth. These are some questions about these habits and how often you did these things in the past 30 days.

	In the past 30 days did you:	No	Yes	How many days in the past 30 days?
33.)	Brush your teeth	No	Yes	_____
34.)	Floss your teeth	No	Yes	_____
35.)	Smoke cigarettes	No	Yes	_____
36.)	Use other tobacco products (e.g., snuff, chewing tobacco)	No	Yes	_____
37.)	Eat hard sugar candy or chew gum with sugar	No	Yes	_____
38.)	Drink soda (with sugar)	No	Yes	_____
39.)	Grind/clench teeth	No	Yes	_____

Now we are going to ask a few questions about your use of alcohol and drugs. These also help us and you know how best to take care of your teeth.

40.) Have you ever consumed alcohol? No Yes

41.) If yes, how many drinks in the past week? _____

Have you ever:

If yes, have you used in the past 30 days?

42.) Smoked marijuana? No Yes

No Yes

43.) Used crack or cocaine? No Yes

No Yes

44.) Used crystal meth? No Yes

No Yes

HEALTH-RELATED QUALITY OF LIFE (SF-8)*

45.) Overall, how would you rate your health during the **past 4 weeks**?

Excellent

Very good

Good

Fair

Poor

Very Poor

46.) During the **past 4 weeks**, how much did physical health problems limit your usual physical activities (such as walking or climbing stairs)?

Not at all

Very little

Somewhat

Quite a lot

Could not do physical activities

47.) During the **past 4 weeks**, how much difficulty did you have doing your daily work, both at home and away from home, because of your physical health?

None at all

A little bit

Some

Quite a lot

Could not do daily work

48.) How much **bodily** pain have you had during the **past 4 weeks**?

None

Very mild

Mild

Moderate

Severe

Very Severe

49.) During the **past 4 weeks**, how much energy did you have?

Very much

Quite a lot

Some

A little

None

50.) During the **past 4 weeks**, how much did your physical health or emotional problems limit your usual social activities with family or friends?

Not at all

Very little

Somewhat

Quite a lot

Could not do social activities

51.) During the **past 4 weeks**, how much have you been bothered by emotional problems (such as feeling anxious, depressed, or irritable)?

Not at all

Slightly

Moderately

Quite a lot

Extremely

52.) During the **past 4 weeks**, how much did personal or emotional problems keep you from doing your usual work, school or other daily activities?

Not at all

Very little

Somewhat

Quite a lot

Could not do daily activities

*www.sf-36.org/tools/sf8.shtml

ORAL HEALTH-RELATED QUALITY OF LIFE

53.) How would you describe the health of your teeth and gums? Would you say it is:

Excellent Very good Good Fair Poor

54.) **During the past 3 months** HOW OFTEN have you experienced the following difficulties because of problems with your teeth, mouth, or dentures?

	Never	Hardly ever	Occasionally	Fairly often
55.) Have you had to avoid eating food?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
56.) Have you found it difficult to relax?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
57.) Have you avoided going out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

58.) **During the past 3 months** how much pain or distress have your teeth or gums caused you?

None at all A little bit Some Quite a bit A great deal

If you have removable denture appliances, please answer the following question (otherwise skip to Question 59):

59.) During the past 3 months, have you had uncomfortable dentures?

Never Hardly ever Occasionally Fairly often Very often

60.) Have problems with your teeth or mouth made it difficult for you to take HIV medications?

I don't take medications Not at all Sometimes Much of the time Always

During the past 3 months HOW OFTEN have you experienced the following difficulties because of problems with your teeth, mouth, or dentures?

	Never	Hardly ever	Occasionally	Fairly often
61.) Have you had trouble pronouncing any words?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.) Have you had painful aching?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
63.) Have you felt that your sense of taste has worsened?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
64.) Have you felt self conscious?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
65.) Have you felt tense?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
66.) Has your diet been unsatisfactory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67.) Have you had to interrupt meals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68.) Have you been a bit embarrassed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69.) Have you been irritable with other people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70.) Have you had difficulty in doing your usual jobs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
71.) Have you felt that life in general was less satisfying?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CHART REVIEW

Date _____ Value _____
 Month Year

Source: Adapted from the Evaluation Center for HIV and Oral Health's "SPNS Baseline Oral Health Client Interview." Available at: <http://hdwg.org/sites/default/files/resources/SPNS%20Oral%20Health%20Baseline%20Client%20Survey.pdf>.