



Florida Department of Health

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DELIVERING DENTAL CARE FOR HIV+ PATIENTS IN PUBLIC HEALTH

An overview for medical and dental staff on effective healthcare delivery

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PRESENTATION OBJECTIVES



To describe the core objectives of dentistry in the care of HIV+ public health patients

To describe the key procedures provided to patients

To analyze the key factors that make dental care for HIV+ patients different from public health dentistry for the general population

To highlight key lab values and possible complications and conditions that are critical for dental care delivery

To make recommendations for better medical-dental cooperation

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CORE DENTAL OBJECTIVES



To prevent, identify and treat pathology such as malignancies and tumors

To prevent and treat dental and periodontal infections (including caries and periodontitis)

To preserve and restore masticatory function for the patient and thus allow a healthy diet and normal nutrition

To create an aesthetically pleasing smile and thus allow the patient to be employed and to have the necessary self esteem for professional and personal advancement and relationships

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CORE DENTAL SERVICES



Diagnostic – dental exams, radiographs (including panoramic), record keeping, charting and planning

Preventative – oral hygiene instruction (such as flossing), providing dental supplies, smoking cessation, fluoride varnish

General periodontal – prophylaxis, scaling and root planning, Arestin placement

General restorative – composite, glass ionomer and amalgam fillings... and now SDF (silver diamine fluoride for caries arrest)

General oral surgery – simple and surgical extractions, reduction of bone / bony exostoses

General removeable prosthodontics - full and partial dentures (can be cast metal, flexible plastic or acrylic)

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ADDITIONAL DENTAL SERVICES



Simple soft tissue biopsies (such as of the tongue, inside of the cheek and lip, soft palate, etc.)

Endodontics – root canal services, may limit to anterior teeth or anterior and premolar teeth only

Single unit crowns and simple bridges (3 or 4 unit)

Single tooth dental implant and crown

Implant retained full denture

Orthodontic treatment

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REFERRED DENTAL SERVICES



Oral surgery – for complex biopsies, treatment for benign or malignant lesions, removal of difficult wisdom teeth

Endodontics – root canal services, either for all root canals or only for molars (and premolars); root canal re-treatment and apical surgeries

Periodontics – for patients with severe periodontal disease, not responding to conventional treatment or needing / desiring periodontal surgery

Implant services – including simple implants, implant-supported dentures and full-arch implant-supported fixed porcelain/metal prostheses

Orthodontic treatment – braces and possibly including severe skeletal deficiencies and deformities in cooperation with oral surgery

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HOW DOES PUBLIC HEALTH DENTAL CARE FOR HIV+ PATIENTS DIFFER?

HIV+ dental patients, such as recipients of Ryan White dental funds, oftentimes have the same dental problems as the general population. There are additional factors that can exacerbate oral pathology such as the suppressed immune system, drug use, polypharmacy, depression, lack of adherence with medical treatment and others. Our main consideration is to deliver safe and effective treatment and to improve the patient's dental health – to allow them eat and speak properly and improve their health, professional opportunities and self esteem.

Dental care for Ryan White recipients is usually delivered to a lower income population using limited funds and thus needs to focus on the highest "health return" procedures. Example – placing several fillings rather than 1 crown.



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IMMUNE SUPPRESSION



HIGHER RISK OF:

Post-operative surgical site infections

Thrush (candida infections of the mouth)

Aggressive periodontal disease

Aggressively progressing tooth decay

Higher risk for oral cancer – higher rates of alcohol abuse, smoking, HPV in combination with a suppressed immune system

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DRUG ABUSE



Methamphetamine use – leads to rapid tooth decay and tooth loss

Cocaine – constriction and damage to peripheral blood vessels, palate and nasopharyngeal pathology

Marijuana – the “munchies” are not followed by an inspiration to brush/floss

Opiates, Benzodiazepines – lead to aggressive tooth decay, Xerostomia

Smoking, vaping, chewing tobacco (last one is rare) – in combination with HPV, EBV – malignancies!

Alcohol abuse continues to be an issue... and can also increase the risk of oral cancer!

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POLYPHARMACY



HIV patients are ageing along with the general population and the main morbidity and mortality is now coming from diseases such as cancer, heart disease, diabetes, and obesity

HIV+ patients oftentimes take multiple medications in addition to their antiretroviral regimen

Many medications are implicated in Xerostomia and impaired / altered salivary flow and composition – such as opiates; Examples: Ambien, suboxone

Anti-seizure medications as well as Ca-channel blockers (such as amlodipine) in combination with poor oral hygiene can cause out of control gingival hyperplasia

Bisphosphonates, especially the IV form to prevent cancer metastases, are of great concern if tooth extractions or other oral surgery procedures are needed – such procedures should ideally be completed beforehand!

Mountain Dew – a special class of “medication”

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DEPRESSION AND OTHER MENTAL HEALTH ISSUES



HIV patients have high rates of depression and mental health issues

Low motivation extends to oral hygiene habits in addition to areas such as professional advancement and relationships

Many anti-depressant medications can contribute to Xerostomia and increase the rate of tooth decay and periodontal disease progression

Psychiatric care and mental counseling are difficult to find for uninsured and underinsured patients

Stigmatization of the disease is added to the stigmatization of the patient's lifestyle (such as being transgender, gay, etc.)

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BRIDGING THE GREAT DIVIDE BETWEEN MEDICINE AND DENTISTRY



How effective collaboration between medical and dental providers can result in better health outcomes for the patient

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KEY LAB VALUES THAT INFLUENCE DENTAL CARE DELIVERY

LAB	Desired value	Possible complication	Prevention and Treatment
ANC – Absolute Neutrophil Count	500 (1/3 of normal) or higher	Infection, non-healing	Preoperative antibiotics (Amox...)
Platelet count	50 or higher	Prolonged bleeding, not clotting	Hematology consult, may need platelet transfusion
HIV viral load (VL)	<20 or not detected	Infection risk in case of needle stick-type injury	Univ precautions; PrEP, post-exposure prophylaxis (PEP)
Hepatitis C (HCV) VL	Not detected	Infection risk in case of needle stick-type injury	Univ precautions; HCV treatment
TB test – QUANT or CXR/CT	Negative or no evidence of active pulmonary disease	TB infection to staff	Re-schedule the patient until LTBI Tx complete; N95 mask

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CRITICAL CONDITIONS AND EVENTS IN HIV+ DENTAL CARE

Condition/Event	Caused by	Prevention	Treatment
Kaposi's sarcoma	EBV/HHV8(KSHV) and suppressed immune system (CD4 count)	HIV prevention such as PrEP, condoms, etc.	Initiate and continue effective ARV treatment, coordinate care with oncology / surgery
Oral cancer – SCC, etc.	HPV, smoking, alcohol, tobacco, other carcinogens	Reduce risks – quit smoking, HPV vaccination, condoms, etc.	Early diagnosis (biopsy) and rapid treatment initiation (oncology)
Uncontrolled/prolonged bleeding	Patient low platelet condition or clotting disorder (rarely medication-related, but can be)	Thorough health history and up to date labs including PLT count; if needed – PT/INR	Local measures such as suturing, gelfoam, vasoconstrictor and if necessary timely referral for in-hospital treatment (platelets)
Severe dental / periodontal infections that can progress to Ludwig's angina or sepsis	Bacterial infection of the teeth and surrounding tissues , oftentimes in combination with a suppressed immune system	Regular dental care, emphasis on timely treatment of urgent dental needs; effective viral suppression	May require hospitalization, IV antibiotics; Oftentimes definitive treatment may not be rendered in the hospital, requiring a return to the dentist

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TWO TAKEAWAYS FOR IMPROVING MEDICAL-DENTAL COOPERATION:

- **HAVE PATIENT LABS UP TO DATE AND COORDINATE CARE**

Medical providers should make every effort to assure that their patients have labs that are consistent with the standard of care, such as routine blood work every 6 months and a TB test every 12 months. Conversely, dental providers should make every effort to complete surgical and urgent procedures with priority. Dental providers should be consulted prior to serious medical procedures such as organ transplants, treatment for malignancy (such as chemo, radiation or bisphosphonates) – and dental providers need to always try to have the latest updates on the patient's medical situation.

- **ENCOURAGE PATIENT COMPLIANCE**

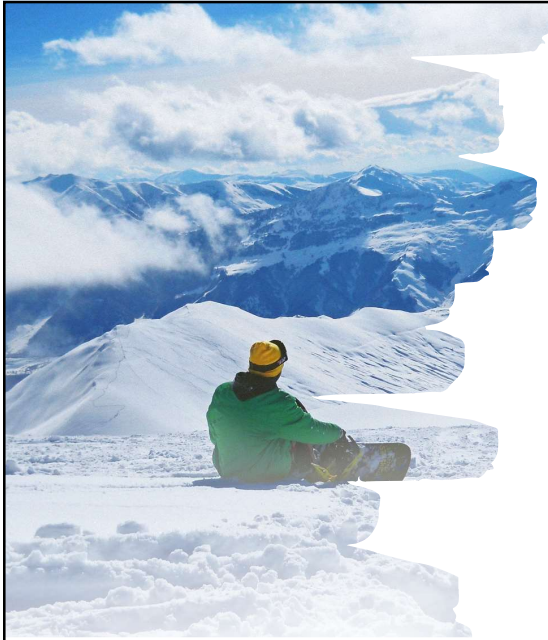
Medical and dental providers have the opportunity to "nudge" patients to be compliant with other aspects of their healthcare

Examples include dental providers encouraging patients to be compliant with anti-hypertensive medications or antiretrovirals and, when appropriate, contacting the medical provider for follow up (such as uncontrolled HTN)


Conversely medical providers can encourage patients to seek both emergency (if needed) or routine dental care and to question patients about their recent dental care ("When was your last cleaning and dental exam?")


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THANK YOU!

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