

Expanding the dental safety net for persons living with HIV and AIDS



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Ryan White HIV/AIDS Program

Assessment of dental programs
to meet educational requirements
while expanding dental safety net



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HIV/AIDS Bureau

Health Resources and Services Administration

U.S. Department of Health and Human Services

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Problem



- Oral health diseases are a major problem among persons living with HIV/AIDS
- Critical levels of unmet oral health care needs
 - Increased demand, yet
 - Many barriers

Ryan White HIV/AIDS Program and Oral Health Services



PURPOSE	<p>Fill Gaps in HIV/AIDS Health Care for Underserved Populations Funds array of primary medical care and support services—including oral health care</p>				
FUNDING CHANNELS	<p>Grants to Areas of Need Parts A through F (Cities, States, Communities, Special Initiatives)</p>				
PROGRAMS	<p>Parts A through D Funds array of care including oral health</p>	<p>Part F Community Based Dental Partnership Program CBDPP</p>	<p>Part F Dental Reimbursement Assists accredited institutions with unreimbursed oral health care costs</p>	<p>Part F SPNS Research and Demonstration Oral Health Initiative Exploring innovations in oral health care delivery</p>	<p>Part F AIDS Education and Training Centers Clinician training</p>

Part F: Community Based Dental Partnership

“To increase access to oral health care services for persons living with HIV/AIDS in areas that remain underserved, especially in communities without dental education programs, and to increase the number of dental providers capable of managing the oral health needs of patients with HIV, through collaborative community-based partnerships.”

CBDPP Background



- First funded in FY 2002
- 12 CBDP Programs: accredited dental education programs
- Over 50 community based agencies involved as partners

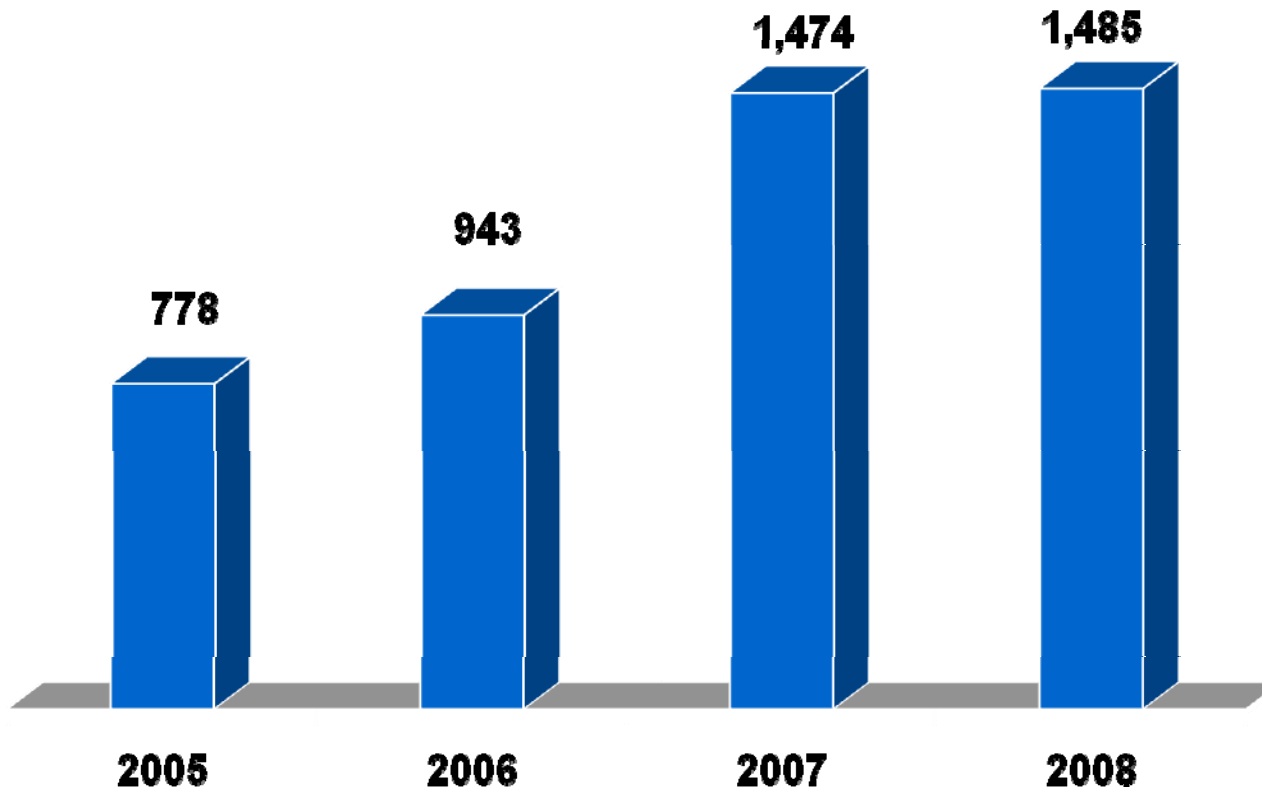
CBDPP: Utilization

	2004	2008
Number of HIV Patients	3,235	5,384
Sex		
Male	2469 (76.3%)	4319 (80.2%)
Female	760 (23.5%)	1037 (19.2%)
Ethnicity		
Hispanic	463 (14.3%)	1011 (18.7%)
Non-Hispanic	2772 (85.7%)	4373 (81.3%)
Race		
White	1549 (47.9%)	3146 (58.4%)
Black	1004 (31.0%)	1754 (32.6%)
Asian	37 (1.1%)	26 (.4%)
Other	645 (20.0%)	458 (8.5%)
# of visits for all types of services	13,705	24,653
Average number of visits per patient per year	4.2	4.6

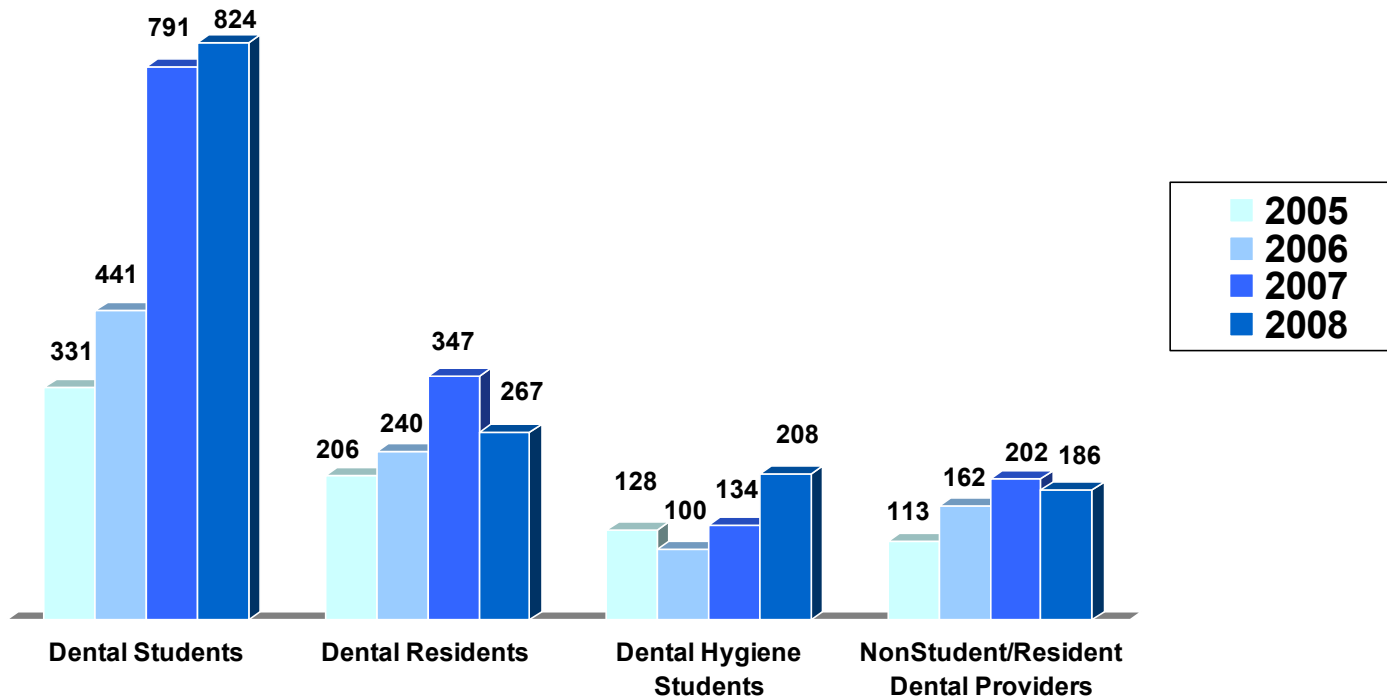
*Percentages may not add up to 100% due to rounding and an unknown number of patients for some programs.



CBDPP: Number of Providers Who Provided Direct Care



CBDPP: Type & Number of Providers Who Provided Direct Care



Part F: Dental Reimbursement Program



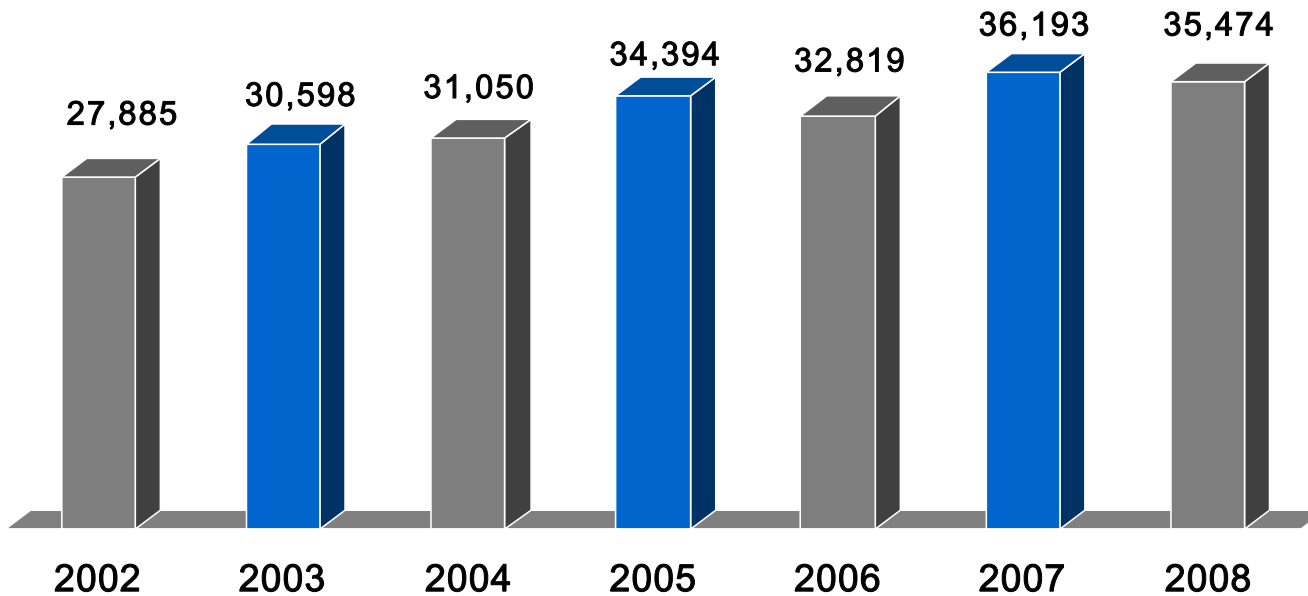
The DRP, first funded in 1994, assists institutions with accredited dental or dental hygiene education programs by defraying a portion of their unreimbursed costs associated with providing oral health care to persons living with HIV/AIDS.

Dental Reimbursement Program



- 57 applicants received funding FY 2008.
- Award recipients located in 20 states plus the District of Columbia.
- 5,883 dental students, postdoctoral dental residents, and dental hygiene students provided oral health services to over 35,000 clients.
- 18 award recipients (32%) are pre-doctoral programs; 38 (67%) are postdoctoral dental education programs; and 1 (2%) is a dental hygiene education program.

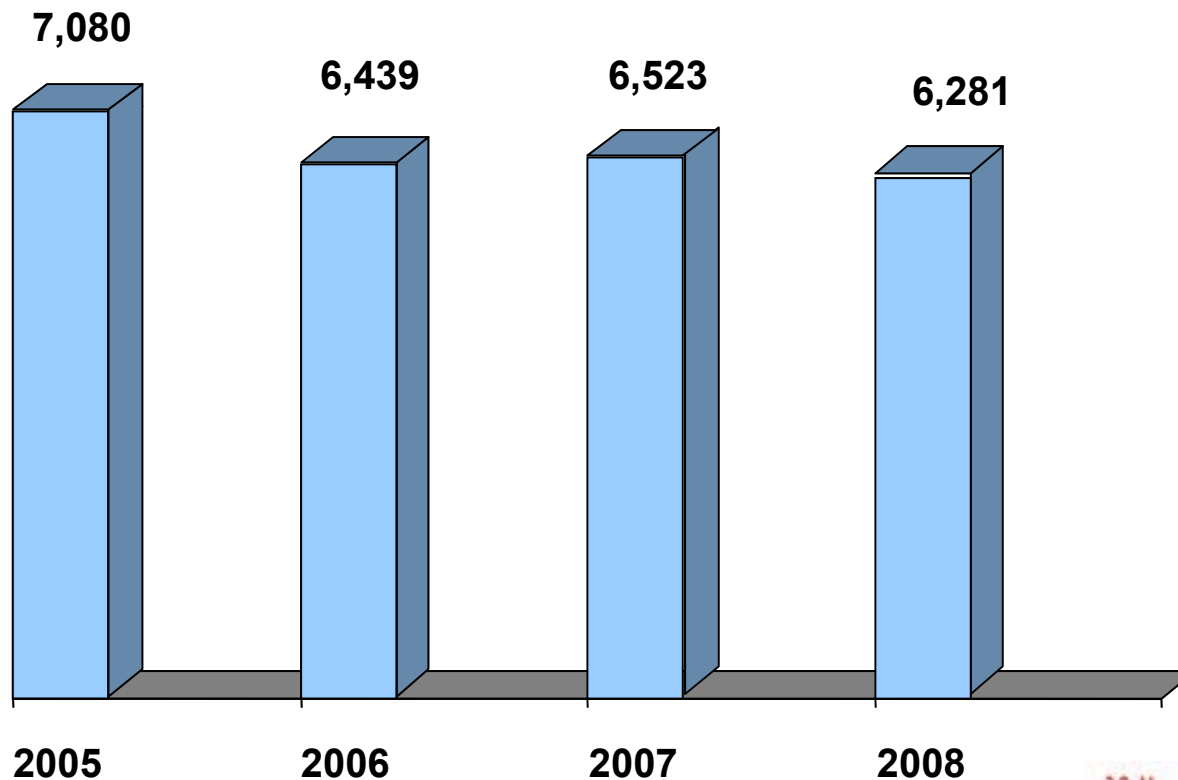
Dental Reimbursement Program Clients Served



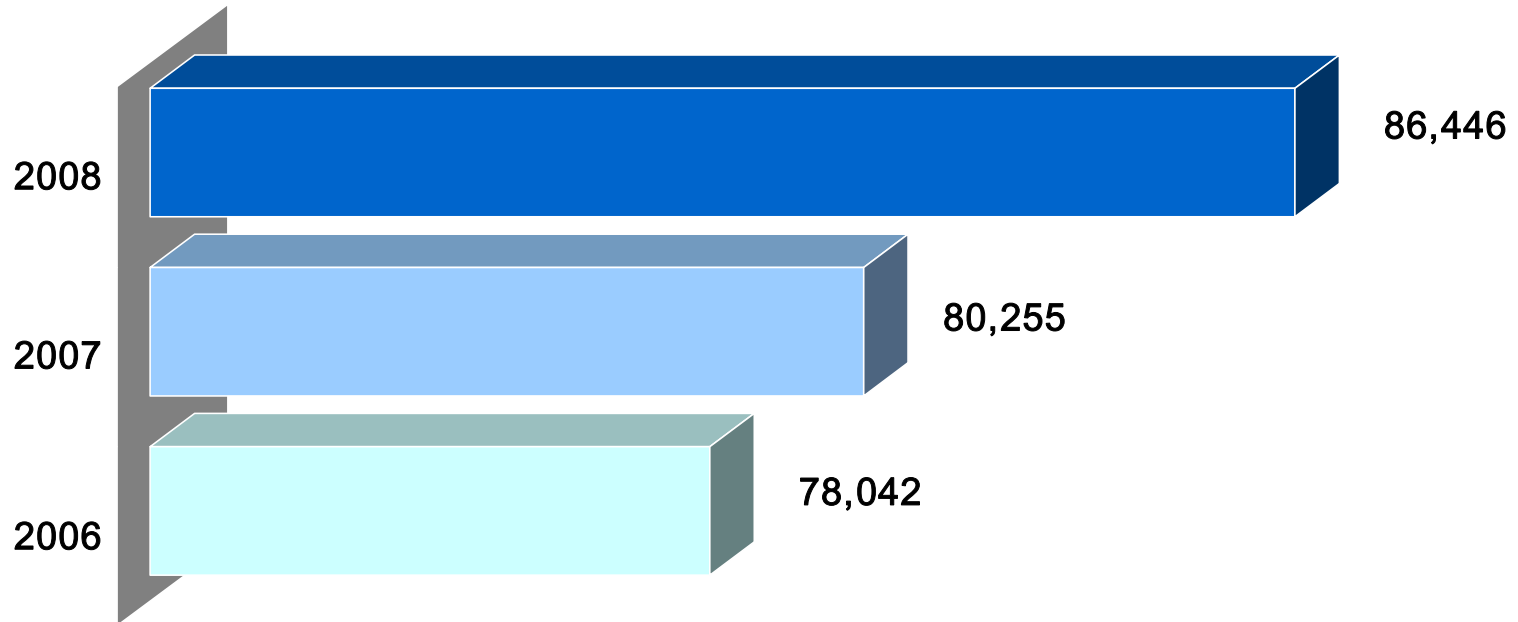


Dental Reimbursement Program

Number of Providers Who Provided Direct Care



Ryan White Parts A-D Utilization of Oral Health Services



Impact on Patients

“People treat you as if they have known you their whole life.”

“They take care of my fear.”

“They are like a big family...they gave me my smile back.”

“I feel free, secure and welcomed by the staff.”

“I feel comfortable here...not treated as a HIV patient, but a person who needs dental care.”

“We’re all so fortunate to get what we need.”

“Its affordable. It’s a one stop shop.”

“This is the only game in town.”



Impact on Students and Residents

“I was a little nervous at the beginning, not anymore, I feel comfortable and really enjoy providing care to HIV patients.”

“As a result of this experience, it opened my eyes on how so many people need dental care. This has been invaluable.”

“This experience has changed me in that I am now interested in seeking out and serving patients who suffer from HIV and AIDS.”

Impact on Partner Organizations

“1st opportunity for people with HIV in Mississippi to have access to quality dental care, other than getting extractions.”

“When we have students we see more patients.”

“It is worthwhile to train students and help them feel comfortable and confident in treating HIV patients. They are the future.”

Conclusion

- Data have shown that Ryan White HIV/AIDS Program positively impacts:
- Access to dental care for persons living with HIV/AIDS.
- Provider training and experience in the care and treatment of persons living with HIV/AIDS.
- Collaboration between dental education programs and community resulting in enhanced local community's dental service delivery capacity

Next steps

- Evaluate the education and training of students and residents in CBDPP:
 - What are the HIV knowledge, attitudes, and behaviors among fourth year dental students and residents?
 - How does participation in the CBDPP impact HIV knowledge, attitudes and behaviors among fourth year dental students and residents?
 - Does the CBDPP experience affect work placement decisions and commitment to treating persons living with HIV/AIDS and other underserved patients post-graduation?
 - What recommendations are to be made regarding curriculum to improve HIV oral health education and training?

Contact Information

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ORAL

Oregon Rural Alliance of Dental



Amanda McCluskey



HIV Alliance

- Community based nonprofit organization
 - Ryan White Case Management
 - Prevention & Education
- Addition of Dental Program September 2006



Program Model: Collaboration Community Partnerships

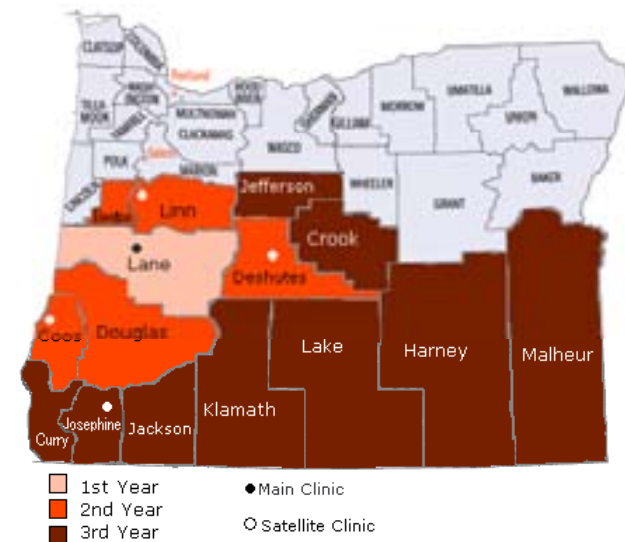
- Non-Profit Agency: HIV Alliance
 - Build relationships with social workers and dental providers
- Community Health Centers of Lane County
 - Federally Qualified Health Center (Tort Protection)
- Lane Community College
 - Dental Hygiene and Assisting Programs
 - MANPOWER!
 - Enthusiastic students and compassionate care



Clinics and Locations

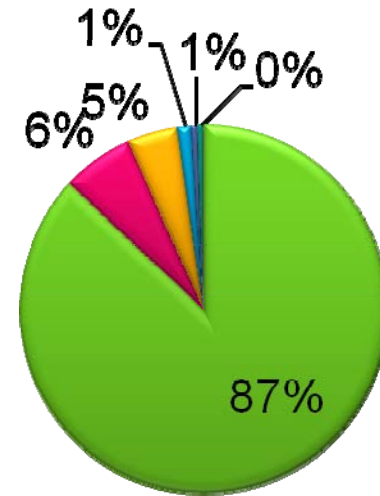
Main Clinic: Clock Tower Dental Clinic at Lane Community College

- ▶ Satellite Clinics-Currently in Operation
 - Linn-Benton Community College in Albany
 - Central Oregon Community College in Bend
- ▶ Satellite Clinics-Planned
 - Medford
 - Coos Bay



Client Demographics

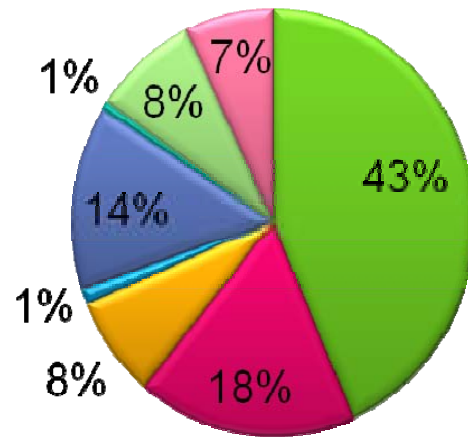
Race



- White
- Hispanic
- Black
- American Indian
- Asian

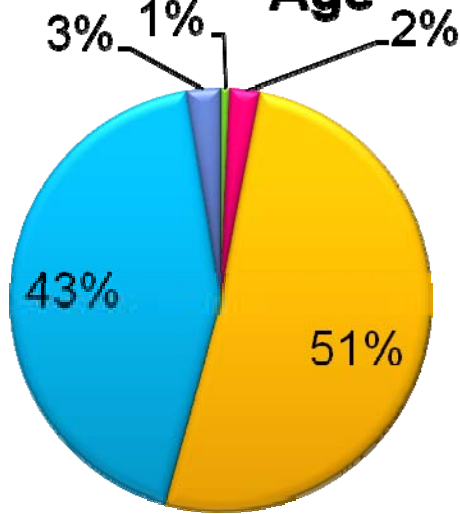


Risk



- MSM
- IDU
- MSM/IDU
- Hemophilia

Age



- 0-12
- 13-24
- 25-44
- 45-64

Changing the Portrait of Dental Education

- Unique Population: HIV+ patients
- Community College provides a public safety net
- Dental program collaborates with Community Partners
- Community College provides a unique source of manpower --- the students



Curriculum Development

- Infection Control
- HIPAA
- Epidemiology
- Treatment
- Treatment Planning
- Instrument Safety
- Application of Medical History
- Complications in Dental Setting
- Special needs



Community Collaboration: Development of a Dental Case Manager Position

- Minimal training was provided
- Individual hired previously worked as a Ryan White Case Manager
- Needed education and support around clinical dental aspects

Activities

- ▶ Recruits clients
- ▶ Processing and tracking referrals
- ▶ Collaborating with clients and RWCMs
- ▶ Facilitates relationships between clients, clinic and RWCMs



- ▶ Arranging & providing transportation
- ▶ Identifying client barriers and overcoming barriers
- ▶ Clarifies system, minimizes conflicting information
- ▶ Retains clients in care



Community Partner Benefits

- Decreases the workload for Ryan White Case Managers
- RWCMs have a contact for dental questions and issues
- Reinforce the importance of dental care and medical care through the need for labs
- Unique Patient Pool



But Most Importantly...

Clients are accessing care!



DCM Services Provided

- In Grant Year 3
 - Coordinated 557 appointments
 - Provided 228 rides
 - Provided 43 meals
 - Helped coordinate care through
 - 212 clients received direct case management
 - 2,322 clinical services to 447 PLWH/A across more than 63,000 miles



Clinical Services Provided

Expanding Oral Health Services for Persons Living with HIV/AIDS

Note: Oregon offers a restorative endorsement

- Grant Year 3
 - 729 Diagnostic
 - 251 Preventative
 - 537 Restorative
 - 61 Endodontic
 - 256 Periodontic
 - 243 Prostodontic
 - 166 Oral Surgery



Partnership Benefits

- ▶ Increased access for patients through the Community College
 - Manpower of students: able to see more patients
- ▶ Patient pool provides unique educational experiences for students
- ▶ Decreased fear and stigma
 - Willingness to treat HIV+ patients
 - Receptive atmosphere for patients
- ▶ HIV+ knowledge and skills built into training program
 - Hands-on training of students
 - Clinical rotations
- ▶ Dental provider training carries to private practices

Lessons Learned



- Utilize a Dental Case Manager
- SPNS Support and Expertise invaluable
- Yearly HIV+ presentations provided by regional AETC (AIDS Education and Training Center)
- Early appointments don't work for HIV+ patients
- Change curriculum to meet student needs

Part F Funding=Sustainability

- Lane Community College
 - an accredited dental hygiene program
- Part F Dental Reimbursement funds
 - Applied for and received funding
- Spend funds on dental care and apply for reimbursement
- Part of our sustainability plan
 - Dollars of last resort
- Grants and community partnerships
 - United Way; 100% Access Coalition



How do you pay for it?

- SPNS Dental Grant
- Contract with State of Oregon
 - Ryan White Part B
 - Transportation
 - Lab fees
- Part F Dental Reimbursement
- Community Partnerships
 - Grants
 - Foundations



Contact Information

Dental Program Manager

HIV Alliance

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How Improving Access to Care Fostered an Interprofessional Approach to Oral Health Care

Theresa G. Mayfield, D.M.D.
University of Louisville School of Dentistry



How Improving Access to Care Fostered an Interprofessional Approach to Oral Health Care

- University of Louisville Programs
- Facilitating Access to Oral Care
- An Interprofessional Approach
- Impact on Education

University of Louisville

School of Dentistry

Ryan White HIV/AIDS Oral Health Programs



- Direct Reimbursement Program (DRP) 1999
- Community Based Dental Partnership Program (CBDPP) 2002

University of Louisville Direct Reimbursement Program

- Services provided at the School of Dentistry for persons living with HIV/AIDS
- Referral from local medical and social services agencies serving persons living with HIV/AIDS



University of Louisville

Community-Based Dental Partnership Program



- Services provided at community-based sites
- Education and hands-on training at community-based sites
- Multi-partner collaborations among University of Louisville and community-based

Community-Based Dental Partnership Dental Sites



- **Portland Family Health Center – Dental Clinic**

Louisville, KY

- **FHC Phoenix Health Center**

Louisville, KY

- **Richard L. Miller Oral Health Clinic**

Elizabethtown, KY

Partnerships are Paramount

Dental Service Delivery Sites

- Louisville, KY - FHC Portland Dental Clinic and Phoenix Health Center
- Elizabethtown, KY - Richard L. Miller Oral Health Clinic

Co-Educators and Partners

- WINGS (Part C)
- Kentucky AIDS Education and Training Center (Part F)
- Family Health Centers, Inc.

Referral and Outreach Partners

- WINGS (Part C and D)
- VOA (Part B)
- Matthew 25 (Part B and C)
- Northern KY Health Department (Part B)

Referral Area

- Louisville, Henderson, Owensboro, Nashville, Evansville, Bowling Green



Dental – Medical Collaboration



Collaborators in 1999

- University of Louisville School of Dentistry
- WINGS Clinic University of Louisville Outpatient Medical Clinic

Facilitating Access to Care



- Recognition of need to provide oral care to persons living with HIV
- Efforts to build to capacity and facilitate access to care

Facilitating Access to Oral Care

Medical provider makes referral to dental clinic

OR

Patient requests referral to dental clinic



Medical front
desk personnel
calls dental clinic

Medical front
desk personnel
makes
appointments

Patient-centered
system

Patient-Centered Oral Care



■ *Facilitate Access to Care*

- Increase number of oral evaluations
- Access to oral health care provider
- Decrease “no show rate” at dental facility

■ *Eliminate Barriers*

- Medical
- Social
- Dental

Action Plan for Patient-Centered Oral Care

- Educate medical providers on oral health care
- Form a care plan team for patient-centered oral care coordination
- Collaborate as a team to overcome barriers to care

Education for Medical Providers

- Goals of an Oral Health Program
- Performing an Extraoral and Intraoral Evaluation
- Identification and Assessment of Needs

Education for Medical Providers

- *Goals of Oral Health Program*
 - Treat pain, eliminate sources of infection, and identify/diagnose pathology
 - Facilitate maintenance of health and adequate nutrition
 - Educate patients regarding health maintenance
 - Contribute to self-esteem and quality of life

Performing an Extraoral and Intraoral Evaluation

- *Extraoral Exam*
 - Head and neck
- *Intraoral Exam*
 - Lesions
 - Conditions for referral and acute care
 - swelling, purulence, bleeding, fever
 - Presence of caries and periodontal diseases
 - Problems with ill-fitting dentures
- *Documentation of findings*
 - Custom form for documentation and progress note

Performing and Extraoral and Intraoral Evaluation

HIV Oral Health Curriculum for Nursing Professionals

Four-part curriculum for nursing professionals on oral health and HIV, with information on the importance of oral health on systematic health; history and physical examination of oral cavity and neck; oral health emergencies; HIV-associated oral health emergencies; and oral health maintenance and patient education.

4 modules with slide sets, videos, and PDFs.

Source: <http://www.aids-ed.org/aidsetc?page=etres-display&resource=etres-144>

Assessment of Need

- *Acuity Level*
 - Emergent Care
 - Urgent Care
 - Routine Care

- *All Emergent Care*
 - Dental appointment within 24 hours

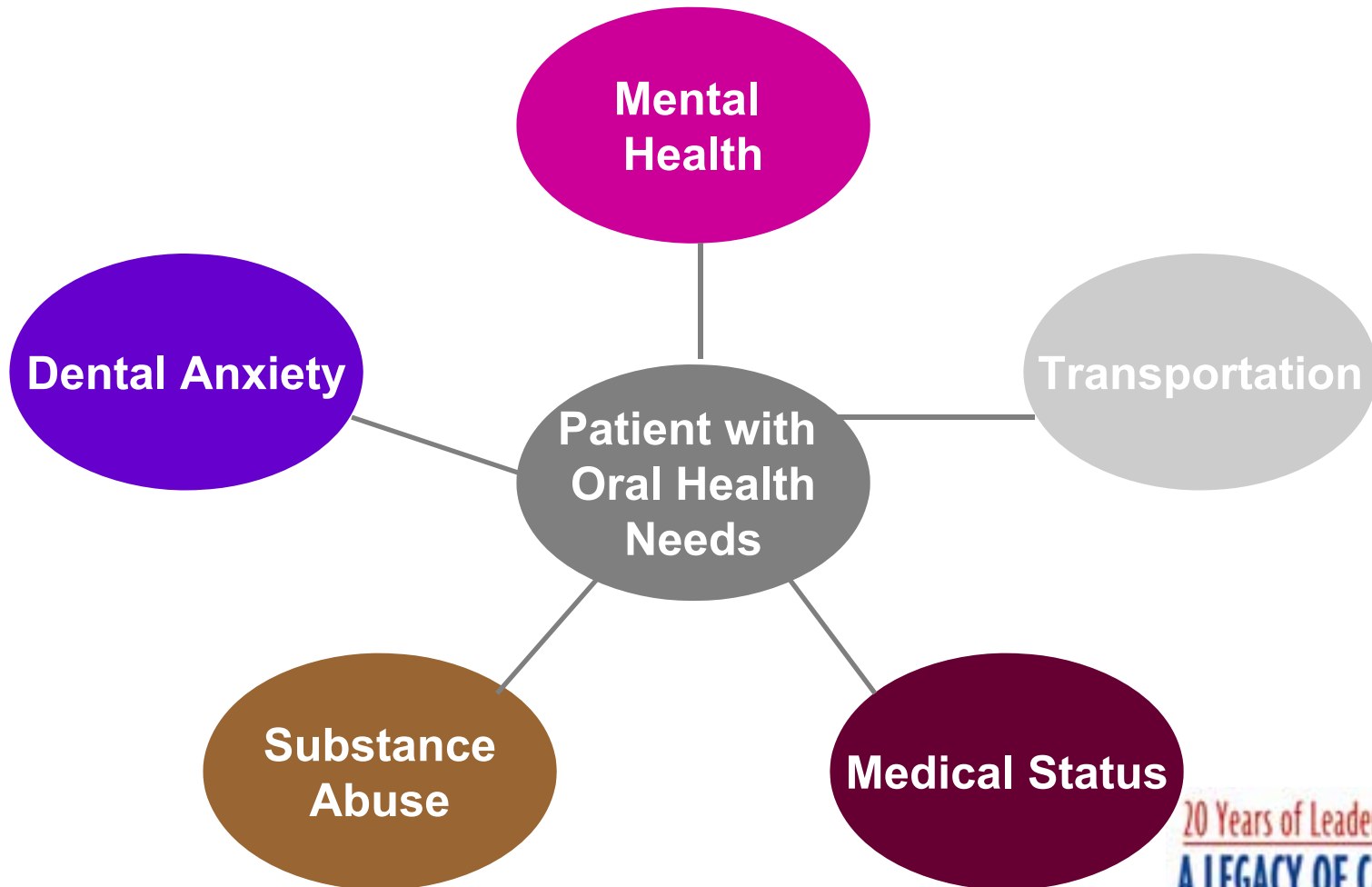
- *Urgent and Routine*
 - Oral Care Coordination Conference



Access to Oral Evaluations

- *Medical Appointment*
 - Oral evaluation performed at routine medical appointment
- *Dental Screening “Walk-in” Clinic in the Medical Clinic*
 - Oral evaluation performed on patients presenting to the clinic during walk-in session
- *Referral to Dental Clinic*

Patient-Centered Oral Care Coordination



Interprofessional Team for Oral Health Care

- Dentists and Dental Residents
- Infectious Disease Physicians and Infectious Disease Fellows
- Nurse Practitioners/Physician Assistant
- Mental Health Specialist
- Pharmacist and Pharmacy Students
- Social Services Care Coordinators
- Medical and Dental Support Staff



Impact on Education

- Model for interprofessional approach to patient-centered care
- Increased collaboration and communication between dental, medical, pharmacy, mental health, social services professionals, and students
- Decreased “no show” rate

Impact on Education

- *Some additional outcomes*
 - Infectious disease physician, mental health specialist, pharmacist, and social service care coordinators provide education during orientation for community based program
 - General Practice Residents have a clinical rotation in the WINGS medical clinic.

What our medical colleagues say about the program

“We are all speaking the same language and can communicate better about patients’ oral health care needs.”

“We can tell the dentist their CD4 count, viral load, whether they’ve been adherent to their medications, and any background information needed as they deliver oral health care.”

The Dental Education Environment

The concept of a “Health Care Team” is one of the basic principles proposed by the ADEA Commission on Change and Innovation (CCI) that is shaping the dental education environment.

“Access to oral health care and the connection of oral health to general health form a nexus that links oral health care providers to colleagues in other health professions.”

NK, Andrieu SC, Chadwick DG, Chmar JE, Cole JR, George MC, et al. The Dental Education Environment.

J Dent Educ 2006; 70(12); 1265-70.



Access to Care

Provision of Oral Care For Persons Living With HIV

Professional
Education

Inter-
professional
Team

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Acknowledgement

Grant funding support Department of Health and Human Services. Health Resources and Services Administration. Grant Award 2 H65HA00013-04-00. Community Based Dental Partnership.

Evaluating the HRSA SPNS Oral Health Initiative

Jane Fox, MPH

Boston University

Ryan White 2010 All Grantees Meeting

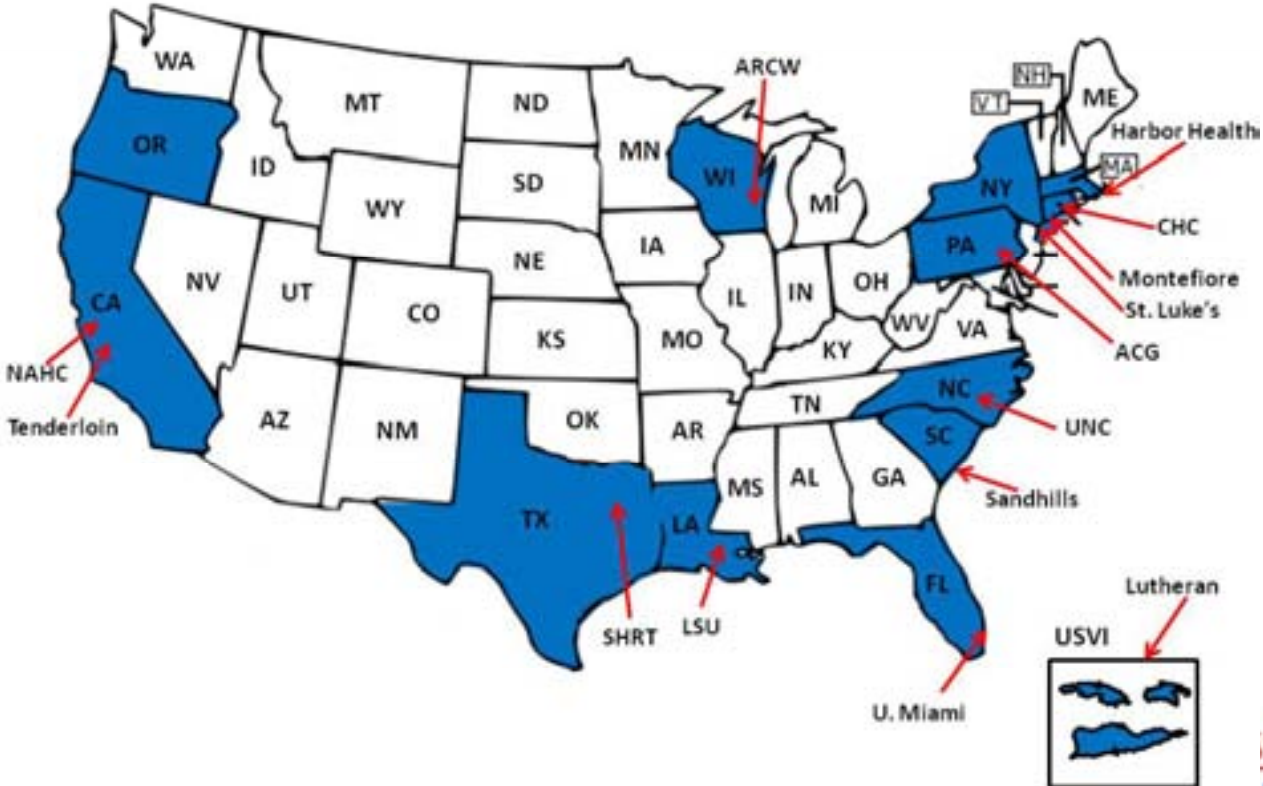


HRSA Oral Health SPNS Initiative

- September 2006 HRSA funded 15 sites and one evaluation & TA center
- Five year funding cycle
- Sites were charged with increasing access to oral health care for PLWHA

SPNS Sites

Innovations in Oral Health Care Project Sites



Evaluation Study Questions

- Do the demonstration programs increase access to oral health care for the target population?
- What are the main similarities and differences in strategies and program models to increase access to oral health care across programs?
- Are the oral health services performed in accordance with professional practice guidelines?
- Do clients experience improvements in health outcomes over time?

Evaluation Study Questions

- Are clients' oral health care needs met?
- Do clients experience improvements in oral health related quality of life after enrollment in oral health care?
- What strategies are most effective in furthering successful program implementation: barriers, facilitators, key lessons learned?
- What strategies to address the structural, policy and financing issues can be replicated in other settings?

Evaluation Study Design

- Quantitative survey at baseline, 6mos, and 12 mos
 - Demographics, past access, insurance, HIV status, past oral health symptoms, SF-8, OH QOL, and presenting problem
- Utilization and ancillary data
 - CDT codes of EVERY procedure done, evidence of tx plan completion and recall

Evaluation Study Design

- Qualitative Interviews
 - In-depth interviews of 60 patients at 6 sites
 - OH experiences and values, OH self care knowledge and behaviors, patient education, and impact of HIV on OH
- Dental Case Manager Focus Group
 - June 2008 with 12 participants

SPNS Models - Typology

- Three types of host agencies
 - ASO/CBO (5), CHC (4), and hospital/University-based programs (6)
- Three basic models:
 - Fixed site
 - Expansion of prior dental program/services
 - Implementation of new dental program
 - Mobile units

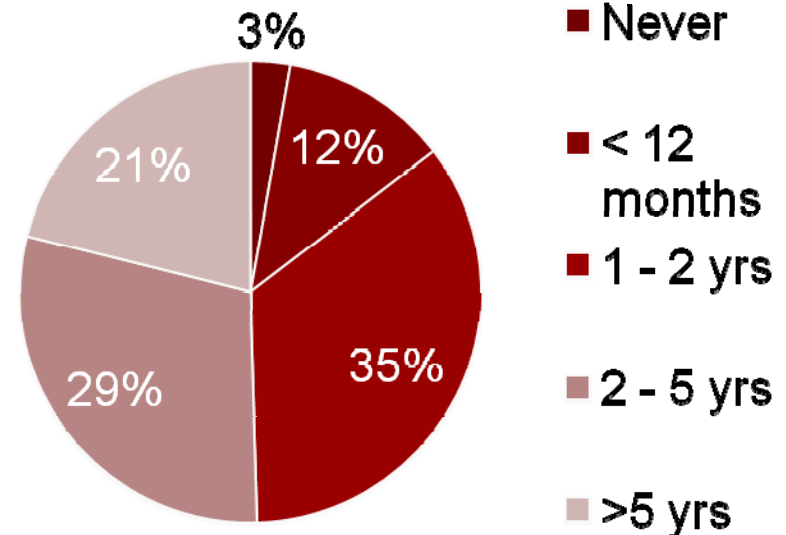
SPNS Models - Typology

- Levels of dental services
- Dental care coordination
- Training of professionals
- Connection to medical care
- Ancillary services and transportation
- Patient education

Patient demographics



- 75% male
- 40.3% black, 21.4% latino
- 32.8 % high school education, 42.0% beyond high school
- 30.7% working, 54.4% monthly income < \$850
- Age= 43.6 (18 – 81),
- Yrs positive = 9.54



Dental Access

- Usual place for dental care: 37.6% none; 30.4% private dentist
- 48.5% reported needing dental care but were not able to get it since testing positive
- Of those who did not get dental care, 64.4% stated affordability as the reason.

HIV status

- 97.3% have a regular place for HIV care and 95.5% have seen their HIV provider in the past 6 months
- 84.6% have an HIV case manager and 77.4% are taking ARTs
- 57.35 have a CD4 count over 350 and 44.2% have an undetectable viral load

“...I used to go regularly, you know, like every six months for the teeth cleaning and then if something came up I'd get that taken care of. That was just something my parents instilled in me. But when you don't have dental insurance it makes it a little harder coming out of pocket.”



Engagement in Care

Outreach and retention were two things we did not anticipate to be problematic when planning for this grant. As we began to open our clinic and serve patients, we realized that this is one of the most important aspects of operating a dental clinic for this population.”

Getting Patients in the Door

- Marketing
 - Paid & unpaid media
- Community materials
 - Literacy level
- Outreach to providers
 - Clinicians
 - Case managers
 - Other CBOs
- Ancillary services
 - Transportation
 - Other social or medical services
- Special events
 - SPNS days
- Word of mouth
 - Peers

Keeping Patients in Care

- Follow-up appointments
 - Timely and efficient
- Reminder calls
- Dedicated staffing
 - Patient navigators/dental case managers
 - Staff skills and relationships with patients
- Patient education and empowerment
 - “When both the dentist and the dental case manager reviewed the treatment plan with the patients, the patients gained a better understanding of why the proposed treatment was needed.”
- Incentives
 - “thank you gifts”
 - transportation

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Case Studies

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Ryan White All Grantees Meeting

August 26th, 2010

Interprofessional Team for Oral Health Care

- Dentists and Dental Residents
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One Collaborative Patient-Centered Outlook

What if, instead of one health-care professional focusing on your medical needs, a team of professionals worked together to give you the best possible diagnosis and treatment?

Interprofessional Education I.P.E.

Collaboration and teamwork among health professionals are important aspects to the delivery of high-quality patient care. A landmark report by the Institute of Medicine suggests health care workforce preparation should include interprofessional education (IPE).

Painful Bleeding Gums

AIDS Resource Center of Wisconsin

A 20+ year-old male presented to the AIDS Resource Center of Wisconsin (ARCW) dental office with a chief complaint of “bleeding gums” and pain for a period of two weeks. He was given a chlorhexidine mouth rinse and viscous lidocaine from his primary care physician until an appointment with a dentist could be arranged.

The patient was diagnosed HIV+ in 2000 with history of poor compliance with his medical care. His CD4 was 7 cells/ μ L, and his viral load was >100,000 copies/mL. His medications included sulfamethoxazole and trimethoprim.



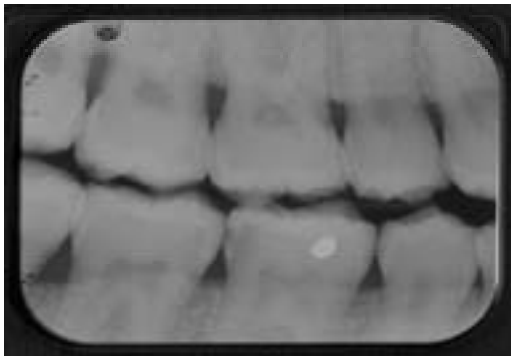
Figure 1. Erythematous, shiny and hemorrhagic gingival margin. Irregularly contoured papillae. Frontal view



Figure 2. The palatal view of the gingiva of the same patient



Figures 3 and 4. Right and left bitw





The following is the most likely diagnosis:

- A. Adult Periodontitis
- B. Streptococcal gingivostomatitis
- C. Necrotizing Ulcerative Gingivitis (NUG)
- D. Herpetic Gingivostomatitis
- E. Desquamative Gingivitis

Differential Diagnosis

The diagnosis of NUG is usually straight forward with its characteristic presentation. However, other oral mucosal lesions that may be **confused with NUG** include **acute herpetic gingivostomatitis, desquamative gingivitis, streptococcal gingivostomatitis, and advanced marginal gingivitis.**^{2,3} **Herpetic gingivostomatitis** is viral in origin with vesicular eruption, diffuse erythema and diffuse involvement of gingiva that may include the buccal mucosa and lips.² **Herpetic gingivostomatitis** is contagious and occurs frequently in children.² **Desquamative gingivitis** displays diffuse involvement of marginal and attached gingivae and other areas of oral mucosa.² It is a chronic condition which may or may not be painful.² It has a patchy desquamation of gingival epithelium.² Papillae do not undergo necrosis, and it has no characteristic odor.² Chronic destructive periodontal disease is painless if uncomplicated.² It generally has no desquamation.² Periodontal pockets are present and may contain purulent material.²

HIV and NUP

Gingival and periodontal lesions are frequently found in patients with HIV infection and AIDS.² Necrotizing ulcerative periodontitis (NUP) shares the same clinical features of NUG, but the destructive progression of NUP includes periodontal attachment and bone loss.² NUP lesions found in HIV+/AIDS patients can be much more destructive and frequently result in complications such as large areas of soft tissue necrosis with exposure of bone and sequestration of bone fragments.² Necrotizing forms of periodontal diseases appear to be more prevalent in patients with advanced immune suppression such as patients with CD4+ counts below 200 cells/ μ L^{7, 5, 6, 7} and patients can experience extremely rapid and extensive tissue destruction.

In this case, the patient was treated with full mouth debridement with an ultrasonic scaler and 10% providone iodine lavage. A chlorhexidine mouth rise was prescribed for twice daily use and refills indicated as necessary. Metronidazole 250mg, 1 tab qid, for 7 days. The patient was given a follow-up appointment in 3 days for additional debridement and supportive therapy as needed.



Figure 5. Three day post treatment. Front view.
Notice the decrease in gingival inflammation.



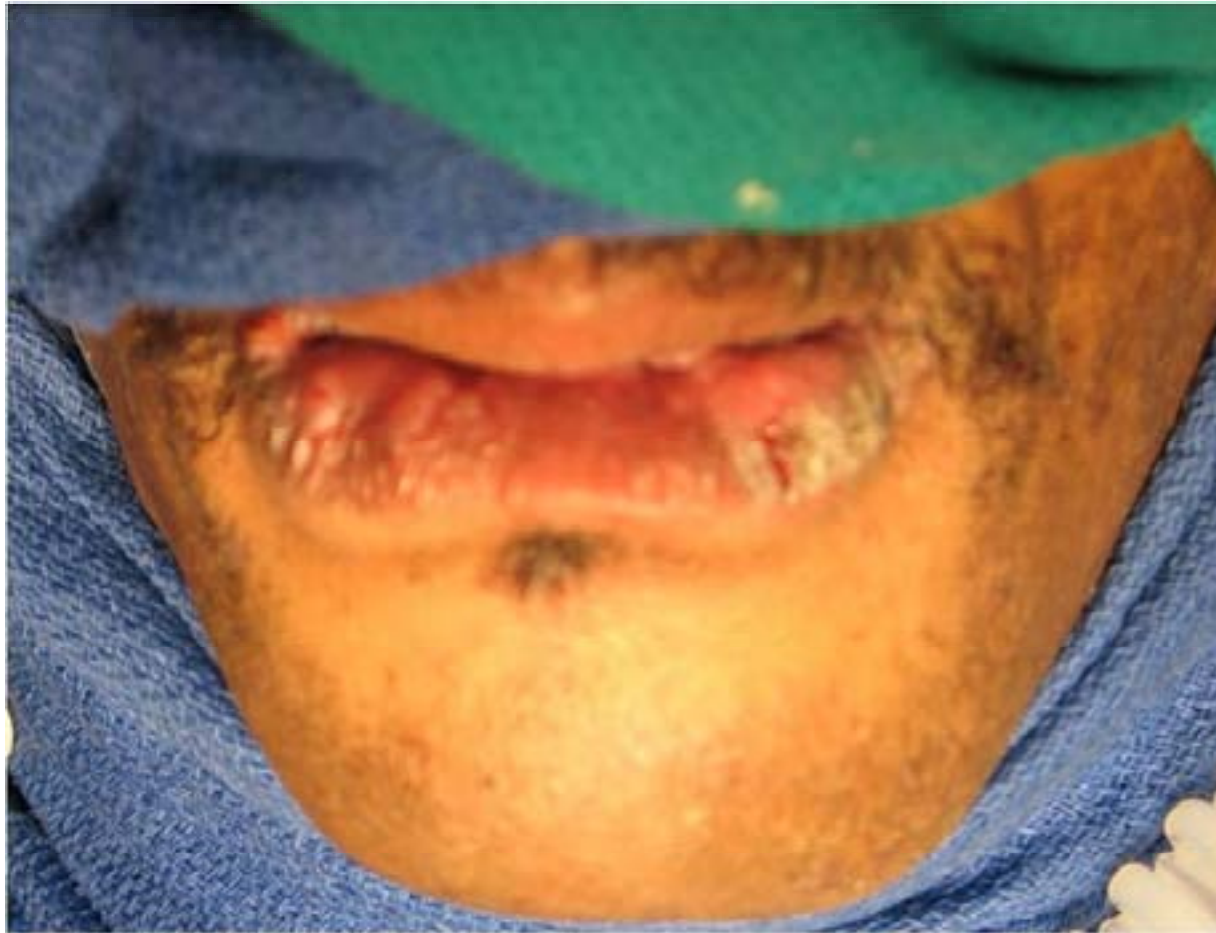
Figure 6. Three day post treatment. Palatal view.



CONCLUSION

NUG requires an accurate diagnosis since treatment options for NUG and differential diagnosis vary dramatically. Improper treatment may exacerbate the condition.²

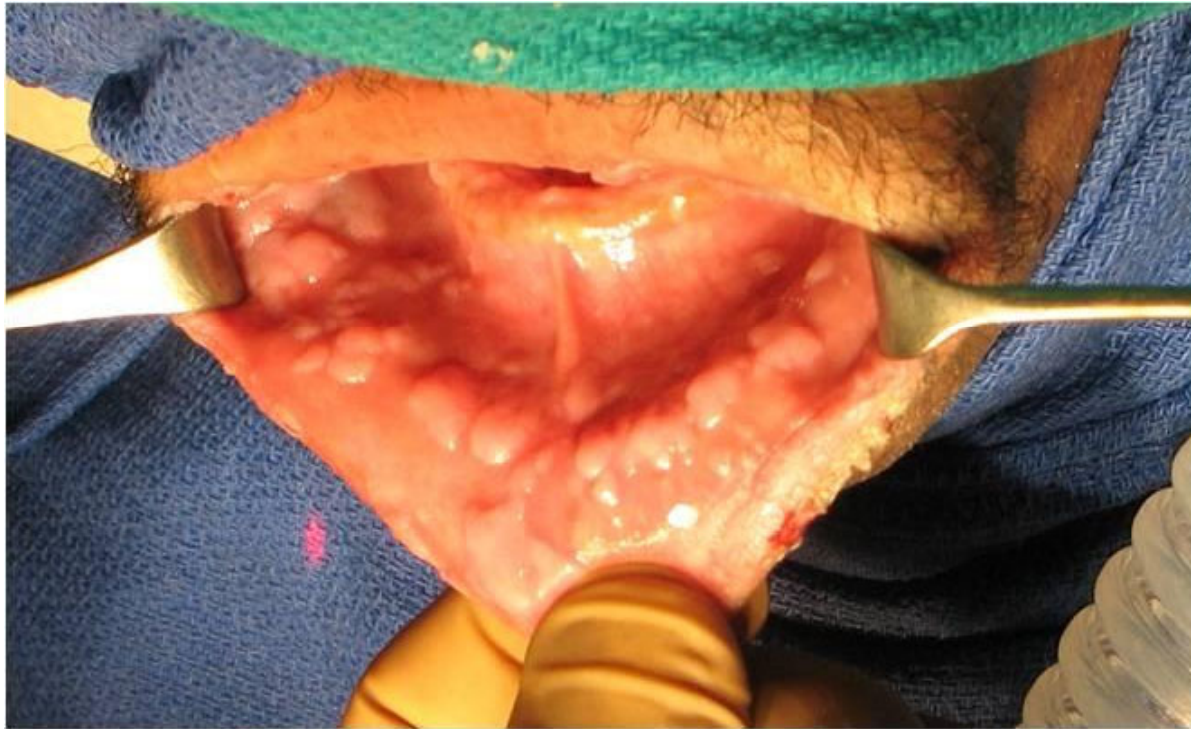
Early diagnosis and treatment of NUG are crucial because the osseous defects that occur in the late stages of the disease are difficult to resolve even with regenerative surgical procedures.²



Clinical/Radiological Findings



Clinical/Radiological Findings

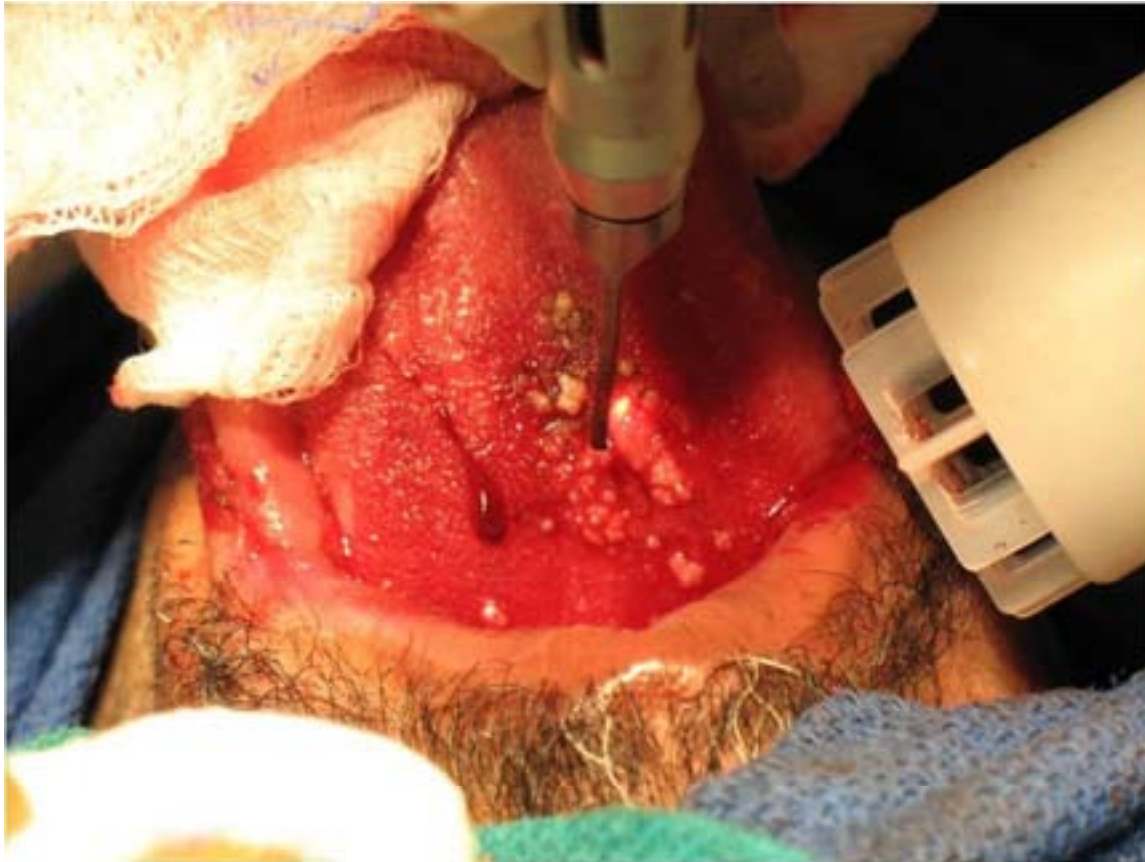




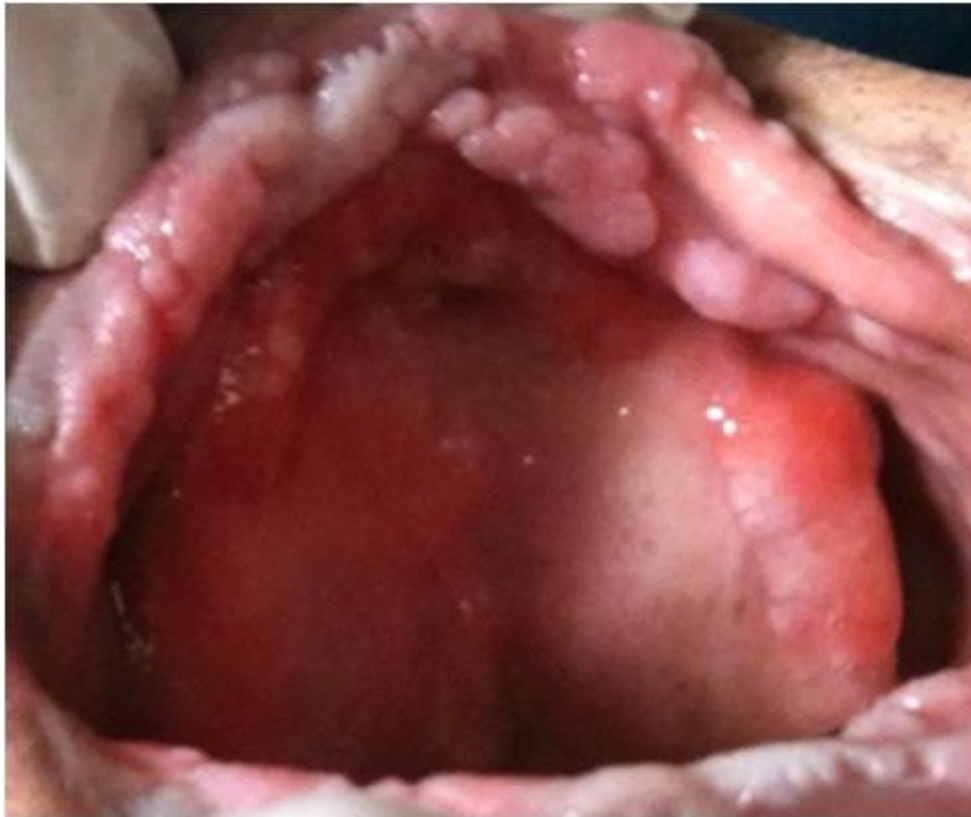
Clinical/Radiological Findings



Clinical/Radiological Findings



Clinical/Radiological Findings



- 1yr post ablation, recurrence

