Oral Health: Demonstration Model of Oral Health Care

Highlights from the Special Projects of National Significance (SPNS) Program

This fact sheet contains highlights from AIDS Care Group's *Demonstration Model of Oral Health Care,* responding to the high incidence of common oral health problems in people living with HIV (PLWH) that are directly related to HIV infection.[1] The Demonstration Model of Oral Health sets out to extend the reach of oral health care services for PLWH.

Setting: Satellite Dental Clinic in Southeastern Pennsylvania

Target Population: PLWH living in Chester, Lancaster, and York counties located in south central Pennsylvania

Background

PLWH experience a high incidence of common oral health problems, such as dental decay/cavities, gingivitis, as well as oral health problems that are directly related to HIV infection.[1] Although the incidence of certain oral manifestations, such as oral candidiasis and Kaposi's sarcoma, have decreased,[2] the rate of HIV salivary gland disorder—which results in xerostomia (dry mouth)—has increased.[3] This reduction of saliva, which can be caused by HIV medications or HIV-associated salivary gland disease, can result in a range of dental problems, such as tooth decay, periodontal disease, and fungal infections, and produce serious negative effects on clients' quality of life by affecting dietary habits, nutritional status, speech, taste, and tolerance to dental prostheses.[4] Moreover, poor oral hygiene increases the risk of additional oral complications of HIV disease,[5] and dentists can play the role of diagnostician as some infections present in the mouth first.

Unmet Needs

Oral health is a critical component of total health for all people. Poor oral health has serious consequences, including painful, disabling, and costly oral diseases. Diseases, such as gum disease and periodontal disease are associated with diabetes, heart disease, stroke,[6] cardiovascular disease, pulmonary disease, poor pregnancy outcomes, and osteoporosis.[4] As with the general U.S. population, PLWH are more likely to have an unmet need for oral health care than for medical care, and amidst the advances in HIV care and treatment, access to oral health care continues to be frequently cited by PLWH as their primary unmet need.[7,8] Poor oral health can make it difficult to chew or swallow and can impede food intake, nutritional density of food eaten, appetite, and nutrition, leading to poor absorption of HIV medications and poorer medication adherence, making PLWH more susceptible to HIV progression.[4]

Intervention Objectives

The objective of the *Demonstration Model of Oral Health Care* intervention was to establish a satellite dental treatment center for PLWH who receive HIV medical and case management services but have little to no access to comprehensive oral health care. More specifically:

- **Develop innovative strategies** for providing comprehensive oral health care services for PLWH
- **Expand oral health care services** to new communities and populations
- **Implement models** to maximize payment coverage and sustainability
- **Establish linkages and referrals** to HIV medical care and support services
- **Provide appropriate training** and support to staff in managing oral health care for PLWH.[9]

⇨ Key Considerations for Replication

Key considerations that organizations should consider when replicating this evidence-informed intervention include the following:

- **Assess feasibility** for a satellite clinic to increase client enrollment into dental care.
- **Secure buy-in** by communicating and soliciting feedback from the community, staff members, and clients about the new location and its services.
- **Identify a dental case manager/care coordinator** to increase access to and retention in care by addressing barriers to oral health care.
- **Train staff and identify a champion** who is friendly and non-judgmental, willing to learn, and want to work at the satellite clinic with the target population.
- **Market the clinic** to referring providers, social support organizations, dental societies, consumer advisory groups, and explore more traditional marketing methods such as flyers and a dedicated clinic webpage on your organization's website. Ensure staff and clients know about the new clinic as word-of-mouth can be particularly effective.
- **Educate clients and provide dental care.** All clients should receive an oral health screening and one-on-one education.
- **Processes need to be in place to track referrals.** Two primary types of referrals are referring clients to the satellite dental clinic and referrals that can include subspecialty dental care.

⦿+ Intervention Staff Requirements

To replicate the AIDS Care Group Oral Health Care Intervention, the following positions and capacity are necessary.

- **Dental supervisor**—plans and sets up satellite clinic; trains staff; oversees primary dentist.
- **Dentist**—day-to-day dental care; provides client dental education.
- **Dental hygienist**—dental exams; cleans teeth; provides client dental education; and may provide dental case management.
- **Dental assistant**—assists dentist and hygienist; client record-keeping; may be trained in case management.
- **Front desk receptionist**—welcomes clients; schedules appointments; office work.
- **Dental case manager**—ensures client is engaged in care.
- **Transportation support**—drives clients to appointments, or provides other support (e.g., bus tokens, gas cards).

Notes

[1] Health Resources and Services Administration (HRSA), HIV/AIDS Bureau (HAB). Oral Health and HIV. Ryan White HIV/AIDS Program [Fact Sheet]. Retrieved from https://www.hrsa.gov/publichealth/clinical/oralhealth/hivfactsheet.pdf

[2] Patton LL, McKaig R, Strauss R, et al. Changing Prevalence of Oral Manifestations of Human Immunodeficiency Virus in the Era of Protease Inhibitor Therapy. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 2000; 90:299–304.

[3] Fox JE, Tobias CR, Bachman SS, et al. Increasing Access to Oral Health Care for People Living with HIV/AIDS in the U.S.: Baseline Evaluation Results of the Innovations in Oral Health Care Initiative. *Public Health Reports*. 2012 (Suppl 2):127:5–16.

[4] Strauss H. Adapted from Abel N. Importance of Oral Health Care in Treatment of PLWHA. [Presentation].

[5] Rajabiun S, Fox, JE, McCluskey A, et al. Patient Perspectives on Improving Oral Health-Care Practices Among People Living with HIV/AIDS. *Public Health Reports*. 2012 (Suppl 2):127:73–81.

[6] U.S. Department of Health and Human Services. *Oral Health in America: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000.

[7] Tobias C. Oral Health Care: The Forgotten Need for HIV-positive Populations in the Continuum of Care. [Presentation]. American Public Health Association (APHA) Conference; Washington, DC.

[8] Kenagy GP, Linsk NL, Bruce D, et al. Service Utilization, Service Barriers, and Gender Among HIV-positive Consumers in Primary Care. *AIDS Patient Care STDs*. 2003;17: 235–44.

[9] HRSA, HAB, SPNS. Innovations in Oral Health Care Initiative: Demonstration Models and Evaluation and Support Center. Rockville, MD: Author; 2006.