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## Lucy Corr Dental Clinic: Addressing Dental Needs of Uninsured Older Adults

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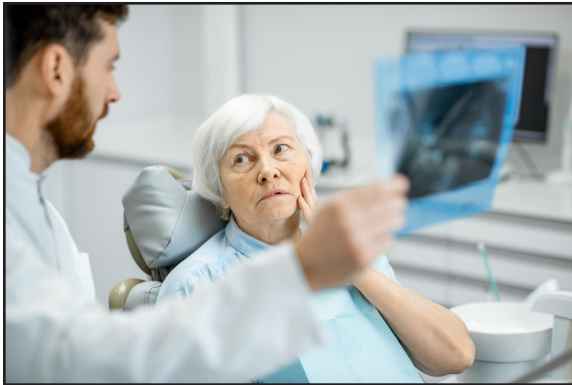
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## Case Study

# Lucy Corr Dental Clinic: Addressing Dental Needs of Uninsured Older Adults

By Patricia B. Bonwell, RDH, BSDH, MS, PhD



### Educational Objectives

1. Discuss the critical importance of oral health and the oral-systemic relationship in older adults.
2. Describe how dental insurance determines receipt of dental treatment in older adults.
3. Share how the Lucy Corr Dental Clinic (LCDC) increases access to dental care for uninsured older adults.
4. Describe valuable collaborations with community foundations, the Virginia Dental Association, and Virginia Commonwealth University that enable the success of the LCDC.

### Background

A healthy mouth is essential to healthy aging. An

unhealthy mouth adversely affects nutrition, sleep, psychological status, social interactions, and other activities, and is associated with a number of serious chronic conditions, thereby worsening quality of life. This is called the oral-systemic relationship. Having no teeth or unhealthy teeth and gums can contribute to poor nutritional intake and associated health problems. Pain from untreated oral diseases can limit one's activities of daily living, as well healthy sleep patterns. Feeling that the appearance of one's teeth or mouth is unattractive or not socially acceptable can lead to isolation and possible depression.

Evidence supports an oral-systemic relationship between oral disease and chronic diseases, including diabetes, rheumatoid arthritis, cardiovascular disease (CVD), and respiratory conditions (American Academy of Periodontology, n.d.). It is the inflammatory process associated with periodontal (gum) disease that produces the majority of these chronic conditions, for about 70% of adults ages 65 and older have it. Diabetes limits the healing ability of gums and poorly controlled diabetes increases this limitation after dental treatment. Diabetes can also affect the salivary glands leading to a reduction of saliva produced. Bi-directionally, studies show that reducing the inflammation associated with gum disease improves blood sugar levels and healing in diabetics (Corbella, et al., 2013). Reducing the inflammation

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associated with gum disease also reduces arthritic 'flare-ups' (Araujo, et al., 2015) and assists with controlling CVD by reducing the production of C-reactive protein associated with CVD (Schenkein, & Loos, 2013). Studies indicate a systemic link between inflammatory gum disease and Alzheimer's disease, and support implementing oral health preventative measures early that are continued throughout one's lifespan (Kantarci, et al., 2020). Oral health issues can trigger incidents of acting out in those with Alzheimer's.

Bacteria in dental plaque/biofilm as well as larger pieces of calculus (calcified plaque) from unclean teeth can be aspirated into the lungs. This increases occurrence of bacterial pneumonia or aspiration pneumonia in less mobile older adults, especially those residing in long-term care (LTC) facilities (Terpenning, et al., 2001). Pneumonia is a common cause of mortality in older adults. Practicing good preventative oral hygiene techniques and receiving routine dental care help to reduce the prevalence of aspirating oral bacteria, preventing hospitalization, thereby reducing medical care costs for older adults (Rife & Luanne, 2018).

Medications prescribed for chronic conditions can display side-effects in the mouth. These can include overgrowth of the gums, burning mouth, ulcers, and limited healing of gingival tissues. However, the main oral side-effect of many medications is xerostomia/dry-mouth (Tan, et al., 2017). Dry mouth is not a normal consequence of aging, and in healthy adults change in saliva production is minimal to nonexistent. Dry mouth can increase tooth decay (cavities), gum irritation, gum infections, chewing and swallowing problems, inhibit taste, limit speech, and limit both comfort and fit of dentures and/or partials.

Oral cancer becomes more prevalent with age. According to the American Cancer Society, the estimated number of new cases of oral and pharyngeal cancer in the U.S for 2020 is 53,000, with the median age of diagnosis being 63. The CDC reports that oral cancer will be responsible for over 10,000 deaths this year with more than half of these occurring among those aged 65 and older. The median age at death is 67. These statistics support the need for routine oral exams/screenings performed by oral health care

providers.

### **Inadequate Dental Care in Later Life**

Maintaining oral health and receiving routine dental care are essential to the overall health and wellbeing of older adults. Practicing proper oral hygiene techniques and routinely visiting a dentist help to address dental needs at an early stage and prevent the exacerbation of chronic conditions, thereby reducing both dental and medical care expenses. However, a survey of older adults found that 54% cited dental care as their most frequent unmet need, second only to transportation (National Association of States United for Aging and Disabilities, 2016). Medicare does not provide any dental coverage and dental coverage in Medicaid plans for adults varies from state to state. According to the 2018 State of Decay Report, eight states cover no dental services through Medicaid and only four states cover the maximum possible dental services in Medicaid (Oral Health America, 2018). The CDC notes that having adequate dental care is closely related to having dental insurance for older adults.

Individuals ages 65 years and older generally have the lowest level of dental insurance coverage, in part due to loss of employer-provided insurance at retirement. Approximately half of all Medicare beneficiaries did not have a dental visit in 2016. In 2017, only 29.2% of adults aged 65 and over had dental insurance. A large number of older adults do not retain employer provided dental benefits after retiring. This lack of coverage leads to their paying for dental care with out-of-pocket resources, which many cannot afford, preventing them from receiving routine dental care. (Allareddy, et al., 2014). Uninsured older adults are often forced to wait until they are experiencing dental pain before seeking treatment, limiting routine oral cancer exams/screenings performed by an oral health care provider. This predicament leads to an increase in high cost Emergency Department (ED) visits to address preventable dental pain. The lack of dental coverage for many older adults contributes to a rise in unnecessary medical costs.

### **The Lucy Corr Intervention**

The Lucy Corr Foundation (LCF) was founded in

2000 with a mission to enhance the lives of Lucy Corr Continuing Care Retirement Community (Lucy Corr) residents, participants, and their families and to help meet the emerging needs of older adults in the community. A central program of the Foundation is the operation of the Lucy Corr Dental Clinic (LCDC), which provides oral health care free of charge to Lucy Corr residents, as well as to eligible uninsured older adults residing in surrounding communities. Community seniors must be ages 65 or over, have no type of dental insurance, and have not been seen by a dentist for a year in order to be eligible to receive care in the LCDC. In addition to screening residents of Lucy Corr, the LCDC volunteers and staff provide offsite screenings to eligible dentally uninsured participants of partnering community geriatric programs, including senior housing and nutrition programs. Participants screened are then scheduled in the dental clinic for treatment based upon needs they presented during their dental screening. For almost 10 years, the LCDC has consistently operated and served as the only safety net provider solely meeting the oral health care needs of eligible dentally uninsured seniors in the region. The LCDC has so far served over 1,300 patients and provided over \$2 million worth of dental services to uninsured older adults.

Grant funds, various fund raisers, and donations have enabled the LCDC to pay part-time staff salaries and purchase dental materials, equipment, and supplies to provide dental treatment free of charge to eligible participants. The Jenkins Foundation, Richmond Memorial Health Foundation, John Randolph Foundation, Rotary of South Richmond, Mary Morton Parsons Foundation, Titmus Foundation, Conduff Memorial Trust, Gwathmey Memorial Trust, Delta Dental of Virginia Foundation, Altria Companies Employee Community Fund, and the Cameron Foundation have provided funds to the LCDC. Services provided by the LCDC include routine exams, prophys (cleanings), restorations (fillings), fluoride treatments, simple extractions, x-rays, new dentures and partials, as well as repairs. Other benefactors to the LCDC are volunteer dentists, dental hygienists, and dental assistants. Their extraordinary donation of time and talent is gratefully received by those to whom they render dental treatment free of charge.

Strong partnerships have helped the LCDC to provide critically important dental care free to uninsured older adults. Through a collaboration with the Virginia Dental Association's Donated Dental Services (DDS) Program, the LCDC has provided over 324 dentures and partials, fabricated free of charge by dental labs that also collaborate with DDS. Once LCDC has determined prosthetic needs, its partnership with the DDS Program enables assistance with making partials with a partnering lab, full dentures if they cannot be made on site, and securing oral surgeons to perform surgical extractions. In turn, DDS reaches out to the LCDC on behalf of community members who have contacted them in need of dental care and dentures. Recipients are grateful for this collaborative effort.

### Case Study #1

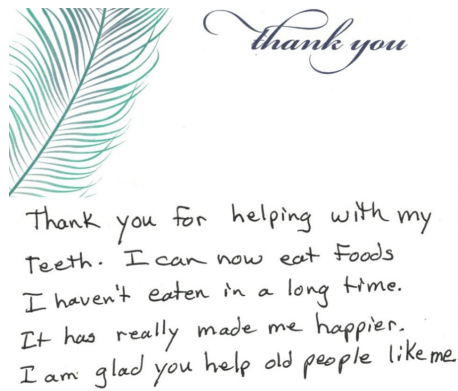
This case study focuses on two patients in the LCDC. The first is Ms. B, an 88-year old resident of the facility with hypertension, Type 2 diabetes, and COPD. She had been without dentures for a while and was having trouble with eating a diet she desired. She was tired of the soft pureed diet she was on and longed to be able to chew "good food." Her nurses commented that she lost interest in her food and had started to lose weight. She seemed reticent and to be feeling down on herself when she was first seen in the clinic. However, the LCDC staff shared with her that they would be able to make her a new set of dentures on site using the Larell Denture making system. She was delighted to hear this and went cheerfully through the steps and appointments involved in making removable dentures on site. After receiving the dentures and having some adjustments made, her mood improved, she gained weight, and was happy to be able to chew "good food."



*Before dentures (left) and after dentures (right).*

The second patient, Ms. S., age 82, with hyperten-

sion and restless leg syndrome, came to the LCDC because she was a participant in one of the partnering community geriatric programs. She was in need of surgical extractions of several root tips that were causing her discomfort. In addition, Ms. S. needed to have partial dentures made to replace pulled teeth and improve mastication (chewing). LCDC collaborated with the DDS Program to secure a volunteer oral surgeon for the extractions and a dental lab to assist the LCDC with making upper and lower partial dentures. Her shared “thank you” note supports the scientific findings that being able to chew food more adequately with dentures and partials improves nutritional intake and self-image.



## Case Study #2

This case stems from the LCDC serving as a preceptor site for the rotation of dental and dental hygiene students from the Virginia Commonwealth University School of Dentistry. This partnership gives students an opportunity to work with and provide dental treatment to members of the geriatric population that they may not encounter in the dental school clinic environment. With the aging of the population, there is a need to include geriatrics in the educational curriculum of future oral health care providers (Levy, et al., 2013). The LCDC addresses this need by providing oral health care students an on-site training opportunity for the provision of clinical dental treatment to older adults. Students are overseen by licensed volunteers and staff. This collaboration produces twofold benefits: having students on rotation in the clinic increases the number of providers available to render free oral health care, and more providers increases the number of uninsured older adults who are treated. This experience has had a profound impact on students.

As part of their clinical training curriculum, senior dental and dental hygiene students of the VCU School of Dentistry have various preceptor sites at which they are required to rotate and provide services under the supervision of licensed oral health care providers. After his rotation at the LCDC, B. B., a senior dental student, submitted his reflection piece to the Dental School’s Director of Oral Health Promotion and Community Outreach. His words show the impact of the rotation:

*“My training as an expeditionary serviceman and a dentist came into contact during the Lucy Corr rotation. I believed that I would go into the clinic, find an operatory, and wait for my patients to appear seeking my specific skill set. This was not to be. For the first part of my rotation I was handed a Rubbermaid tote containing examination gloves and masks and followed the attending dentist, hygienist and assistant as they went out into the nursing home to patient rooms. In this role we provided the service of quick oral exams and prostheses evaluations along with limited treatment planning. This limited treatment plan allows for the patient to be scheduled for an appointment where more definitive treatment can be performed. I was able to be the student and observe the dental treatment rendered. However, the dental portion of this visit was not the only service we provided. We were four humans entering the rooms of strangers, some of whom were mentally aware and some who were not. Regardless of the mental state of the patients, we provided much needed interaction: a smile, a few words, physical touch, even a laugh. It was in one such room that one of the residents continually shouted, “Help us, help us please!” We ensured that she was alright, but her mind was such that she repeated this request, so much that in my memory I can still hear the pitch of her voice, see the height of her bed and the brightness of the light in the room.*

*After these visits were completed, we returned to the main dental clinic where I was able to practice the dental model to which I am accustomed: those in need come to me. But now a new dental model has been planted in my mind: the expeditionary dentist. Our country has an aging population, a portion of which will utilize nursing homes and assisted living where their ability to seek out dental care might be*

*limited. This limitation can be coupled with a staff too overwhelmed with the myriad of medical problems to consider dental care for their patients. This is a mission field well suited to the expeditionary dentist. I know of a nursing home not one mile from the office where I will practice in my hometown of Salem, VA. Having now seen a model of this expeditionary nursing home dental care I know I have the resources to either set up a similar clinic or supplement a clinic should one already exist. Perhaps, the one resident's cry of "Help us, help us please!" was meant for me: meant to bring into clarity this need to take dental care where it is needed."*

Clearly, the rotation experience at the LCDC was impactful on this future oral health care provider. Follow up correspondence revealed that this dental student did stick to his word after graduating by volunteering at a nursing home facility near him to provide oral health to its residents.

## **Conclusion**

The utilization of routine dental care services is an important component of maintaining oral health. Impaired oral health can adversely affect diet, nutrition, sleep patterns, psychological status, social interaction, and other activities of life in older adults. Research findings support a link between gum disease and systemic chronic conditions prevalent in the older adult population. However, despite these findings and the fact that research also suggests improved oral health may have a positive impact on general health and may delay mortality, dental coverage for older adults in Medicaid is minimal to none in many states and there is no dental benefit included in Medicare at present. There is a nationwide push to add a dental benefit to Medicare and various states have adopted a broader dental benefit to cover adults in their Medicaid plans. However, while policy issues are being addressed, free and charitable clinics, such as the Lucy Corr Dental Clinic, are striving to improve access to dental care for uninsured older adults.

By 2030 the number of US adults aged 65 and older is expected to reach 74 million, 21% of the overall population (Colby & Ortman, 2014). The Baby Boom cohort is a large cohort that may face greater competition for social resources than previous small-

er cohorts. The lack of dental coverage in Medicare and numerous Medicaid programs creates a financial barrier for many Baby Boomers entering later life, limiting their access to dental care. The LCDC, and other similar clinics, present a model for working to address this limited access.

The operation of the LCDC has resulted in positive outcomes for patients seen and students educated. While preparing students to provide dental care after graduation to older adults in need, this clinical educational site rotation improves access to dental care for uninsured older adults. Through collaborative efforts, the LCDC increases access to dental care for these elders while improving knowledge, interpersonal skills, and clinical expertise of future oral health care providers.

Students rotating through the dental clinic add to the number of volunteers providing free oral care. In turn, training future oral health care providers in geriatric oral health care prepares them for what they will confront in practice settings as the overall population grows older. So long as national and state policies limit access to critical oral health care for so many older adults, initiatives like the LCDC offer a meaningful response to this barrier by providing dental treatment free of charge through positive partnerships, training, and productive collaborations.

## **Study Questions**

1. Why is it important to understand how the oral-systemic relationship may affect older adults?
2. What is a good approach for addressing oral side effects of medications?
3. How should the impact of oral health on overall health be shared with older adults and care givers?
4. What are ways to improve access to oral health care for uninsured older adults?

## **About the Author**



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