

Chapter 6: Enhancing quality of life through comprehensive dental and vision insurance benefits

6.1. Introduction

People enjoy a better quality of life and greater productivity through improved health, supported by advancement and greater accessibility of early diagnostic services in the areas of health and vision. Quality of life is also inherently tied to other factors, including income, workplace safety, health, family, and social networks. Fortunately, many individuals have access to health and vision plans through employer-sponsored offerings or through the government. About half of individuals in the United States receive health insurance benefits through their employers, while only a small percentage purchase insurance directly from a provider. The remainder of the population qualify for government-sponsored plans. However, these government services have sizable gaps, and only about two-thirds of individuals in the United States have coverage through government-sponsored programs, employer sponsorship, or direct-purchase from private organizations. Of those that do have health insurance, many plans have operating weaknesses, including established limits on care, especially for preventive care, implementation of high deductibles, and restrictions that limit choices regarding treatment and physicians (Abdulmalek et al., 2022; Danda, 2022; Gupta, 2024).

Some benefits of a good quality of life can be achieved through prevention and early detection, which are proven methods for significantly improving morbidity and mortality outcomes in many diseases. Among susceptible families in the United States, early detection and intervention has been shown to reduce diabetes-related complications and vision loss. For these reasons, both vision and dental examinations should be performed on a routine basis and offer an opportunity for primary care providers to educate patients regarding preventative strategies. Comprehensive examinations can improve the quality of life for these patients by diagnosing and treating ocular and systemic conditions early and providing preventative care to avoid future problems. However, both vision and dental insurance have traditionally lagged behind other medical services in coverage and reimbursement for dentists. It offers voluntary accessible dental and vision benefits for

children and allows and encourages states to provide additional adult dental services. Historically, pediatric dental services are often viewed primarily as screening services (Mann et al., 2021; Slashcheva et al., 2021; Ragavane & Chandrasekaran, 2025).



Fig 6.1: Enhancing Quality of Life Through Comprehensive Dental and Vision Insurance Benefits

6.1.1. Background and Significance

The work described herein affords a unique opportunity to critically examine the potential for a business model, established on the foundation of extensive experience in the marketplace, to offer a comprehensive benefits solution to the employer. Moreover, it proposes a “why” for traditionally low utilization insurance products related to oral and vision health. The “why” relates to the social message of improved quality of life, an enhanced ability to participate in family, school, and work or social activities, and expressing self-image. There have been many studies that correlate the importance of oral and vision health to overall health and wellbeing. Many of these studies have displayed a relationship between poor oral health and chronic disease, mental illness,

health risk behaviors, adverse pregnancy outcomes, and poor general health; and poor access to care. Similarly, studies have shown the negative impact of poor untreated vision problems including lower family income and education, poorer physical health, and less social political participation, and poorer life satisfaction and happiness. Research has shown that a lack of vision correction can impede the development skills in early childhood. Children who cannot see well may have difficulty learning how to read, which can lead to difficulties in academic performance and completing school. Poor vision can also hinder an older child's social development and negatively impact the success of their personal relationships. In adolescents, poor vision care can lead to strategies that are aimed at mitigating symptoms of poor vision, which in turn can result in poor overall mental health.

These and other connections help to establish oral and vision health as a critical foundational element to maintaining our society's overall health and wellbeing. But yet, there is little consensus, even in the social sciences community itself as to what quality of life is. There are many definitions for the phrase "quality of life." Quality of life is defined to be a broad concept, and it comprises mostly general and subjective understandings of life. It represents the satisfaction of individuals and groups of individuals with the conditions of their lives. Quality of life focuses primarily on those aspects of life that make people more or less satisfied. Its elements are not necessarily determinable and measurable as are the determinants of quantity of life. Quality of life is a perception of the individual, or a personal judgment of what life has been like or is like.

6.2. The Importance of Dental Insurance

It is no secret that the cost of dental insurance is a significant part of the overall cost of an employer-sponsored health plan. It is also no secret that for many employers, offering a competitive benefits package that includes dental and vision insurance is an expensive proposition. Even so, dental and vision care coverage is included in most employer-sponsored benefit plans these days. Why? The answer is simple: Because it is what their employees want.

Dental care plays a part in the quality of life for everyone. The early detection and treatment of dental problems reduce the risk of more serious problems later on. In fact, poor dental health can lead to more serious health issues, such as heart disease and diabetes. Routine dental care is essential to maintaining good overall health and well-being, as with other areas of healthcare.

Dental disease is one of the most prevalent diseases. The term "dental disease" refers to any number of disease types, including dental decay, periodontal disease, trauma, or

oral-facial anomalies. Dental diseases are the primary reason for more than \$70 billion in annual dental-related health care costs. Even routine dental procedures such as tooth cleaning performed by a dentist or dental hygienist can cost anywhere from \$50 to \$150, and X-rays and fluoride treatments add to the cost, which is incurred every six months to every year, depending on the person. These costs can be burdensome, especially for families with several members. In fact, dental expenditures, that is, the money spent on oral healthcare services and supplies, are the third-largest out-of-pocket healthcare expense for consumers, behind only copayments for prescription drugs and out-of-pocket spending on nonprescription drugs and medical supplies.

6.2.1. Overview of Dental Health

Maintaining proper oral health has always been overwhelming. Oral health status is inextricably linked to chewing function and the well-being state. Poor oral health contributes to malnutrition and decreases dissatisfaction with life. The role of dental health in the quality of life is widely adopted in the dental and healthcare sector but is not acknowledged appropriately. Dental care today is primarily told by the perception of aesthetic care from the media. Teeth bleaching or porcelain dental work is unquestionably sensationalized as affluent individuals inquire about the “perfect smile.” Cosmetic dental care is common to affluent non--or older-age people who can afford dental coverage for a perfect dental appearance. Many young populations have moved to cosmetic dental care in their teens. There is emerging dental care support and patient movement because of dental coverage services. It has established much significance in people’s perceptions of health care. This tension between cosmetic dentist institutions and other dental care institutions remains today because of the role of cosmetic dentistry in society.

Additionally, the topic of dental coverage services is often initiated. Dental insurance companies have started promoting those plans, which make implant procedures fee-for-service. In particular, this action poses a favorable position regarding the dental policy. Our society has dental programs that are only focused on children and employer subsidies for their employees, as do dental coverage programs. The oral disease problem forces both parties to impose rules on the services that dental insurance companies support, including dentures, root canal treatments, tooth enamel sanding, corrections, etc. The rules dictate that dental services provided by dentists’ offices must offer a successful outcome. This “outcome” is a commonly accepted oral health standard that, though durable, is considered neutral from an aesthetic viewpoint.

6.2.2. Financial Implications of Dental Care

Dental treatment is relatively expensive compared to other types of medical expenditures, and no one can afford dental work entirely out-of-pocket as they easily can do other smaller expenses, like most doctor visits. In fact, dental treatment is often put off until a problem is more serious and requires more costly repair work because of the high cost of dental treatment. Although the use of insurance coverage can reduce the overall cost of dental care, it does not eliminate it. Even with insurance, out-of-pocket spending for dental services is considerable. The experiences of many families point to a real social need for help in financing the cost of dental care. The purpose of this section is to highlight the analysis of financial burdens resulting from various types of dental treatment, the utilization of insurance in easing these burdens.

Like all other forms of health care, there is some relationship between the quantity of dental services consumed and the household's disposable income. To the extent that this is a valid assumption, any efforts to increase spending in this area will not only benefit the dental profession, but also society in general. Payment for dental services may enhance the risk of the consumer neglecting these services, especially in the case of preventive care. At the present time private insurance coverage pays a relatively small portion of the total costs of dental care. Dental benefits are generally linked to employee fringe benefit programs; however, only about a quarter of privately insured employees are covered in this manner. Also considered burdensome are the out-of-pocket expenses for orthodontic, periodontic, and oral surgical care. Such expenditures are not only large and concentrated, they are also considered to be of greatest financial concern.

Utilization of dental insurance influences not only expected expenditures but also the magnitude of total dental expenditures. Dental insurance affects consumer spendable income by transferring part of the cost of dental care from the private sector to the business sector. A change in the percentage of total costs usually paid by the insured would alter the demand for dental care by consumers, subsequent total demand for dental care in excess of resources. For high-income families, large budgets receive increased incentives to seek dental services, but small budgets are unlikely to be influenced by an increase in insurance coverage.

6.3. The Role of Vision Insurance

Vision insurance benefits provide an important foundation for maintaining eye health and are often provided to employees as part of a larger package of health insurance benefits, including medical and dental insurance. Vision insurance usually provides benefits for routine preventive eye exams, eyeglass lens and frame upgrades, contact lenses and exams and supplemental discounts on other vision-related services. While

most people are well aware of protecting the overall quality of their vision through services that detect eye disease, such as annual eye exams or vision correction via eyeglasses and contact lenses, most people don't know how vision plays a central role in the overall quality of one's life and in performing nearly every task essential to living. Vision provides the foundation for learning by allowing us to take in information and then safely master the physical environment; it allows us to interact socially with both our family and friends; it allows us to engage in recreational interests; and it is critical for driving, which is necessary for performing essential tasks such as commuting or going shopping. In other words, vision is integral for leading a productive, rewarding life. Never before have employees had more responsibilities for competing priorities in their lives outside of work and it is crucial that they remain healthy and engaged in all of their other activities. Therefore, for employers wanting a thriving workforce and ultimately a successful business, it is imperative that they provide comprehensive dental and vision benefits.

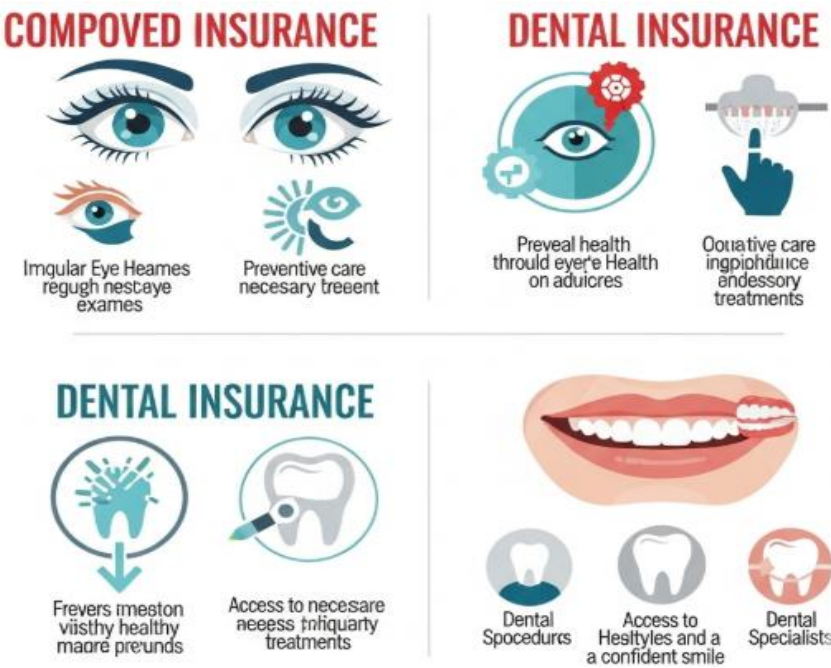


Fig 6.2: Role of Vision Insurance

6.3.1. Understanding Vision Health

Vision health is central to the health of the whole person, and to that of the family unit. Problems with vision are often linked to stress, fatigue, lack of sleep, physical and emotional illness, social defeat, and life events affecting family dynamics. Therefore,

vision disorders and deficient vision are unlike other areas of specialty medicine. Also specifically related to the family unit are the emotional impacts associated with risky situations such as caring for a visually handicapped family member. Vision is crucial for developing relationships and social interaction, so it is natural that coping with the stressors of a family member suffering from visual problems should be considered a family affair. Another aspect that merits attention from the family dynamics viewpoint is that vision impairment is frequently associated with the migration process in foreign communities. The importance of studying health from the family perspective is due, however, to the fact that every illness involves its patient, but also the constellation of people surrounding the patient. When one family member suffers, this naturally affects the closest ones. Dependability on family members causes additional encumbrance for the relatives, along with the economic burden also associated with eyesight problems.

Physicians and specialists involved in detecting, diagnosing, and treating visual problems in family members must work together. Primary caregivers will each see and have regular contact with many family members. General practitioners should therefore pay careful attention to how visual functions may affect relationships within a family at risk. Vision care practitioners should be aware of all the factors involved in family dynamics in order to consider their importance when examining a family member or advising that patient. However, it is difficult for doctors to take this into account, given their time constraints. An understanding of these precepts and attitudes is essential to fostering and ensuring the good relationships among family members and professionals and to amplifying the efficacy of the help provided in a sensitive stage of the family life cycle.

6.3.2. Economic Impact of Vision Care

More than just providing the essential support to address vision problems, vision care has a direct and indirect impact on productivity and the economy. The relationship between good vision and productivity has been recognized and studied for around 100 years, but until a few decades ago, attention was more focused on costs associated with vision loss: inattention, decreased cognitive ability, and loss of employment. In the past 30 years, an expanding body of vision research has examined how spending on prevention increases society's overall productivity and capacity. For example, an increase in use of vision services improves educational achievement, participation in gainful employment, performance on the job, and therefore improves productivity and earnings.

In recent years, awareness has grown of the link between visual health, work, and productivity. Additionally, growth in demographics known to be at increased risk for visual problems, including an aging population, have drawn attention to the critical

importance of vision care services. Vision loss—meaning visual impairment, blindness, and at its most serious, total loss of vision—carries a heavy burden on persons who are directly affected, as well as on their caregivers and society at large. Research has confirmed the negative impact of vision loss in daily lives that may include limited work capability, decreased functional independence, reduced quality of life and comorbid conditions, including increased mortality, delayed recovery, and increased anxiety and depression. Combined with burdens of high out-of-pocket costs for affected persons and families, it is increasingly critical for every person to have access to preventive, acute, and rehabilitation services.

6.4. Comprehensive Benefits Packages

Many small and large employers offer limited benefits packages that focus on hospital medical coverage. That is an important part of employee benefits, but it is not enough to enhance the health and quality of life of employees and their families. An increasing number of employers are providing greater assistance to employees — especially those with families — by offering more extensive employee benefit programs. In addition to comprehensive hospital medical insurance, a growing number of companies are also adding dental insurance, vision care benefits, life insurance, mental health benefits such as treatment for drug and alcohol abuse, and employee assistance programs.

Such extensive employee benefits packages have both a direct and indirect favorable impact on employee health and well-being. Insurance coverage for dental services lessens the economic burden of maintaining good oral health, while assistance with payment for eyeglasses permits employees and their families to ensure that their eyesight meets present work-related and learning needs. Both prevent existing dental or vision problems from worsening, while conveying to employees and their loved ones an employer's concern for their total health. This attentiveness on the employer's part may translate into employees being more appreciative of their jobs and more motivated to do them well.

Many holders of group and individual medical insurance typically do not know what their plan covers, especially once they encounter a deductible or copay. Dental and vision plans are far more user-friendly, as they have none of these loopholes. With a handful of exceptions, dental coverage kicks in for preventive checkups, like other aspects of general health, but also covers fillings, crowns, root canals, and gum disease treatment. Vision plans usually include a yearly exam and a payoff for glasses or contacts. Only those suffering from eye pathology need to proceed with their medical plan.

6.4.1. Integrating Dental and Vision Insurance

A greater number of health plans are expanding their basic health coverage to include other areas of preventive and restorative care, such as dental and vision services. As more people utilize managed care networks to access physical health services, they are becoming accustomed to the advantages of managed care, and since many dental and vision procedures are elective, they are seeking the same convenience, economies, and simplicity in purchasing and using a plan for their dental and vision care as they find with their health plans.

Dental and vision care are two areas of health needs which are typically separate from and additional to basic health coverage. The two areas fit very nicely together in an employee benefits package. They are elective services in which the consumer is guided by a combination of aesthetics and a need for normal function; the provider network is small and highly specialized; as a group, they comprise a small but non-negligible percentage of total health expenditures. In the past, employers tended to consider them as secondary items that give a company an edge in attracting new employees. Today, there are more employees advocating for their company to support these additional areas. In addition, many doctors and dentists are likewise advocating increased financial support from employers for these two areas due to the link with overall good health. It has also been shown that children who do not have regular dental care are more prone to become ill.

6.4.2. Comparative Analysis of Insurance Plans

This section will review dental and vision benefit plans available throughout the United States, covering such areas as cost, quality, and utilization. As previously mentioned, the federal government does not mandate dental and vision insurance; therefore, access to these services is determined by employers. Review of dental and vision plans throughout the U.S. show that prices, service availability, and the discounts associated with these services vary immensely. Employers should be conscientious in determining which health benefit package is cost effective while providing quality service to their employees.

Dental insurance provides coverage mainly for annual general dental exams and treatments for decay, gum disease, and oral cancer. There is some coverage for crowns, root canals, oral surgery, and denture work. The dental benefit program covers examinations, cleaning, filling, X-rays, and, if necessary, some extensive dental work. Some of the extensive work covered may include root canals, dentures, crowns, and bridges. Unstated but indicated is that only general dentistry preventive measures are included. Other dental procedures such as root canals, gum surgery, and orthodontia are

considered cosmetic and are not covered; all associated expenses must be borne by the patient. The Federal Employee Health Benefits program has thirty-three dental plans to choose from. The wellness benefit includes one preventive oral examination and cleaning, X-rays, fluoride treatment, sealants, and space maintainers for children under sixteen.

6.5. Impact on Quality of Life

Routine dental and eye care are vital components of an individual’s overall health and wellness. Untreated dental diseases, dental decay, and poor oral hygiene are associated with adverse outcomes in those with chronic illnesses such as diabetes, ischemic heart disease, myocardial infarction, respiratory disease, kidney disease, and osteoporosis. Lack of preventative vision care leads to decreased productivity and increases the likelihood of falls, which may lead to significant injury in the elderly population. Ancillary members who are 65 and over increased nearly fourfold from 1980 to 2020. It was 82.3 million in 2020, and it is expected to be 94.7 million by 2060. Thus, the elderly population faces growing risk. Older adults with vision problems are also far more likely to have difficulty with activities associated with everyday living, such as fixing meals, managing money, shopping, using a telephone, and doing housework. Overall, 41% of people with vision problems report difficulty with at least one of those activities, compared with only 8% of those who do not have vision problems. Furthermore, children with limited or no access to routine vision care suffer from poor academic performance, experience difficulties with overall development and socialization, and are at an increased risk of being bullied. Adults with no vision are present with issues such as decreased productivity, difficulties driving, and greater chances of being involved in workplace accidents.

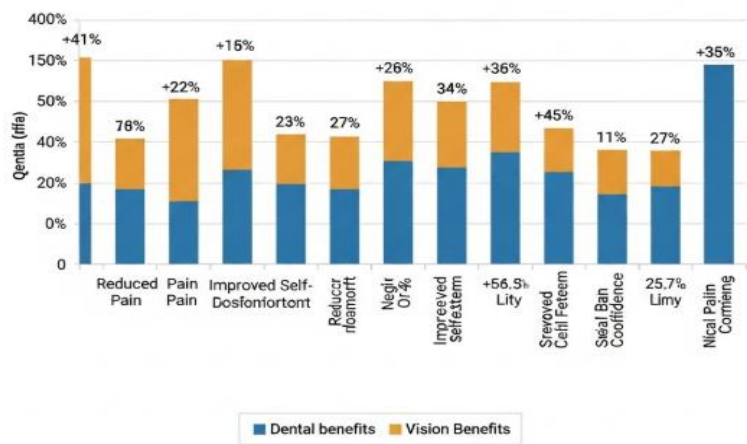


Fig : Quality of Life Through Comprehensive Dental and Vision Insurance

Reducing the financial burden through preventative, comprehensive dental and vision benefits leads to healthier individuals, in turn decreasing the burden on state budgets and lessening the costly burden of good people at home. Employers offering comprehensive health benefit packages with segregated benefits for dental and vision see improved productivity, better relations with employees, reduced absenteeism due to allergies and general illnesses, increased safety, improved employee morale, increased job satisfaction, and decreases in overall health benefit spending. Providing quality of life by funding these much-needed services allows for the overall betterment of not only private businesses but the state.

6.5.1. Link Between Oral Health and Overall Wellbeing

Apart from toothbrushes, toothpaste, and time, people increasingly rely on dental interventions to improve their oral health. Some such procedures are long-established. Others, such as dental implants and bleaching, have become increasingly common in recent years. Yet, a growing body of literature reveals that the impact of oral health goes far beyond well-being as defined by personal comfort or beauty. Indeed, a correlation exists between oral health-related quality of life and general health-related quality of life. Poor oral health can be associated with multiple physical, social, mental, and functional limitations; and, as such, index measures of quality of life frequently incorporate an aspect of oral health. Research reveals only some of these relationships; but they provide ample support for the need to include oral health when studying factors impacting quality of life.

The relationship between oral diseases and chronic diseases such as cardiovascular disease, diabetes, or obesity is well documented but again provides only a partial link between oral health and general health impact on quality of life. Oral diseases, such as periodontitis or tooth loss, are associated with missing teeth, difficulty chewing food, and the use of removable dentures. These conditions can have important social consequences and may lead to diminished quality of life due to daily embarrassment over appearance; manifestations of aging due to tooth loss, loose teeth, or bad breath; loss of self-confidence; and general psychological discomfort, especially in older adults. Some investigators have developed measures of condition-specific quality of life to evaluate a wider range of oral health conditions.

6.5.2. Vision Health and Quality of Life

"Vision degeneration has severe ramifications for quality of life and is projected to be the leading source of disability worldwide in the next decade. Intriguingly, adults with visual impairments exhibit significant disparities in overall health, increased depressive

symptoms, and a lower health-related quality of life compared to those without impairments. Those with low vision report problems with distance vision and especially near vision tasks such as reading as their primary concern. Cosmetic refractive surgery and other vision care procedures are performed primarily for the sake of appearance or convenience; these procedures do contribute, however, to the ever-increasing demand for health care dollars and largely go unmeasured. Serious eye disease is rarely fatal; visual loss is what impacts quality of life, and thus, an estimate reflecting only those serious eye diseases sufficient to cause irreversible vision loss is likely the more appropriate metric.

The contributions of eye disease to reduced quality of life are difficult to quantify. Studies attempting to do so have used different methodologies. Some quantified QALYs specifically for those patients undergoing cataract surgery and those patients with irreversible vision loss due to ocular trauma, hereditary disorders, or pathological myopia. A study estimated that the QALY associated with a generally asymptomatic person with diabetic retinopathy was 0.70, and that a person with diabetes is willing to pay to be free of retinopathy."

6.6. Conclusion

When it comes to engaging a dental and vision benefits partner, companies may be unaware of the impact their decision can make on the lives of employees and their families. Employees often are dissatisfied with low coverage amounts, rising costs, and a lack of value. With limited benefits dollars to go around, organizations are feeling the crunch, as group benefits spent on medical care are rising considerably faster than overall healthcare spending is increasing. That, however, does not mean the less visible benefits of covering "what you can't see" get put on the breakable shelf. Medical plan cost-shifting may prompt employees to pay attention to their underused dental and vision benefits and choose more expensive in-network treatment options, counteracting attempts to save on plan spending by offering a more affordable, less comprehensive benefit. Furthermore, as more and more people put off preventive and routine health visits, especially during an economic downturn, organizations are witnessing a big push from employees to help their family members get routine treatment instead of expensive acute care.

To help their employees and their families understand the value of their medical, dental, and vision benefits, employers will need to take advantage of the benefits and services offered by their benefit partners. Companies need to work with partners who are continuously upgrading to better meet their needs... partners who help companies communicate their overall benefits package, conduct on-site and online meetings, produce brochures in the appropriate languages, and mail out house and fill enrollment

kits. They will also want to be engaged with people who are offered plans consisting of easy-to-remember coverage guidelines. In a world of medical, dental, and vision noise, it is becoming increasingly important to businesses to have trustworthy partners to help them be a beacon of clarity to their employees and their families.

6.6.1. Future Trends

In the future, more people in the U.S. will have access to dental and vision insurance as health care systems converge and employers seek to simplify options. More than 75 percent of Americans get their health insurance through their employers, but fewer than half have dental benefits. Among those with medical insurance, only 20 percent are insured for vision. As employers seek to make more of their health care plans as competitive as possible, employees want to have a greater choice of health plans, not less. The increasing complexity of health plans, along with rising out-of-pocket health care costs, has raised the importance of voluntary dental and vision insurance products to continue to remain off their list of inconveniences and complaints.

Medically necessary dental and vision work will be covered by the same insurer, further increasing trend and minimizing the concern some have that dental and vision plans may fail to reward sound preventive and maintenance. Employers will purchase these integrated packages from a single vendor, or tightly integrated group of vendors. Some voluntary plans will be expanded to cover employees. These plans will be structured in the same generous, premium-attractive mode as actual dental plans. After many years of encouraging employees to rely primarily on a relatively low cost "safety net" set of dental and vision benefits, more employers see it in their own interest to encourage a greater overall level of employee spending for these elective services.

References

- Danda, R. R. (2022). Deep Learning Approaches For Cost-Benefit Analysis Of Vision And Dental Coverage In Comprehensive Health Plans. *Migration Letters*, 19(6), 1103-1118.
- Gupta, A. (2024). Dental, Vision, and Hearing Supplemental Benefits in Medicare Advantage: Plan Selection, Value and Equity (Doctoral dissertation, New York University College of Global Public Health).
- Ragavane, P., & Chandrasekaran, P. (2025). The VISION model: a novel holistic framework to improve oral health-related quality of life for visually impaired individuals. *European Archives of Paediatric Dentistry*, 1-3.
- Abdulmalek, S., Nasir, A., Jabbar, W. A., Almuhaaya, M. A., Bairagi, A. K., Khan, M. A. M., & Kee, S. H. (2022, October). IoT-based healthcare-monitoring system towards improving quality of life: A review. In *Healthcare* (Vol. 10, No. 10, p. 1993). MDPI.

- Mann, J., Doshi, M., Quentin, L., Eaton, K., & Morton-Holtham, L. (2021). Cost benefit analysis of two oral health improvement programmes. *Community Dental Health*, 38(1), 26-32.
- Slashcheva, L. D., Karjalahti, E., Hassett, L. C., Smith, B., & Chamberlain, A. M. (2021). A systematic review and gap analysis of frailty and oral health characteristics in older adults: a call for clinical translation. *Gerodontology*, 38(4), 338-350.