

The differences between dental and medical care

Implications for dental benefit plan design

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Dental benefit plans were introduced on a national scale in the 1960s as an employer-funded benefit for employees. The number of plans and the number of employees and their dependents covered by these plans grew rapidly during the 1970s. Now, 50.4 percent of Americans are beneficiaries of a private dental benefit plan.¹

Meanwhile, in the early 1960s, the federal government, in collaboration with the states, initiated the Medicaid program, which included dental benefits for children who qualified according to family income. Some states also added benefits for adults.

Employer-funded dental benefit plans were designed subsequent to the development of medical-surgical-hospital plans (medical plans), oftentimes by the same insurers who administered the medical plans. The insurers often used their medical plans as models for the design of their dental benefit plans and incorporated plan provisions

ABSTRACT

Background. Dental benefit plans have grown since they were introduced in the 1960s. More than one-half of the American population is covered by a private dental benefit plan today. In general, these plans have been designed to mirror medical insurance plans, despite the fact that dental care is significantly different from medical care. The author discusses the differences and how they should influence dental benefit plan design.

Conclusions. The differences between dental care and medical care, how oral diseases are treated, the diseases' natural histories without treatment and the organization of the dental profession compared with that of the medical profession require that dental benefit plans be designed differently than medical insurance plans if they are to be effective. The operation of dental and medical plans requires different mind-sets.

Implications. If they are to be effective, dental benefit plans and attempts to control the costs of those plans must be designed with the specific nature of oral diseases and the organization of the dental profession in mind.

Key Words. Dental benefit plans; dental public assistance programs; medical insurance; oral diseases.

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that controlled the costs of their medical plans into their dental plans. This mirroring of the structure of medical plans often has resulted in ineffective dental benefit plan design. The reasons for this apparent paradox constitute the basis for this article.

NOT AN INSURABLE RISK

Unlike medical disease, oral disease is not an insurable risk; it does not have the essential characteristics of an insurable risk. Certain conditions are needed for a risk to be insurable^{2(pp257-9, 292),3}:

- its occurrence should be uncertain, fairly rare and random;
- the consequences should be irreversible and not disappear spontaneously;
- the financial consequences of the risk occurring should be significant and almost catastrophic for most people;
- the affected person should have no control over the timing of the event or its consequences.

Medical diseases have all of the characteristics of an insurable risk. They are “unpostponable, unpredictable and unbudgetable.”³ Oral diseases, however, have none of these characteristics. They are nearly universal, though their prevalence, particularly dental disease, has decreased significantly in the general population.⁴ That decrease has been due to personal and professional intervention—passive intervention such as community water fluoridation and active intervention such as programmed individual preventive dental procedures and education. The average per person dental expenditure for those who had dental expenses in 2002 was \$513.06,¹ which usually is not a catastrophic stress on a patient’s financial status. When oral disease does require treatment, the patient has considerable control over when treatment expenses are incurred, the nature of the treatment provided and the associated costs.

THE NATURE OF ORAL DISEASE

Unlike most diseases, the most common oral diseases—dental caries and periodontal disease—do not heal without therapeutic intervention. They are chronic, progressive and destructive, and they become more severe over time. Since oral diseases progress slowly, often without symptoms initially, appropriate treatment often is postponed for a considerable length of time during which damage increases. Delay in treatment usually results in higher costs for treatment when it is provided.

Dental disease can begin in infancy and early

childhood and continue to be a problem into adulthood. The sequelae of dental disease can continue throughout a person’s lifetime. Most general illnesses heal with little, if any, adverse long-term sequelae. However, when dental caries is treated by restoring the diseased tooth with a restorative material, that tooth becomes at risk of needing further treatment throughout the person’s lifetime.

Through community-based preventive activities (such as community water fluoridation), professional dental care and fastidious personal dental care, much oral disease can be prevented. Treatment and lifetime maintenance costs are considerably higher than the costs of prevention; for example, water fluoridation generally costs less than \$1 per person per year.⁵

THE STRUCTURE OF THE DENTAL CARE SYSTEM

Approximately 80 percent of practicing dentists are general practitioners who provide primary dental care.⁶ The balance of the profession is made up of dentists who limit their practices to providing specific specialty care, except for pediatric dentists who provide both primary and specialty care. The medical care system is organized just the opposite; 80 percent of physicians are specialists, and 20 percent are generalists.⁷

The greatest portion of dental care is provided for a person by one practitioner at a single site. It is not unusual for medical care to be provided by a number of physicians at different locations. Patients receive almost all of their dental care as outpatients, while a significant amount of medical and surgical care is provided on a hospital inpatient basis.

Unlike medicine, there is no central facility, such as a hospital, where dentists interact on a daily basis. Dentists own, equip and operate their own “hospitals”—their dental offices—without public subsidy.

There are a relatively small number of categories of allied dental personnel compared with allied medical personnel.

ECONOMICS OF THE DENTAL CARE SYSTEM

Expenditures for dental care accounted for 4.5 percent of the total costs of health care in the United States in 2002.⁸ They certainly are not a driving force in health care expenditures. The average annual percentage increase in dental care costs has been greater than that for all medical care costs for approximately the last 10 years, as

measured by consumer price indexes.^{9,10} For the prior 20 years, however, it had been lower.^{9,10}

The average amount of money spent by people who had some dental care in 2002 was \$513.06, compared with \$3,302 spent by those who had some medical care.¹ The per capita dental expenditure in the United States in 2002 was \$254.68, compared with \$2,869.90 for medical and hospital care.⁸

Technological advances in dental care have increased dentists' productivity and efficiency without severely inflating dental costs. "High-tech" advances in medicine, however, generally increase costs.^{2(pp383-4)}

Competition exists in the dental care marketplace. Since most dental care is not of an acute or life-threatening nature, patients can seek out the best value in dental care. There is time to "shop around," and consumers have several sources of information, such as second opinions and recommendations from family and friends, to help them select the dentist of their choice. Unlike medical plans, few dental benefit plans restrict the patient's choice of provider.

DENTAL BENEFIT PLAN DESIGN

The differences between dental and medical diseases, as well as how they are treated, require that the design of dental benefit plans reflect those differences if they are to operate efficiently. Failure to consider those differences when designing assistance programs will result in plans that do not provide the mechanisms or the appropriate incentives to allow beneficiaries to achieve maximum oral health at the most reasonable cost.

The costs for dental care for a group can be predicted accurately and planned for. Dental benefit plans are not insurance plans but are prepayment plans. The concept and the mind-set of insurance—a benefit to be used infrequently—must be abandoned in dental benefit plans. For a dental benefit plan to affect oral health positively, it must be used regularly. Proper, regular use of a dental benefit plan makes the long-term cost for that plan less than does sporadic use of a dental benefit plan. For this reason, dental benefit plans should not present any barriers to entry into the dental care system.

Deductibles in medical and dental plans can delay or prevent entry into the system and decrease plan utilization.¹¹ Because many medical conditions heal on their own, patients often have no long-term effects from delaying or avoiding

treatment, and medical plans, thereby, enjoy reduced costs. The opposite occurs with dental disease; delaying treatment increases the disease's severity over time, as well as the costs for required treatment.

In a well-designed dental benefit plan, there should be no deductibles or copayments for diagnostic, preventive and emergency services; these services should be reimbursed at the 100 percent level. Incentives, such as reduced copayments and increased frequency of oral prophylaxis, should be built into a dental benefit plan to encourage people to use preventive and early therapeutic services. Most oral diseases are preventable, which is the key to cost control in dental benefit plans, not reduced utilization.

COST CONTROL IN DENTAL PREPAYMENT PLANS

There are several ways to control costs in dental prepayment plans. An established annual maximum benefit limits a plan's exposure to extraordinary costs in a single policy year. It also serves as an incentive for patients to seek regular care, rather than let the damage from oral disease accumulate so that expected treatment costs will exceed the cost of the plan. It is important, however, that the amount of the annual maximum benefit be realistic and be increased as the consumer price indexes increase.

Because people have an important role in their oral health—including the maintenance of dental treatment when it is provided—patient cost sharing (the portion of the treatment costs that patients must pay out of pocket) serves two useful purposes: it is an incentive for patients to practice good oral health habits, and it is a way to control the costs of a dental benefit plan. Long-term patient cooperation and participation in oral health maintenance are critical factors in achieving successful treatment outcomes. Copayments serve as incentives for patients to become cooperative participants in maintaining their oral health.

It is important that the patient copayment level serve as a positive incentive and not rise to a level such that it becomes a barrier to receiving care. Patient cost sharing should reflect the degree of patient cooperation required for long-term success of a particular course of therapy and the relative frequency of the use of that therapy. Basic services that are used commonly have been reimbursed at 80 percent traditionally. Services that are less

common, more costly and require a high level of patient compliance for maintenance have been reimbursed at 50 percent traditionally.

The dental benefit scheme of 100 percent, 80 percent and 50 percent reimbursement has evolved over the course of dental benefit plan development. While there are variations of this scheme in the dental benefits marketplace, it appears to serve the needs of patients and plan purchasers. The cost of medical benefits is putting severe cost pressure on dental benefit plan purchasers, however, and may engender significant changes in this purchaser-patient cost sharing equation.

Dental treatment that is relatively uncommon and has the greatest financial impact (for example, dental implants) comes close to meeting the definition of an insurable risk, particularly during the early years of its qualification as a dental plan benefit. Generally, in plans other than dental benefit plans, insured risks are reimbursed at a high level in the event they do occur. In most dental benefit plans, however, these low-occurrence, high-cost categories of dental care are not a covered benefit or are reimbursed at the lowest percentage. In practice, the benefit often does not reach the stated reimbursement percentage because payments are limited by the annual maximum benefit.

Dental benefit plans can handle quasi-insurable risks only when they lose some of their risk characteristics over time (for example, when their costs are reduced) or through policy reimbursement provisions that limit risk (for example, fixed benefits or lifetime maximum benefits). In essence, insurance is converted to prepayment.

There are limited opportunities for cost savings in dental benefit plans instituting second opinion programs or reducing plan utilization.

Historically, introducing new technology in dental care has resulted in a net reduction in the cost of that care by increasing the productivity (that is, production per unit of time, of dentists). The air turbine is a classic example, as it significantly reduced the time required to prepare carious teeth for restoration, as well as the stress on the dentist and patient. Dental benefit plans should not discourage the implementation of new technology in dental offices in an attempt to control costs in dental benefit plans.

OTHER CONCEPTS

Recently, concepts that have resulted in reduction in the costs of medical plans have been misap-

plied to dental benefit plans in an attempt to gain similar cost reductions. They generally have failed because they did not take into consideration the differences between medical and dental care.

Attempts have been made to employ for dental care the concept of "health maintenance," which was embodied in the health maintenance organization (HMO) movement of the 1980s and 1990s for medical care. Medical HMOs did reduce the costs of medical care, and they achieved significant penetration into the medical care market. They remain a force in that market today. On the other hand, dental HMOs (DHMOs) never acquired a significant share of the dental care market and are continuing to lose ground to other types of dental prepayment.

The concept of "health maintenance" involves a presupposition that a state of health exists that needs only to be maintained. Most people are medically healthy most of the time and important savings can accrue to a medical plan by maintaining people's health. In contrast, the ubiquitous nature of dental disease requires that resources must be committed to achieving a state of oral health before it can be maintained. The differences between medicine and dentistry were not considered in applying this concept to dental benefit plans. The failure of DHMOs to generate cost savings and the dissatisfaction of many patients with the manner in which DHMOs operated¹² limited their success in the dental benefits market.

"Managed care" swept the health care benefits market in the 1990s. The central concept of that cost-control system was that of the "gatekeeper," a physician who was charged with providing primary care and directing patients through the confusing maze of medical specialists when specialty care was required. This concept cannot be applied to dental care reasonably, as 80 percent of dentists are generalists and the remaining 20 percent are specialists who are organized into only nine clinical specialties. Dental care is not a difficult system for patients to navigate. Most dental patients receive their dental care from one dentist at one site. The many "gatekeepers" have few gates to keep.

Managed care achieved its greatest cost savings by reducing hospital utilization, converting much care that originally was delivered on an inpatient basis to care delivered at outpatient clinics. These cost savings have not been avail-

able to dental managed care plans, since dentistry already is primarily an outpatient service.

The latest concept being used by health insurers to control costs is “consumer-driven health plans.” This type of plan attempts to enlist patients in making financially conservative health care choices by involving them heavily in paying for entry-level health care. These plans have high deductibles before benefits begin. Earlier in this article, I explained that this tactic might be successful in reducing medical costs without endangering patient welfare; however, if it is misapplied to dental care, it will increase costs, as it acts as a barrier to entry into the system and early treatment.

It is important for dental benefit plan designers to consider the differences between medical care and dental care when developing dental benefit plans rather than simply applying concepts that have worked to some degree in medical plans.

SPECIAL CONSIDERATIONS FOR PUBLIC ASSISTANCE PROGRAMS

The structure of the dental benefits plan in public assistance programs closely mirrors that seen in private dental benefits plans. On the surface, the benefits themselves appear to be more generous, since there generally are no deductibles, no patient copayments and no maximum annual benefit. In those cases, dentists must accept the payment provided by the plan as payment in full and may not charge patients for any service that is a plan benefit. All financial barriers related to the professional fees for dental care have been removed. Utilization should have soared, but it hasn't. Utilization of Medicaid dental benefits, for example, is lower than that experienced by private dental benefit plans for a number of reasons including socioeconomic and cultural factors and the availability of providers.^{1,5}

In addition to financial barriers being removed, the incentives that these financial sharing arrangements provide to patients to become active participants in their oral health also have been taken away. It may be difficult to reconcile the dilemma that benefit planners face in considering the imposition of cost sharing on beneficiaries who already have inadequate incomes and the incentives that financial participation provide. Some incentive mechanism other than cash payments should be considered as a substitute for patients' direct financial participa-

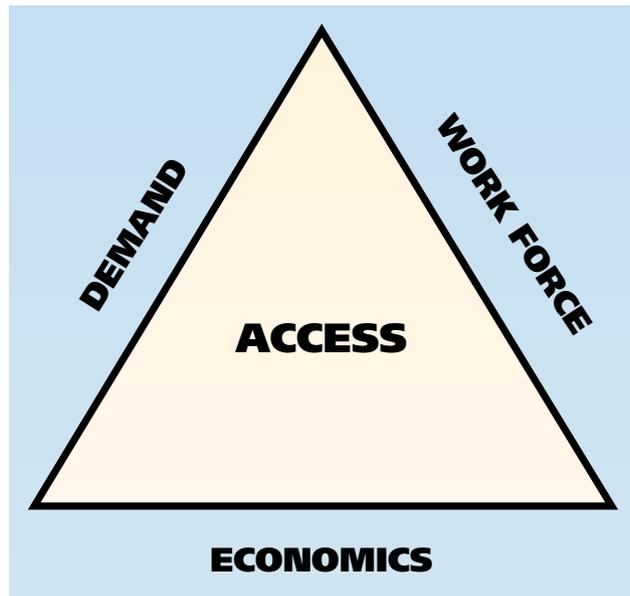


Figure. The access triangle. Reproduced with permission of the publisher from Guay.¹⁴

tion; added benefits or eligibility for other assistance programs could be awarded to reward conscientious behavior.

Most dental public assistance programs have experienced underutilization. If the “silent epidemic” of dental disease described in the surgeon general’s report on the oral health in America¹³ is to be reduced, use of dental public assistance programs must be increased significantly. Assistance programs must have both an effective treatment component to address accumulated disease and an effective prevention program. Of course, increasing the use of a program will increase the costs of operating that program in the short term. The only long-term hope for containing the costs of dental public assistance programs is through disease prevention. A society cannot treat its way out of an epidemic; it must prevent disease.

An effective way of increasing the use of a dental public assistance program may be to enlist the aid of caseworkers to facilitate the connection between dentists and program beneficiaries. They also could educate caregivers about the importance of good oral health for their charges beginning at a young age.

Access programs must address adequately the three key components that comprise the access triangle (Figure) if they are to be successful¹⁴:

- beneficiaries must be aware of the need for good oral health and seek professional assistance to achieve it—there must be adequate “demand” for care;

- reimbursement rates and administrative requirements should be at a level that encourages practitioners to participate in the program—there must be an adequate “work force” to provide care;
- all costs, beyond professional fees, must be reasonable so that patients and dentists can participate in the program—the “economics” of the entire program must be facilitative.

The differences between medical and dental care are so significant that attempts to improve public assistance programs, particularly to reduce costs, will have the opposite effects on medical care and dental care in many cases. This calls for separate consideration of the dental segment or a carve-out from the general public assistance program. In this scenario, only provisions that will improve the dental public assistance program will be implemented in that section, while leaving out changes from the general program that would adversely affect dental care.

Finally, funding of public assistance programs must be stabilized. The illogical “boom or bust” cycling of funding must stop; that is, expansion of programs during good economic times (when the need for assistance programs, in general, decreases) followed by contraction of programs during more challenging economic times (when the need for assistance programs increases).

CONCLUSIONS

There are significant basic differences between medical and dental diseases and the amount of tissue damage that will occur in the natural course of these diseases if they are left untreated. In addition, the medical care and dental care systems are organized in an almost opposite manner. Because of these differences, it is not logical that dental benefit plans be designed or operated like medical insurance plans. Historically, however, that has been the case. Since hospital and med-

ical costs drive the health care system economically, attempts at controlling those costs were instituted first. Whether they were effective or not, many of these innovations have been misapplied to dental benefit plans with unsuccessful results that should have been anticipated.

Dental benefit plans should be designed with the unique nature of dental diseases and the organization of the dental profession in mind. ■

The views expressed in this article are not necessarily those of the American Dental Association or its subsidiaries.

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