



MetLife

Dental Disease Management:

What Makes an Effective Program

Introduction

Employers that offer coverage for healthcare benefits are encouraging their employees to become more responsible for healthcare decisions. They are encouraging healthcare insurance carriers and other benefit vendors to develop wellness and disease management programs for their covered employees. According to the Seventh Annual MetLife Study of Employee Benefits Trends, more employers are adopting wellness programs—defined as smoking cessation, weight loss, stress reduction AND disease management.

As of August 2008, 33% of employers reported offering some type of wellness program, which is up from 27% in 2005.¹ And of the companies that do not currently offer a wellness program, 11% planned to do so within the 18 months following August 2008.¹

With healthcare costs a focus for the nation and not just employers, wellness programs, including disease management, represent a logical, timely alternative to traditional cost-reducing measures (cutting benefits and shifting benefit costs to employees).

Today, there are well-established disease management programs for costly systemic medical conditions like coronary heart disease. However, few, if any, disease management programs focus solely on the cost of dental services, including the prevention and/or the treatment of dental disease— tooth decay and periodontal disease— for which it is estimated that \$101.9 billion will be spent in 2009.³

What's more, with the growing body of research indicating a strong potential association of oral health to overall health, improving dental health may contribute to better outcomes for certain systemic conditions. For example, almost one-third of people with diabetes have severe periodontal disease (with loss of attachment of the gums to the teeth measuring 5 millimeters or more).³

So, given the responsibility being handed over to employees, the need to manage healthcare costs, and the general acceptance of the association of one's oral health to overall health, it makes sense for employers to consider dental disease management programs. Plus, as employees acquire more interest in participating in these programs, adopting dental disease management programs may help employers derive more value from the dental benefit plans they already provide.

¹ *Seventh Annual MetLife Study of Employee Benefits Trends, March 2009.*

² *Centers for Medicare & Medicaid Services, Office of the Actuary. National Health Expenditures 2008–2018, History and Projections by Type of Service and Source of Funds: Calendar Years 2008–2018, January 2009.*

³ *Centers for Disease Control and Prevention. National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2007. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008. http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf. Accessed November 30, 2009.*

Disease management in the dental benefits industry today

In today's dental benefits marketplace, there is some confusion about dental disease management. Sure, many dental carriers are talking about disease management, but there has not been a clear-cut definition of what constitutes a dental disease management program, and as of this publication, MetLife is not aware of any other carrier that has taken a comprehensive approach to building such an offering.

Dental wellness and education offerings — where employees are asked to choose the information they need from an online library on their own — have become commonplace. Beyond self-service educational offerings, however, there is little agreement about what else should be included in a complete dental disease management program.

In fact, approaches being positioned as dental disease management include dental education platforms with just an outreach component, such as mailing educational material to employees after they received certain dental procedures or dental education platforms with just enhanced benefits for specific populations, such as employees with diabetes or heart disease and pregnant women. Still other approaches give dental a minor role within a medical disease management program.

Generally speaking, most dental disease management approaches in the industry today offer bits and pieces with little, if any, connections to each other and therefore, of minimal value.

So, if the goal is to help manage costs while deriving more value from dental benefits, what approach should employers take? Perhaps the best way to answer this question is to start by stepping back and taking a quick look at the origins of disease management programs in the medical industry.

Medical disease management programs

Medical disease management programs have been around for a number of years. Driven by rising healthcare costs, the pressure to start measuring outcomes and the adoption of modern technology, medical disease management programs have evolved to a point that, today, they are viewed as effective and accepted components of the healthcare delivery system.

So, what do medical disease management programs look like?

Medical disease management programs aspire to reduce costs and improve health over time by changing the behavior of patients. They have an education platform AND the systems and processes needed to measure and monitor the health of an employee population, or segments of that population, and the utilization of benefits over time.

The marriage of the educational component to these systems and processes is what can make medical disease management programs effective.

Just like the market forces that pushed the development of medical disease management programs, market forces are doing the same in the dental benefits industry today.

Why dental disease management makes sense

There are several major market forces pushing the development of dental disease management. They include:

- Dental costs;
- The general acceptance of the association of one's oral health to overall health; and
- The desire among employers to derive more value from their dental benefit plans.

Dental costs

The cost of providing dental care continues to increase. That's why it makes sense to consider dental care as a disease management category.

While the cost of providing group dental benefits may only be a portion of an employer's overall benefits budget, it is still significant and has probably been magnified during these tough economic times. From 2004 to 2007, the amount of dollars spent on dental care nationally has increased between 4.7% and 6.0% per year.²

Compared to the cost of treating individual medical conditions, the cost of treating dental disease is relatively high. In 2007, \$95 billion was spent on dental care, including the treatment of two types of dental diseases— tooth decay and periodontal disease.² In 2009, the cost is projected to surpass \$100 billion.² And yet, employers may not consider dental-related costs as seriously as they consider other medical conditions when they develop their benefit strategies.

The link between oral health and overall health

Dental problems are more than simply tooth decay or losing a tooth. Periodontal disease (a bacterial infection of the mouth) and oral cancer can have profound implications to an individual's overall health. The dental industry is continuing to explore in depth the mechanisms by which oral infections cause, contribute to, or complicate systemic conditions. However, it is generally accepted that the incidence of periodontal disease could directly exacerbate certain other chronic or acute medical conditions — making dental care an important part of maintaining an individual's overall health.

According to MetLife research, 7 in 10 employers agree that oral and dental health are related to overall health.⁴

The connection between diabetes and periodontal disease bears this out best. There is growing acceptance among medical professionals that diabetes is associated with increased occurrence and progression of periodontitis — so much so that periodontitis has been called the “sixth complication of diabetes.”⁵

- Periodontal (gum) disease is more common in people with diabetes. Among young adults, those with diabetes have about twice the risk of periodontal disease than those without diabetes.³
- Persons with poorly controlled diabetes were nearly 3 times more likely to have severe periodontitis than those without diabetes.³
- Almost one-third of people with diabetes have severe periodontal disease with loss of attachment of the gums to the teeth measuring 5 millimeters or more.³

According to the American Diabetes Association, the direct medical costs of diagnosed diabetes totaled \$116 billion in 2007 — \$58 billion for indirect costs.⁶

Deriving more value from dental benefit plans

Considering today's economic environment, employers are looking for ways to derive more value from their dental benefits dollars by spending those dollars more wisely.

According to the Seventh Annual MetLife Study of Employee Benefits Trends, satisfaction with benefits can influence employee loyalty. For instance, in the case of life, dental and disability coverage, 69% of employees said these benefits were actually an important influence on their loyalty.⁷

Dental benefits are an important factor in that statistic. After all, it is the fifth most popular benefit among employees, behind only medical, 401(k)/403(b)/457, vacation and prescription drug coverage.⁸

So, realizing the critical role benefits play in employee loyalty and the importance employees place on dental benefits, many employers are looking for ways to spend dental benefit plan dollars more wisely instead of cutting benefits. Making appropriate benefit changes can have a positive impact—helping employers drive employee satisfaction, control dental plan costs and add value to their plans.

The potential of dental disease management programs

Further development of dental disease management programs seems inevitable. With a robust education platform and the systems and processes needed to measure and monitor the health of an employee population, or segments of that population, and the utilization of benefits over time, a dental disease management program can help influence the health—and potentially the healthcare costs—of a population by driving healthier behavior.

Dental disease management programs can help employers:

- Cultivate the health and well-being of their workforce; and
- Make informed decisions about their dental benefit plans using insights into the utilization of dental benefits and the health of their employees.

Now with a better understanding of the forces at work and the potential value a dental disease management program can bring to a company and its employees, it is time to look at what makes a dental disease management program effective and what to expect from it.

⁴ *MetLife's Employer Research Study: Dental Disease Management, March 2008.*

⁵ *U.S. Dept. of Health & Human Services. Oral Health in America: A Report of the Surgeon General. Rockville, MD: U.S. Dept. of Health & Human Services, National Institute of Dental and Craniofacial Research, National Institutes of Health, 2000*

⁶ *Diabetes Statistics—American Diabetes Association, Alexandria, Va. www.diabetes.org/diabetes-basics/diabetes-statistics/. Accessed November 25, 2009.*

⁷ *Seventh Annual MetLife Study of Employee Benefits Trends, March 2009*

⁸ *Seventh Annual MetLife Study of Employee Benefits Trends, March 2009.*

What makes an effective dental disease management program

MetLife believes an effective dental disease management program starts with an appropriate dental plan design. Plus, it should be flexible enough to coordinate with an employer's current medical disease management or other wellness programs or perform as a stand-alone solution.

To deliver value to both employers and employees, MetLife believes it is essential that dental disease management programs contain these six components working in conjunction.

1. Education
2. Employee Engagement
3. Disease Risk and Severity Scoring
4. Relevant Education
5. Reporting
6. Engagement and Reporting Over Time

Together, these six components can deliver the information employees need to help manage their oral health and risk and to support the systems and processes needed to measure and monitor the oral health of an employee population and the utilization of benefits over time.

The foundation for a successful program

Education: Education should serve as the foundation of a dental disease management program. It should be robust enough to stand on its own for employees who want to learn about oral health by themselves and, more importantly, support the later components that push relevant education to employees based on their oral health and risk for dental disease.

The education component should contain reliable, timely information and should address the associations between oral health and overall health. For example, employees should be able to learn how some medications can affect their oral health and how periodontal disease and diabetes are related.

Plus, the education component should be easy-to-navigate and contain interactive tools like risk assessments.

Driving participation and ongoing involvement

Employee Engagement: The employee engagement component should be designed to help employers and employees get the most value out of the program by driving participation and ongoing, sustainable involvement. It is the engine that helps employees track and manage their dental health and risk over time.

At a minimum, MetLife believes the dental disease management program should have a strategy for each of these key touch points.

- **Initial communication**, including a strong invitation to participate in the program and support material, such as on-site posters and newsletter articles, for the launch of the program
- **Reminder communication**, including messages to eligible employees who did not respond to the invitation
- **Ongoing communication**, including messages to drive participation and encourage participating employees to interact with the program's tools/resources.

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It is not enough to just offer a dental disease management program to employees. Only through continued use of the program can employers realize the promise of dental disease management—a greater appreciation of dental benefits and a better-informed employee population.
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Measuring risk and severity of disease

Disease Risk and Severity Scoring: Scoring helps employees measure, understand and track their risk and severity of disease. This enables them to see how their risk for, and their severity of, dental disease changes over time and how their actions, or lack of action, affect their scores.

With scoring, data is the key. In fact, the more data points used the higher the confidence level should be. Dental disease management programs could use:

- Self-reported health data, such as tobacco usage, the presence of bleeding gums, the use of medication (both prescribed and over-the-counter), dietary practices and family histories of systemic conditions like diabetes and heart disease;
- Claims utilization data, such as the absence of benefits paid in the previous 12 or 24 months, the indication of only having received emergency dental services or extractions in the previous 12 or 24 months, and the identification of employees with a history of periodontal services who did not complete the definitive treatment regime and/or the follow-up therapy; and
- If available, data from medical disease management vendors identifying employees with systematic health conditions like diabetes, heart disease, hypertension and obesity.

Plus, scoring can provide the dental disease management program with a vehicle to present employees with education that is relevant to their individual needs.

Delivering information when it may have the most impact

Relevant Education: This component provides employees with the tools they need to help manage their oral health. After being presented with their scores for risk and severity of disease, the dental disease management program should provide employees with actionable information. Such information could include:

- Links to articles and resources that are relevant to their specific oral health needs;
- A summary that identifies health concerns they should take note of; and
- A recommended action plan that includes a list of suggestions employees can follow to help improve their oral health.

For example, participants who identify themselves as diabetic could be provided with information about the link between diabetes and periodontal disease and tips to help diabetics manage their oral health.

What's more, dental disease management programs should offer this information to participants promptly—such as at the time disease risk and severity scores are delivered, which is when it may have more impact.

This proactive push of education relevant to employees' needs may help promote even greater understanding of employees' risk and disease, and it may help drive changes in behavior.

Uncovering how benefit plans are functioning

Reporting: Aggregate-level reporting provides employers with valuable insights that can illustrate how benefit plans and disease management programs are functioning, and can help them better understand the health of their employee populations. For example, a dental disease management program could report on:

- **Participation:** The percentage of employees participating in the dental disease management program in a given time period, which employees participate and the distribution of calculated risks for those participants within demographics, such as gender and age.
- **Risks:** The number of participants with high and low risks and the health conditions most frequently associated with those risks, grouped according to various demographics.
- **Health Conditions:** The percentage of participants that self-reported systemic health conditions, including hereditary factors by condition, and oral health conditions.
- **Change in Health Risk:** The percentage of participants based on their change in risk over time, grouped according to various demographics.

- **Claim Costs:** Average costs per claim and average costs per procedure for participants with high and low risk scores.
- **Dental Claims Utilization Analytics:** The utilization of benefits (i.e., the types of services—both preventive and definitive including follow-up care) for both employees who participate in the dental disease management program and those who do not participate in the program, so patterns of care can be identified.
 - The absence of benefits paid in the previous 12 or 24 months
 - The indication of only having received emergency dental services or extractions in the previous 12 or 24 months
 - The identification of employees with a history of periodontal services who did not complete the definitive treatment regime and/or the follow-up therapy.

Plus, if a medical disease management vendor is engaged, the dental disease management program may have the ability to supply them with the same reports that are shared with employers and possibly employee-specific information, including employees' individual risk and disease scores and histories of dental treatments. Ideally, this information can be incorporated into employers' other health and wellness programs.

Actionable insights for dental benefit decisions

Engagement and Reporting Over Time: Lastly, a dental disease management program should be designed to help keep employees engaged and measure the dental health of a population and dental utilization over time.

- Employees can see how their risk for and their level of dental disease changes over time and how their actions, or lack of action, affect their scores.
- Employers will gain a historical perspective on how employees within the program are using their dental benefits, employee engagement in the program and changes in the dental health of the population.
- If engaged, medical disease management vendors may be provided with historical employee-specific information, such as comparisons of individual risk and disease scores over time and histories of dental treatment, to incorporate into their disease management programs for systemic conditions.

While it is important to start with an appropriate dental plan design, employers can consider making additional changes after they have a better understanding of the health of their employee population and how existing benefits are used.

Conclusion

Given the significant cost of treating dental disease, the association between oral health and overall health and the value employees place on dental benefits, dental disease management programs makes sense for many employers. An effective program may potentially lower benefit costs,⁹ minimize employee “noise” and cultivate a workforce that sees real value in their dental benefits program.

For more information about dental disease management and/or ways you can improve the value of the dental benefits your company provides, contact your insurance broker, benefits consultant or MetLife representative today.

⁹ *By educating participants on the benefits of slowing the progression of dental disease or preventing the occurrence of new disease, more costly procedures may potentially be avoided—lowering costs over time.*

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