Improved Health and Lower Medical Costs:

Why good dental care is important

A white paper
Research continues to associate oral health with overall health. Gum disease may have a potentially significant impact on systemic health, and the implications for cost of care and quality of life can be staggering. For example, did you know that when a dentist diagnoses periodontal (gum) disease, other serious health problems may also be lurking? If oral disease is left unchecked, it may result in health complications that take a real toll on quality of life for an affected employee. Those problems can also be a drain on your and your employees’ health dollars. The good news is that treating oral diseases like gum disease may improve overall health and lessen complications with other medical conditions.

Regular routine oral care helps address minor problems before they become major, and more expensive to treat. **Every dollar spent on preventive dental care could save $8 to $50 in restorative and emergency treatments** – and potentially more in additional types of medical treatment. That’s why CIGNA is always working to develop and deliver solutions that include highly effective dental coverage. It’s good for your employees’ health, and good for your company’s bottom line.

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**The right dental plan may lower medical costs**

Our nationally published study supports an association between treated gum disease and lower medical costs for individuals with diabetes, cardiovascular disease and stroke. When compared with patients undergoing initial treatment for gum disease, patients who were previously treated for gum disease and were receiving maintenance care had reduced medical costs. CIGNA’s ongoing dental and medical cost study supports a potential adverse association between untreated gum disease and higher medical costs for these three medical conditions. The numbers speak for themselves:

<table>
<thead>
<tr>
<th>Health Condition</th>
<th>Average Reduction in First Year Medical Costs for Individuals Receiving Periodontal Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>$1,418</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>$647</td>
</tr>
<tr>
<td>Stroke</td>
<td>$10,142</td>
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</tbody>
</table>

"Periodontal Treatment and Medical Costs in Diabetes and Cerebrovascular Accident" Presented at the International Association for Dental Research Meeting 2009, Miami

CIGNA follows the research closely. While studies continue, we believe in the current information concerning the link between oral and overall health, and we share that belief with our clients – we offer a credit for new clients who package their medical and dental plans through CIGNA. An additional credit may be available when CIGNA’s disease management programs for diabetes and heart disease are included. Credits may also apply to existing accounts that add a CIGNA medical or dental plan.
### Pregnancy and prematurity

**Pregnant women with untreated gum disease are up to eight times more likely to give birth prematurely.**

**The facts:** The rate of premature births is on the rise, with 12.5 percent of all newborns born prematurely. The medical costs that businesses pay to care for one premature baby for a year could cover the costs of 10 healthy, full-term infants ($49,000 versus $4,550). When combined, maternity and first-year costs for a premature baby were four times as high as those for a baby born without any complications ($64,713 and $15,047 respectively). Health plans pay more than 90 percent of those costs.

### Enhanced dental coverage during pregnancy

Research has shown that timely treatment for gum disease may reduce the risk of preterm birth. That's why pregnant women with CIGNA dental coverage can take advantage of the extra dental services covered through our Oral Health Integration Program.

### Diabetes and heart disease

Gum disease can be a risk factor for complications of diabetes, and it can also put diabetics at a higher risk for additional gum problems. Studies show that gum disease may also make it more difficult for diabetics to control their blood sugar.

**The facts:** The estimated economic cost of diabetes in 2007 was $174 billion. Approximately one of five health care dollars in the United States is spent caring for someone diagnosed with diabetes. Bacteria present in gum disease may help trigger the formation of blood clots, which can contribute to a heart attack or stroke. The 2010 estimated direct and indirect cost of cardiovascular disease and stroke is $503.2 billion.

### Enhanced dental coverage for people with diabetes and heart disease

Studies continue to present evidence that good oral health may contribute to reduced risk of heart disease, stroke and diabetic complications. That’s why it makes sense to offer enhanced coverage for eligible customers with these conditions.

### Oral cancer

**Early detection may help save a life – about 60 percent of all patients with oral cancer survive more than five years.**

**The facts:** Approximately 36,000 people in the U.S. will be diagnosed with oral cancer this year. It will cause over 8,000 deaths, killing roughly one person per hour, 24 hours per day. This is the fourth year in a row showing an increase in the occurrence of oral cancers – in 2007 alone the rate jumped by 11 percent. It is estimated that approximately $3.2 billion is spent in the U.S. each year on treatment of head and neck cancers.

### Enhanced Oral Cancer screening coverage

Surgical biopsies may not be generally prescribed unless something in the mouth appears “very suspicious.” However, by the time a lesion looks like a problem, it may be beyond a cure. Our **Brush Biopsy coverage** offers dentists and patients a nonsurgical way to evaluate a suspicious area for abnormal cells.

Dental customers undergoing head and neck cancer radiation are eligible for enhanced dental coverage through our Oral Health Integration Program.
Why CIGNA for both medical and dental coverage?

The benefits go beyond simplified administration. Our unique capabilities as a health services company allow us to treat the whole person – not just a condition. And our customer service representatives are available 24/7 at 1.800.CIGNA24 for any questions our customers may have, any time of day, about any plan.

Integration and total health management have been a focus for CIGNA throughout the past several years. In addition to initiatives like the Oral Health Integration Program (OHIP), we have integrated capabilities across all CIGNA units.

Being a fully integrated health services company has been instrumental to our success in creating programs and initiatives that involve the integration of medical and dental coverage information. And we’ll continue to leverage CIGNA’s capabilities in disease management and case management to help our customers enjoy a better quality of life – and help our clients recognize improved productivity as a result.

• We’ve trained our medical staff to include the message that oral health may affect an individual’s medical conditions. Our staff also encourages individuals with related conditions to seek dental care and make an appointment with the dentist.
• CIGNA is also able to identify dental customers who have recently been treated for gum disease. If those customers also have CIGNA medical coverage, we can provide that data to clinical staff for disease management (diabetes and cardiovascular).

We use an evidence-based approach to dentistry to create our innovative dental plan designs and policies. To further this approach we established a clinical advisory panel of well known leaders and researchers in the dental profession. Their scientific knowledge and input helps us continue to create and deliver innovative coverage options that address medical/dental integration, as well as new and developing dental technologies.

Raising awareness in the workplace

Another benefit of having CIGNA medical and dental coverage is our comprehensive communication and education capabilities. After all, what good is a dental benefit if your employees aren’t enrolling in it? And of those who enroll, how many are choosing the right dental plan? Effective communications can move individuals from passive players to active participants. Based on the National Assessment of Adult Literacy, approximately 36 percent of the U.S. population has low health literacy. This means they can’t understand documents written above a sixth grade reading level. A significant body of research has demonstrated that there is a relationship between lower health literacy and higher health care costs from less frequent preventive care, longer and more frequent hospital stays, and lower medication adherence.

As a result of these findings, CIGNA has implemented the “Words We Use” guidelines in all of our customer communications – this means using clear, simple, easy to understand words while doing away with industry jargon. We help our clients send the right message to the right people in the right way:

- **PREPARE** employees to choose the best dental plan at enrollment based on their specific needs
- **ENGAGE** employees at enrollment meetings, benefit fairs, or wellness events
- **TEACH** employees how to maximize their dental care dollars year-round
- **TRAIN** your HR team and/or managers to answer your employees’ questions
- **ENCOURAGE** employees to stay well by getting regular preventive dental care

From dental health flyers, to e-cards, to event posters and more – we have the communications and resources to get your employees enrolled and in the dentist’s chair.
Learn more

Find out how CIGNA can help you design a dental plan that impacts the health and well-being of your employees without compromising your bottom line.

Call your broker or CIGNA representative today. Or, email us at CIGNADentalSales@cigna.com.

1 American Dental Hygienists Association, 2006
2 Journal of the American Dental Association, July 2001
   “Oral Health During Pregnancy: An Analysis of Information”
3 March of Dimes® Release, 2009
4 Journal of Periodontology, August 2003
5 Journal of the American Dental Association, September 2002
6 American Diabetes Association. Economic Costs of Diabetes in
7 American Heart Association: Heart Disease and Stroke Statistics,
   2010 Update, p. 5
8 American Cancer Society, www.cancer.org
9 www.oralcancerfoundation.org
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    Editors: Nielsen-Bohlman, Lynn; Panzer, Allison; & Kindig, David.
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