IMPROVED HEALTH AND LOWER MEDICAL COSTS:

why good dental care is important

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. 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.

We offer a credit for new clients who package their medical and dental plans through Cigna.

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, heart 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:

Average annual savings for those individuals in the study who had proper periodontal treatment

<u>Savings*</u>
\$1,292 or 27.6%
\$2,183 or 25.4%
\$2,831 or 34.7%

*Not an underwriting decrement.

Our findings also indicated \$1,020 average savings per person per year for individuals with gum disease who received appropriate care, regardless of whether or not they had a medical condition. The savings may be significantly attributable to the following additional findings for the group:

- · 67% lower hospital admission rate
- 54% lower ER rate

"Appropriate Periodontal Therapy Associated with Lower Medical Utilization and Costs" Presented at the International Association for Dental Research Meeting March 2013, Seattle. Includes data from other 2012 internal Cigna studies.

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. Credits may also apply to existing accounts that add a Cigna medical or dental plan.





Reviewing the evidence and Cigna's action

The Cigna Dental Oral Health Integration Program® was one of the first to use improved oral health to reduce risks related to pregnancy, diabetes and heart disease. Research shows that patients with the following conditions are frequently prone to dry mouth, a condition associated with a higher risk of dental cavities: head and neck cancer radiation¹, organ transplants² and chronic kidney disease³. As a result, we've enhanced our program. Dental customers can get 100 percent reimbursement of their out-of-pocket costs for certain dental services if they have any of the following medical conditions/procedures: maternity, diabetes, heart disease, stroke, head and neck cancer radiation, organ transplants and chronic kidney disease.

PREGNANCY AND PREMATURITY

Mom's gum disease may increase the chances of a preterm, low birth weight baby. The changing hormone levels in some pregnant women can make dental problems worse.

The facts: In the United States, 1 in 8⁵ babies is prematurely born. 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.⁶

CIGNA'S ACTION

Enhanced dental coverage during pregnancy

It's important that pregnant women take special care to properly brush at least twice a day with a soft-bristled toothbrush, floss daily and get regular dental checkups.⁴ That's why pregnant women with Cigna dental coverage can take advantage of the additional dental services covered through the Oral Health Integration Program.

DIABETES AND HEART DISEASE

Individuals with diabetes are more likely to have gum disease than people without diabetes because they are more at risk of getting infections. And gum disease can actually make it harder for people who have diabetes to control their blood sugar. Researchers have also found that people with gum disease are almost twice as likely to suffer from coronary artery disease.

The facts: The estimated economic cost of diabetes in 2012 was estimated at \$245 billion – a 41% increase over a five year period. More than 1 in 5 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. One study suggests that the cost of medical care for heart disease will rise from \$273 billion to \$818 billion between 2010-30. The same study says heart disease will cost billions more in lost productivity, up from an estimated \$172 billion in 2010 to \$276 billion in 2030.

CIGNA'S ACTION

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 Cigna offers enhanced coverage for eligible customers with these conditions through the Oral Health Integration Program.

ORAL CANCER

Early detection may help save a life – about 60 percent of all patients with oral cancer survive five years. 11

The facts: Approximately 40,000 Americans will be diagnosed with oral cancer this year.¹¹ It will cause over 8,000 deaths, killing roughly one person per hour, 24 hours per day.¹¹ But, when oral cancer is caught early, survival rates reach 80-90%.¹² It is estimated that approximately \$3.2 billion is spent in the U.S. each year on treatment of head and neck cancers.¹¹

CIGNA'S ACTION

Enhanced Oral Cancer screening coverage

Surgical biopsies may not be generally prescribed unless something in the mouth appears "very suspicious." Cigna's **Brush Biopsy coverage**¹³ offers dentists and patients a nonsurgical way to evaluate a suspicious area for abnormal cells. Cigna dental customers undergoing head and neck cancer radiation are eligible for enhanced dental coverage through the Oral Health Integration Program.

Why Cigna for both medical and dental coverage?

The benefits go beyond simplified administration. Our capabilities as a health service company allow us to look at the whole person – not just a dental 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 we have integrated capabilities across all Cigna units.
- Being a fully integrated health service 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 health and wellness advocacy 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 health advocacy staff to use a dental care assessment in order to educate on the importance of oral health and how it may affect an individual's medical conditions. Our staff also encourages individuals with related conditions to seek dental care, make an appointment with the dentist and informs them about the Cigna Dental Oral Health Integration Program.
- 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.14 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.14

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 a 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

And our translation capabilities allow us to make sure customers get important information in the language most comfortable to them. 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.



The Cigna Dental Oral Health Integration Program offers 100% reimbursement for copays or coinsurance for certain related dental procedures, subject to the following limitations: coverage for periodontal maintenance is limited to 4 per year during active therapy; customers undergoing treatment for chronic kidney disease, organ transplants, or head/neck cancer radiation receive coverage for topical fluoride application and varnish, and dental sealants (age limits removed, other plan limitations may apply); maternity patients receive coverage for one additional oral evaluation and cleaning during their pregnancy term. All other plan exclusions and limitations apply.

- 1. U.S. Department of Health and Human Services. National Institutes of Health. NIH Publication No. 12–4362. Head and Neck Radiation Treatment and Your Mouth. (August 2012)
- 2. U.S. Department of Health and Human Services. National Institutes of Health. NIH Publication No. 11–6269. Organ Transplantation and Your Mouth. (Reprinted April 2011)
- 3. Patil S, Khaandelwal S, Doni B, Rahuman F, Kaswan S."Oral manifestations in chronic renal failure patients attending two hospitals in North Karnataka, India. Oral Health Dent Manag. 2012 Sep;11(3):100-6.
- 4. American Dental Association. (2012). Pregnancy. Retrieved from http://www.mouthhealthv.org/en/pregnancy.
- 5. National Center for Health Statistics, final natality data. (2012) Retrieved June 5, 2013 http://www.marchofdimes.com/peristats/pdflib/998/US.pdf.
- 6. Thomson Reuters. The Cost of Prematurity and Complicated Deliveries to U.S. Employers. Report prepared for the March of Dimes, October 29, 2008. Retreived June 5, 2013 from, http://www.marchofdimes.com/peristats/pdfdocs/cts/ThomsonAnalysis2008_SummaryDocument_final121208.pdf.
- 7. National Diabetes Information Clearinghouse in service of the National Institute of Diabetes and Digestive and Kidney Diseases. National Institutes of Health. NIH Publication No. 12–4280. Prevent diabetes problems: Keep your mouth healthy. (February 2012)
- 8. American Academy of Periodontology. (2012, April 18). Gum disease links to heart disease and stroke. Retrieved from http://www.perio.org/consumer/mbc.heart.htm
- 9. American Diabetes Association by Wenya Yang (The Lewin Group, Inc., Falls Church, Virginia); Timothy M. Dall (IHS Global Inc., Washington, DC); Pragna Halder (The Lewin Group, Inc.); Paul Gallo (IHS Global Inc.); Stacey L. Kowal (IHS Global Inc.); and Paul F. Hogan (The Lewin Group, Inc.). Economic Costs of Diabetes in the U.S. in 2012. Diabetes Care, Volume 36, (April 2013)
- 10. Heidenreich PA, Trogdon JG, Khavjou OA, Butler J, Dracup K, Ezekowitz MD, Finkelstein EA, Hong Y, Johnston SC, Khera A, Lloyd-Jones DM, Nelson SA, Nichol G, Orenstein D, Wilson PWF, Woo YJ; on behalf of the American Heart Association Advocacy Coordinating Committee, Stroke Council, Council on Cardiovascular Radiology and Intervention, Council on Clinical Cardiology, Council on Epidemiology and Prevention, Council on Arteriosclerosis, Thrombosis and Vascular Biology, Council on Cardiovalour Cardiovascular Outcomers, Critical Care, Perioperative and Resuscitation, Council on Cardiovascular Nursing, Council on the Kidney in Cardiovascular Disease, Council on Cardiovascular Surgery and Anesthesia, and Interdisciplinary Council on Quality of Care and Outcomes Research. Forecasting the future of cardiovascular disease in the United States: a policy statement from the American Heart Association. Circulation. 2011;123:933—944.
- 11. Oral Cancer Foundation. (2012, October 15). Oral cancer facts. Retrieved from http://oralcancerfoundation.org/facts/index.htm.
- 12. American Cancer Society. (2013, February 26). *Oral cavity and oropharyngeal cancer*. Retrieved from http://www.cancer.org/Cancer/OralCavityandOropharyngealCancer/DetailedGuide/oral-cavity-and-oropharyngeal-cancer-key-statistics.
- 13. Most Cigna Dental plans include Brush Biopsy coverage. Contact your Cigna representative for details.
- 14. Originally produced by Penny Glassman, former Technology Coordinator, National Network of Libraries of Medicine New England Region, Shrewsbury, MA. Health Literacy. (November 2012). Retrieved from http://nnlm.gov/outreach/consumer/hlthlit.html.

If you are unable to access these [reports or studies] please contact your Cigna sales representative to request a copy.

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