

THE IMPORTANCE OF ORAL HEALTH

SCHOOLCARE HEALTH BENEFIT PLANS: 2014 ANNUAL MEETING

NOVEMBER 5, 2014

Dr. Miles Hall, Chief Clinical Director – Cigna Dental



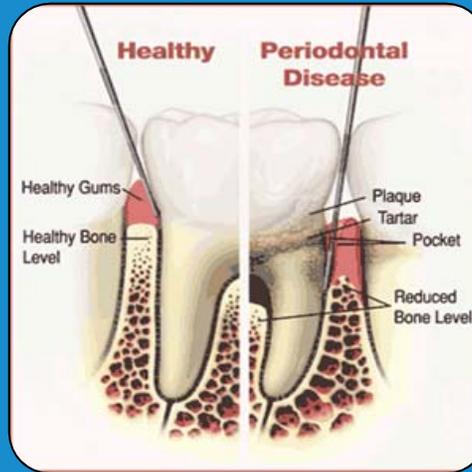
PERIODONTAL DISEASE

A focus on prevention and treatment.



SYMPTOMS¹

Signs and symptoms include, **bleeding gums**, or gums that are **red and swollen**. Even persistent **bad breath** or taste may be a sign. Sometimes one may not even know they have periodontitis. That is why regular visits to the dentist are so critical.



TREATMENT

The goal of periodontal treatment is to **control the chronic infection**, which means controlling the inflammatory process. An important tool in slowing down or controlling the disease process is **excellent home care and oral hygiene**.

PREVENTION

It is important to have **regular examinations and cleanings**. The dentist and hygienist will help the customer make sure their home care is working and keeping the periodontal problem under control.

Image from the American Academy of Periodontology, perio.org

1. P.I. Eke, B.A. Dye, L. Wei, G.O. Thornton-Evans, and R.J. Genco. Prevalence of Periodontitis in Adults in the United States: 2009 and 2010. J DENT RES 0022034512457373, first published on August 30, 2012 as doi:10.1177/0022034512457373.

Confidential, unpublished property of Cigna. Do not duplicate or distribute. Use and distribution limited solely to authorized personnel. © 2014 Cigna



DENTAL PLANS CAN CURB MEDICAL COSTS

Our most recent findings show:¹

- > Medical savings when periodontal conditions are treated
- > Fewer complex dental procedures with appropriate preventive care



Average annual medical cost savings for individuals in study who had the following **medical conditions** and appropriate periodontal treatment.

Population

Savings*

Diabetes	\$1,292 or 27.6%
Heart disease	\$2,183 or 25.4%
Stroke	\$2,831 or 34.7%



Average annual medical cost savings for all individuals in study, **with or without a medical condition**, and appropriate periodontal treatment.

- \$1,020 or 27.5% savings
- > 67% lower hospital admission rate
- > 54% lower ER rate



Beyond gum disease

Customers receiving proper preventive dental care have, on average:

- > 12.5% fewer extractions
- > 5.4% fewer root canals

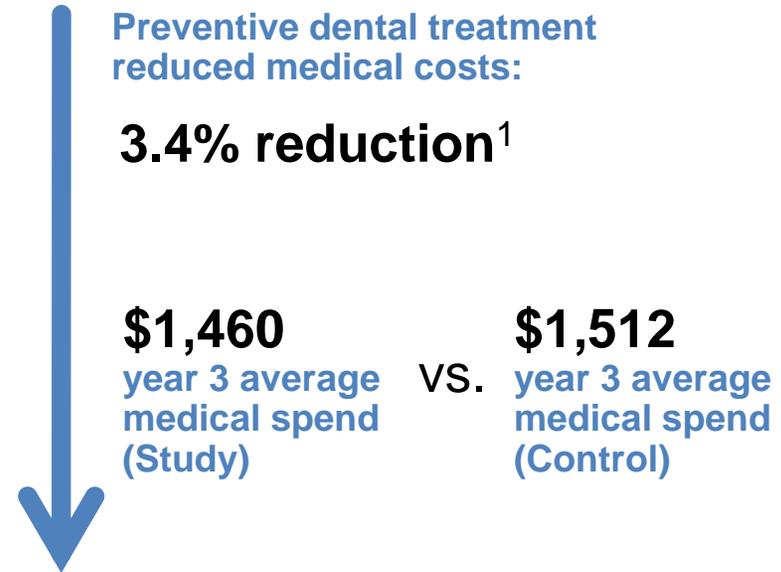
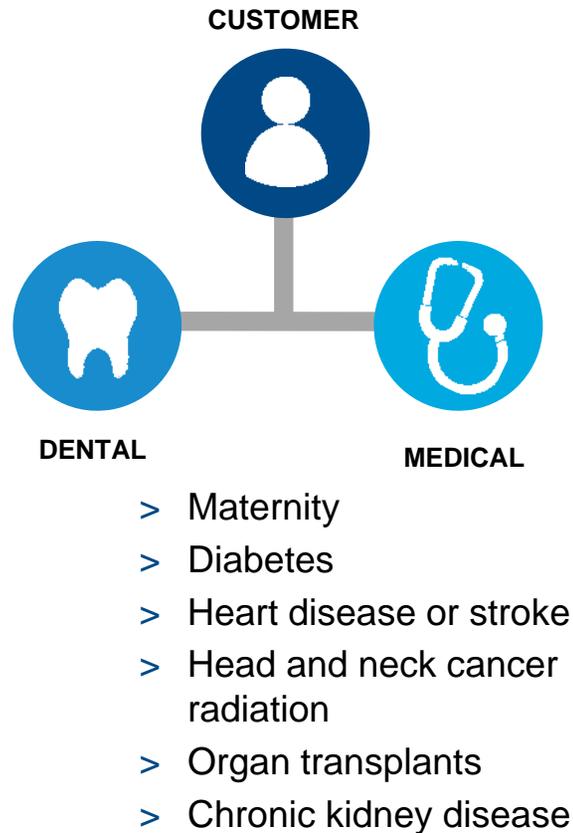
*Not an underwriting decrement

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



OUTCOMES CAN IMPROVE WHEN OUR PLANS WORK TOGETHER

Our 3-year match-case control study proves it:



1. Cigna 2013 national internal study.



Quiz Question #1

Multiple Choice

According to several studies, what proportion of the population does gum disease affect?

- A. 25% of people over 50**
- B. 50% of people over 55**
- C. 75% of people over 35**
- D. 90% of people over 30**



ANSWER

“C” is Correct!

That means three out of four adults aged 35 and older may be affected by gum disease and its complications.



Source: American Dental Hygienists' Association (ADHA)



CIGNA DENTAL AND MEDICAL

Our plans work together to support better outcomes



Health advocates

engage high-risk individuals in oral health improvement discussions during coaching calls

- Perform oral health assessment
- Referrals to dental care
- Referrals to Cigna Dental Oral Health Integration Program
- Assessment count reportable to client
- Online oral health assessment tools

Conditions that prompt the advocate or coach to perform an oral health assessment include:

- Cardiovascular Disease
- Diabetes
- Pre-Diabetes
- Tobacco use (oral cancer)
- Anxiety/Bipolar
- Depression
- Metabolic syndrome
- Coronary artery disease
- Heart failure
- Peripheral artery disease
- COPD
- Asthma
- Osteoarthritis

Dental assessment is highly utilized by our Health Advocates



HEALTHVIEW INTEGRATION – DENTAL ASSESSMENT QUESTIONS

Q1 - Do you practice good dental hygiene by brushing and flossing your teeth on a regular basis?

Q2 - Did you know that the infection and inflammation caused by gum disease could negatively affect other medical conditions?

Q4 - Are you actively or regularly seeing a dentist for care?

Q3 - Have you noticed any of the following:
gums bleed when brushing, flossing, or chewing; teeth feel loose or you notice a change in your bite; you have persistent bad breath; your gums have receded or your teeth look longer?

Q5 - Did you know that tobacco can increase your risk for oral cancer?

Q6 - Did you know that tobacco use is the number 1 risk factor for gum disease — even more than bacteria and plaque?

Q7 - Did you know that use of smokeless tobacco could increase your risk for cavities?

Q8 - Did you know that asthma sufferers' breathing habits and asthma medications may cause dry mouth which potentially increases the risk for tooth decay?

Q9 - Do you experience any pain while chewing or other jaw pain?

Q10 - Did you know that studies are showing a possible connection between gum disease and certain medical conditions?

This is why it is so important that you see your dentist on a regular basis. I would encourage you to visit mycigna.com on the main Dental Page and take the Gum Disease Risk to find out more about the Cigna Dental Oral Health Integration Program.



INNOVATIVE HEALTH IMPROVEMENT PROGRAMS AT NO ADDITIONAL COST

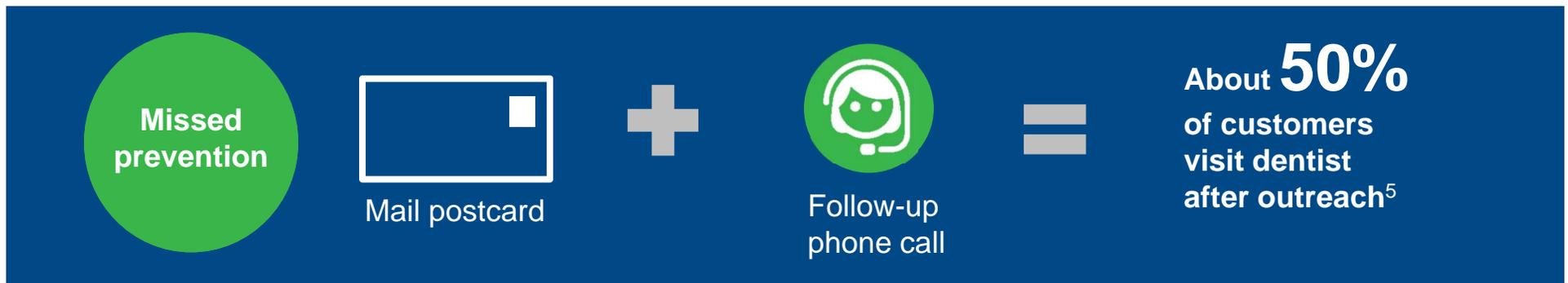
Cigna Dental Oral Health Integration Program®

Proactive prevention for individuals with these medical conditions: maternity, diabetes, heart disease, stroke, head and neck cancer radiation, organ transplants and kidney disease. One of the most **comprehensive**¹ programs, including:



Dental outreach program⁴

Proactive prevention outreach to identified high-risk individuals who haven't been to the dentist in at least 7 months.



1. Based on an internal market survey conducted from 2008 - 2012 including over ten leading dental carriers which indicates Cigna covers more conditions and reimburses for more procedures than any other carrier reviewed. Cigna also offers eligible program participants information on behavioral conditions that can affect oral health and pharmacy discounts on certain dental prescriptions – no other carrier reviewed offered these additional services.

2. Exclusions and limitations apply.

3. December 2010, Cigna Home Delivery Pharmacy Average Retail Price Surveys.

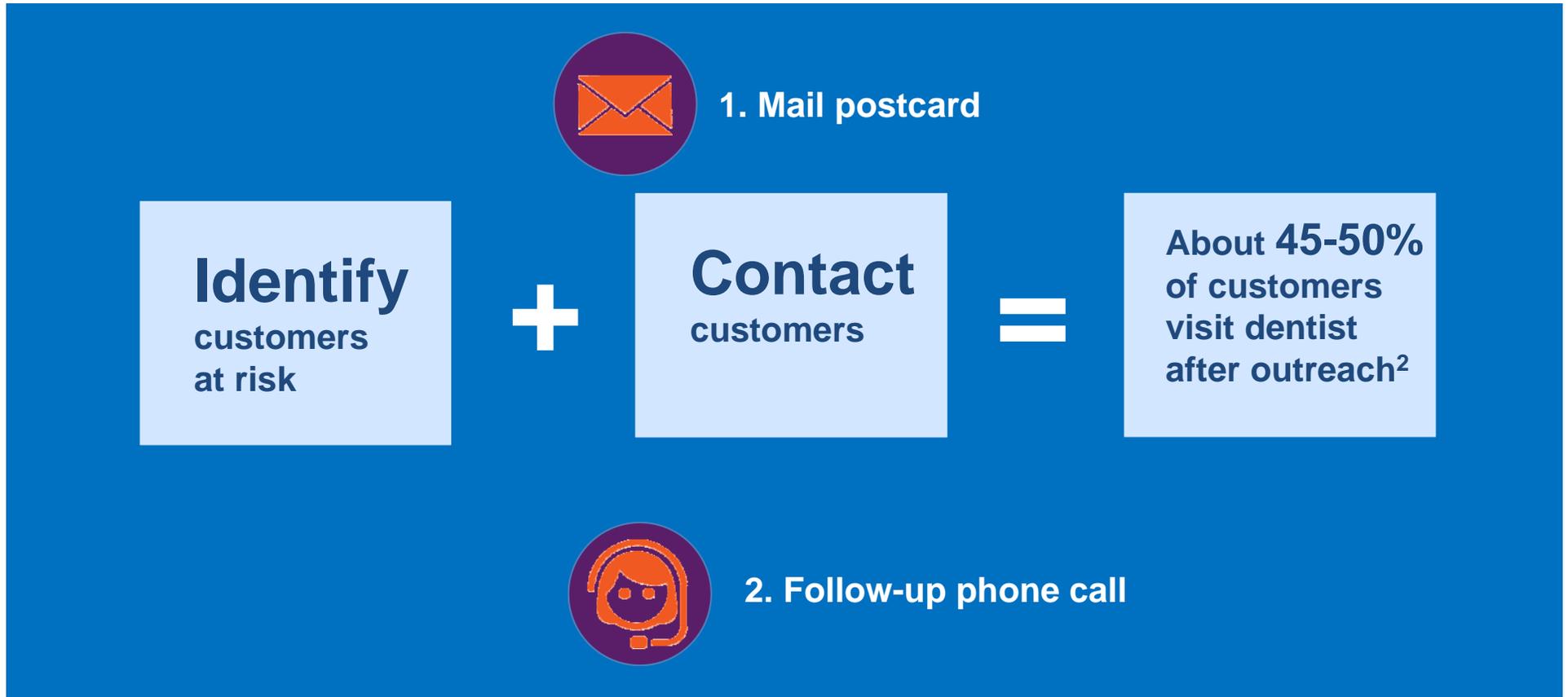
4. Program only available for pre-approved clients

5. November 2013, Cigna internal Dental Outreach Program reporting.



DENTAL OUTREACH PROGRAM¹

Two step proactive prevention outreach to identified high-risk individuals who haven't been to the dentist in at least 7 months. Postcard followed up with phone call.



1. Program only available for preapproved clients.
2. December 2013, Cigna internal Dental Outreach Program reporting.

Quiz Question #2

Multiple Choice

How many work hours per year are lost because of dental-related disease and treatment?

- A. 87 million
- B. 164 million
- C. 26 million
- D. 55 million



Answer

“B” is Correct!

**As the saying goes,
“An ounce of prevention is worth a pound of cure.”
Studies show that for every \$1.00 spent on preventive
oral care, \$4.00 are saved in the long run.**

**For example, dental checkups can expose the early
stages of gum disease. And the sooner it is detected,
the easier and less expensive it is to treat.**



Source: 2000 Surgeon General's Report on
Oral Health in America



CIGNA DENTAL ORAL HEALTH INTEGRATION PROGRAM®



More access	More wellness	More discounts
Available to ALL Cigna Dental customers with qualifying condition(s)	Articles on behavioral issues linked to oral health	Up to 40% off average retail prices on certain prescription dental products ¹

Covered Dental Procedures and Medical Conditions	Maternity	Chronic kidney disease	Organ transplants	Head & neck cancer radiation
Periodontal treatment and maintenance ^{2*}	✓	✓	✓	✓
Periodontal evaluation	✓			
Oral evaluation ³	✓			
Cleaning ⁴	✓			
Emergency palliative treatment	✓			
Fluoride – topical application and varnish ⁵		✓	✓	✓
Sealants		✓	✓	✓

***Periodontal treatment and maintenance are covered with Heart Disease, Stroke and Diabetes conditions.**

One of the most comprehensive programs⁶ reimbursing individuals for enhanced preventive and periodontal services!

1. May 2014, Cigna Home Delivery Pharmacy Average Retail Price Surveys.

2. Four times per year.

3. One additional evaluation.

4. One additional cleaning.

5. Age limits removed; all other limitations apply.

6. Based on internal market survey conducted from 2008-2012 including over ten leading dental carriers which indicates Cigna cover more conditions and reimburses for more procedures than any other carrier reviewed. Cigna also offers eligible program participants information on behavioral conditions that can affect oral health and pharmacy discounts on certain dental prescriptions-no other carrier reviewed offered these additional services.



CIGNA DENTAL ORAL HEALTH INTEGRATION PROGRAM

Using our expertise as a health service company to focus on total wellness

More Wellness	More Access	More discounts
Articles on behavioral issues linked to oral health	Available to ALL Cigna Dental customers with qualifying condition(s)	Up to 40% off average retail prices on certain prescription dental products ¹
Behavioral articles to educate	Discounted non-prescription dental products	Discounted prescription dental products through Cigna Home Delivery Pharmacy SM
<ul style="list-style-type: none">• Stress and the impact of oral health• Fear of going to the dentist• Tobacco cessation	<ul style="list-style-type: none">• Program participants will be eligible for free samples and discounted non-prescription dental products developed for patients with a higher risk for gum disease and cavities.	<ul style="list-style-type: none">• Chlorhexidine antibacterial rinse (e.g., Peridex, Perioguard)• Fluoride prescription rinse (e.g., Colgate Prevident)• Fluoride toothpaste (e.g., Colgate Prevident)• Fluoride gel (e.g., Gel-Kam[®])

1. Cigna Pricing Analysis of National Average Wholesale Price and Customer Costs, June 2014



ONLINE TOOLS RAISE RISK AWARENESS

- > Quick and easy 3-minute quizzes test knowledge
- > Identifies potential oral health risks
- > Score indicates risk level
- > Printable results to share with dentist
- > Available in English/Spanish
- > On **Cigna.com** and **myCigna.com**

Periodontal (Gum) Disease Risk Assessment

Print and share it with your dentist at your next dental check-up

Age: Date: Score:

Low to Moderate Risk
Moderate Risk
High Risk

1 to 6
7 to 11
12 or greater

May increase steadily. 30 years or younger

Products? No

Diabetes and gum disease. No

Controlled? N/A or Diet Controlled

Cavity Risk Assessment

Please print this page and share it with your dentist at your next dental check-up

Age: Date: Score:

Low Risk
Low to Moderate Risk
Moderate Risk
High Risk

-10 to 0
1 to 5
6 to 10
11 or greater

How often do you visit your dentist? At least 2 times a year

How often do you brush your teeth each day? 1 time

How often do you floss between your teeth? Every day

Do you use fluoride toothpaste?

Have you had cavities in the past?

How long has it been since your last cavity?

How many times daily do you eat sugary foods?

Cigna Dental Oral Cancer Awareness Quiz

Cigna

Contents

1. What Do You Know... 00:01
2. How This 10-Que... 00:01
3. Question 1 of 10 00:01
4. Answer 1 of 10 00:01
5. Question 2 of 10 00:01
6. Answer 2 of 10 00:01
7. Question 3 of 10 00:01
8. Answer 3 of 10 00:01
9. Question 4 of 10 00:01
10. Answer 4 of 10 00:01
11. Question 5 of 10 00:01
12. Answer 5 of 10 00:01
13. Question 6 of 10 00:01
14. Answer 6 of 10 00:01
15. Question 7 of 10 00:01
16. Answer 7 of 10 00:01

Total duration: 00:24/00:25

WHAT DO YOU KNOW ABOUT ORAL CANCER?

Cigna dental oral cancer awareness quiz

Click the "next slide" button in the bottom left corner of this window to get instructions for taking this quiz.

GO YOU

Cigna



WE EARN OUR CUSTOMERS' TRUST AND THE PRIVILEGE TO HELP THEM REACH THEIR GOALS

ORAL CANCER AWARENESS QUIZ



A Cigna customer, a family man in his early 40s, was at his company's health fair and he decided to take our **Oral Cancer Awareness Quiz**. What he learned from the quiz prompted him to visit his dentist where he was diagnosed with early stage oral cancer. Due to his early diagnosis, his prognosis is excellent. With timely treatment, he managed to eliminate the cancer and went for follow ups thereafter. This man was very healthy and never smoked. He spoke with the Cigna account manager about how terrifying his diagnosis was and how it would have killed him had he not gone. He had never used tobacco and just never thought of this as an issue he would face.

– Customer of a large national client

This success story is based on real events and is used for illustrative purposes only.



THE PERSONALIZED myCigna.com

Designed to click with our customers.



Customer Experience

Home » Review My Coverage » Dental Print This Page

Dental

CIGNA Dental Care (DHMO) Coverage Summary

Account Number: 12345123
 Network Name: DENTAL CARE NETWORK
 Group Name: CIGNA

COVERAGE SUMMARY					
Who's Covered	Date of Birth	Relationship	Coverage From	To	Dental Office Number
Hanna Banana	05/25/1958	Subscriber	01/01/2014	-	Happy Jack Dental 4599384
Anna Banana	06/05/1960	Spouse/Partner	01/01/2014	-	Happy Jack Dental 4599384

* = Coverage is still effective.

Getting Started with your DHMO

Congratulations on enrolling in the Cigna Dental Care® DHMO plan! You've taken the first step in managing your oral health. Regular dental visits may do more than brighten your smile. Getting regular dental care often catches minor problems before they become major and more expensive to treat. And there's a link between gum disease and other conditions, like pre-term birth, heart disease, stroke, diabetes and other health issues. So taking good care of your teeth and gums may help you live a healthier life.

RELATED LINKS

- Health Care Documents
- Print or Request ID Cards
- Cigna Dental Oral Health Integration Program Registration Form
- Understanding My Coverage
- Cavity Risk Quiz
- Gum Disease Risk Quiz
- Oral Cancer Awareness Quiz
- Dental Claim Form
- Healthy Rewards® Discounts

NEED HELP

FAQ

Check coverage and claims

Find a dentist

Check dental costs

Print ID cards

Oral health assessments



Quiz Question #3

Multiple Choice

Given that research suggests a relationship between gum disease and diabetes, which of these statements do you think is true?

- A. Gum disease makes it more difficult for diabetics to control their blood sugar**
- B. Moderate or severe gum disease can increase a diabetic's blood sugar**
- C. Controlling a diabetic's gum disease may help in controlling his/her diabetes**
- D. All of the above**



Answer

“D” is Correct!

Research supports all of these statements
about diabetes and gum disease.

*Sources: American Dental Association; American Association of
Periodontology*



VALUE OF PERIODONTAL CARE

A demonstration model



VALUE OF PERIODONTAL CARE



Objective

Assess the value of dental and health care integration on Total Medical Cost (TMC)



Strategy

Compare total medical cost for customers who receive periodontal care to those who don't



Population

Cigna customers with periodontal disease

Plan Design



> The industry commonly evaluates the effectiveness of interventions and services by simply relying on pre- and post-data with no reference group. It is difficult to draw associations in these pre/post analyses without comparison groups.

> Cigna uses quality research standards,¹ a match-case control method that quantifies the difference in total medical cost before and after the periodontal screening.

1. "Matching methods for causal inference: Designing observational studies." Stuart and Rubin, Best Practices in Quantitative Methods, 2007.

CONCLUSION

Periodontal treatment associated with reduced medical costs

Customers receiving periodontal treatment	Savings per year/customer
All ¹	\$1,020
With cardiovascular disease ²	\$1,183
With diabetes ²	\$1,292
History of stroke ²	\$2,831

1. "Appropriate Periodontal Therapy Associated with Lower Medical Utilization and Costs." Alex Marano, Michael Hahn, Miles Hall, Clay Hedlund, Cary Sun, Robert Genco, presented at the International Association for Dental Research Meeting, March 2013, Seattle.

2. Internal Cigna studies, 2012.



ESTIMATED SAVINGS FOR CLIENT “ABC” (10,000 MEMBERS) EXAMPLE ONLY!

Conditions	Prevalence ¹	Number of employees with medical coverage	Number of employees with periodontal disease	% of employees without treatment ¹	Measured savings with treatment ^{2,3}	% effectiveness of Cigna outreach ¹	Possible savings due to outreach
Cardiovascular	11.3%	1,133	238	50%	\$2,183	50%	\$129,841
Chronic Kidney Disease	9.6%	957	201	50%	\$1,020	50%	\$51,262
Diabetes	7.3%	729	153	50%	\$1,292	50%	\$49,475
Pregnancy	4.9%	487	102	50%	\$1,020	50%	\$26,100
Stroke	2.3%	231	48	50%	\$2,831	50%	\$34,275
Organ Transplants	0.03%	3	1	50%	\$1,020	50%	\$1,020
Head and Neck Cancer Radiation	0.02%	2	0	50%	\$1,020	50%	\$0
							\$291,973⁵

Cigna averages 50% outreach effectiveness⁴

1. Average Cigna prevalence for medical conditions.
2. "Appropriate Periodontal Therapy Associated with Lower Medical Utilization and Costs." Alex Marano, Michael Hahn, Miles Hall, Clay Hedlund, Cary Sun, Robert Genco, presented at the International Association for Dental Research Meeting, March 2013, Seattle.
3. Additional 2012 and 2013 Cigna book of business internal studies.
4. Average 2013 result for the Cigna Dental, Dental Outreach Program.
5. Example of a client with 10,000 members.



Quiz Question #4

Multiple Choice

This year, approximately how many people in the U.S. will be newly diagnosed with oral cancer?

- A. 40,000
- B. 25,000
- C. 20,000
- D. 15,000



Answer

“A” is Correct!

Approximately 40,000 Americans will be diagnosed with new cases of oral cancer this year. The majority of these cases will be discovered after the cancer has already spread to other areas of the body. Oral cancer causes approximately 8,000 deaths annually, or roughly 1 per hour, 24 hours a day.



Source: Oral Cancer Foundation (oralcancerfoundation.org) and Oral Cancer Institute (cancer.gov).

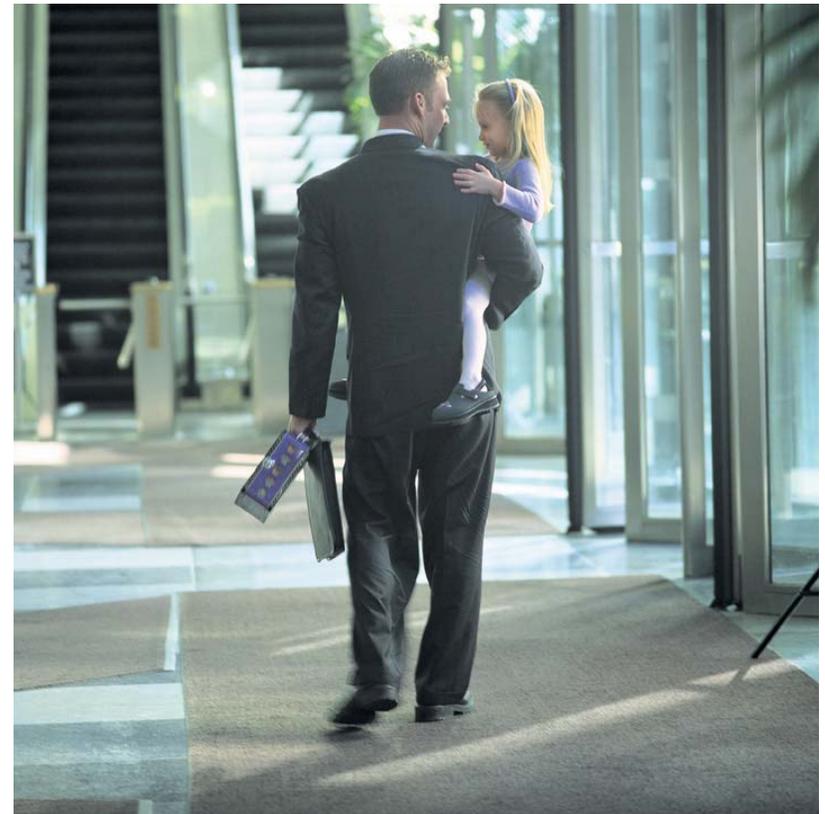


Quiz Question #5

Multiple Choice

Which of the following are some of the signs and symptoms of oral cancer?

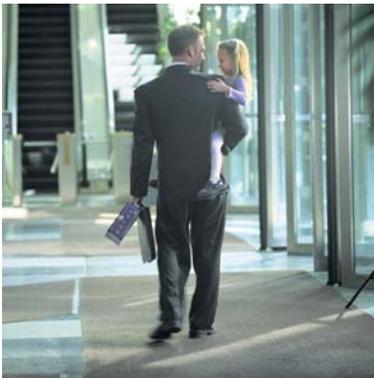
- A. Red and/or white discolorations of the soft tissues in your mouth
- B. A lump or thickening that develops in the mouth or in the neck
- C. Difficulty swallowing
- D. Numbness in or around the mouth
- E. All of the above



Answer

“E” is Correct!

These symptoms may or may not be signs of oral cancer. But if you experience any one or more of them for more than 14 days, you should visit your dentist for an oral cancer exam. When they last more than 14 days, these other, less common conditions may also be symptoms of oral cancer: hoarseness, the feeling that something is stuck in your throat, difficulty moving your jaw or tongue, ear pain that you feel only on one side, a sore under a denture that doesn't heal (even after the denture is adjusted).



Source: Oral Cancer Foundation (oralcancerfoundation.org)

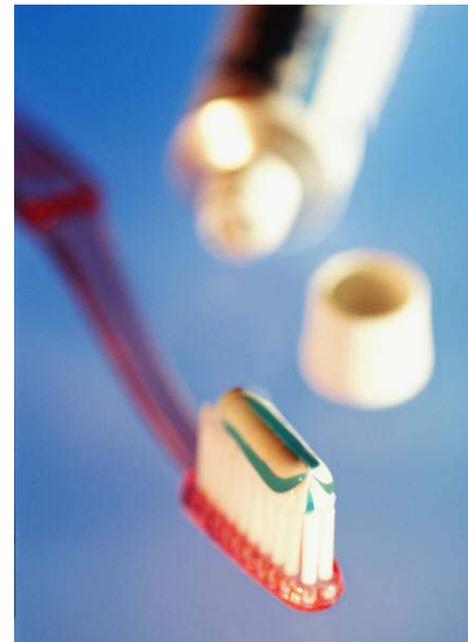


A Few Interesting Thoughts

> According to Michael Roizen, M.D., a physician at the Cleveland Clinic and Chair of their Wellness Institute, and the author of *Real Age: Are You As Young As You Can Be?*, “flossing and brushing your teeth daily can make your RealAge as much as 6.4 years younger.”

“Change is inevitable –
except from a vending machine”
---John A. Simone, Jr

Chief Clinical Director
Miles Hall, DDS
Miles.Hall@Cigna.com
972.863.5208 (o)
972-822-5673 (c)



Offered by: Connecticut General Life Insurance Company or Cigna Health and Life Insurance Company.

The term "DHMO" is used to refer to product designs that may differ by state of residence of enrollee, including but not limited to, prepaid plans (Oklahoma, et al), managed care plans, and plans with open access features (OK and MN, et al).

All plans and insurance policies have exclusions and limitations. Product availability may vary depending on location and funding type and is subject to change. Terms and conditions of coverage are set forth on DHMO plan booklet PB09*, DHMO policy forms GM6000 DEN201V1* (CGLIC) and HP-POL115* (CHLIC), and DPPO policy form HPPOL99*, et al (*actual number may vary by state).

"Cigna," the "Tree of Life" logo, "GO YOU" and "Cigna Dental Oral Health Integration Program" are registered service marks, and "Cigna Dental" and "Cigna Home Delivery Pharmacy" are service marks, of Cigna Intellectual Property, Inc., licensed for use by Cigna Corporation and its operating subsidiaries. All products and services are provided by or through such operating subsidiaries and not by Cigna Corporation. Such operating subsidiaries include Connecticut General Life Insurance Company (CGLIC), Cigna Health and Life Insurance Company (CHLIC), Cigna HealthCare of Connecticut, Inc., and Cigna Dental Health, Inc. and its subsidiaries. Cigna Dental PPO plans are underwritten or administered by CGLIC or CHLIC, with network management services provided by Cigna Dental Health, Inc. and certain of its subsidiaries. In Arizona and Louisiana, the insured Dental PPO plan offered by CGLIC is known as the "CG Dental PPO". In Texas, the insured dental product is referred to as the Cigna Dental Choice Plan. Cigna Dental Care (DHMO) plans are underwritten or administered by Cigna Dental Health Plan of Arizona, Inc., Cigna Dental Health of California, Inc., Cigna Dental Health of Colorado, Inc., Cigna Dental Health of Delaware, Inc., Cigna Dental Health of Florida, Inc., **a Prepaid Limited Health Services Organization licensed under Chapter 636, Florida Statutes**, Cigna Dental Health of Kansas, Inc. (Kansas and Nebraska), Cigna Dental Health of Kentucky, Inc., Cigna Dental Health of Maryland, Inc., Cigna Dental Health of Missouri, Inc., Cigna Dental Health of New Jersey, Inc., Cigna Dental Health of North Carolina, Inc., Cigna Dental Health of Ohio, Inc., Cigna Dental Health of Pennsylvania, Inc., Cigna Dental Health of Texas, Inc., and Cigna Dental Health of Virginia, Inc. In other states, Cigna Dental Care plans are underwritten by CGLIC, CHLIC, or Cigna HealthCare of Connecticut, Inc. and administered by Cigna Dental Health, Inc. All models are used for illustrative purposes only.

858458 b 09/14 © 2014 Cigna. Some content provided under license.

