



MASSACHUSETTS

Comprehensive Health without Oral Health A Medicare Paradox Integrating Dental to Improve Healthcare Value May 9, 2019

Agenda

1. Different Ways to Measure Health
 - Medical Cost Differences
 - Decrements to Life Expectancy
2. The Total Health Program
3. Medical Cost and Life Expectancy Differences
4. Integration in Action

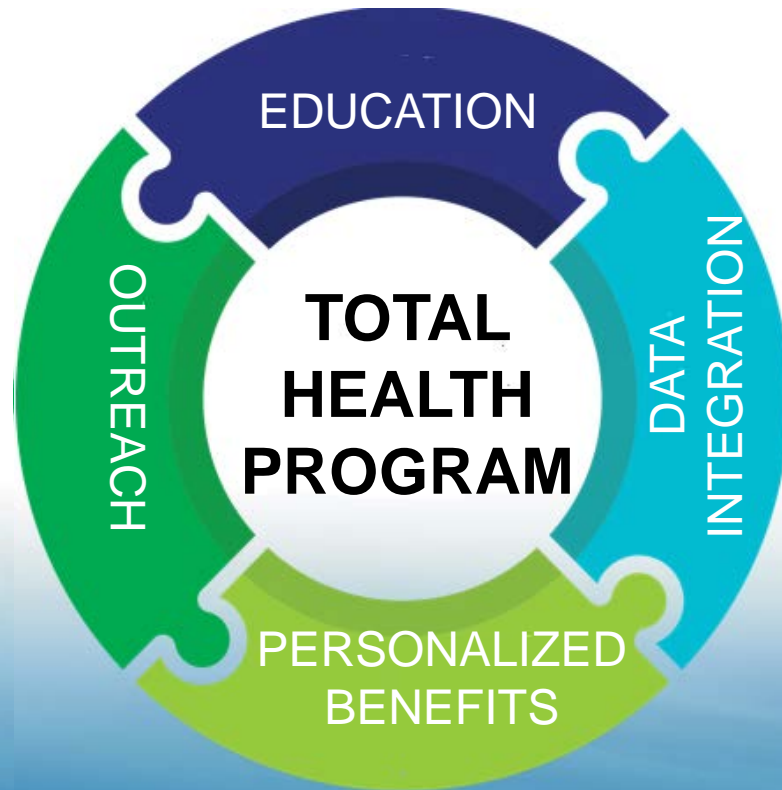


Different Ways to Measure Health

- We usually look at medical and dental claims data to see differences in medical cost depending if the individual was having some type of dental services.
- There is an actuarial way of using medical claims data to look at person's longevity based on whether they have a medical diagnosis of a serious dental or periodontal condition.
- The conclusion from the first analysis would be to say that differences in medical costs are a proxy for member or population health. The conclusion from the second would be the change of life expectancy from poor oral health.



The Total Health Program



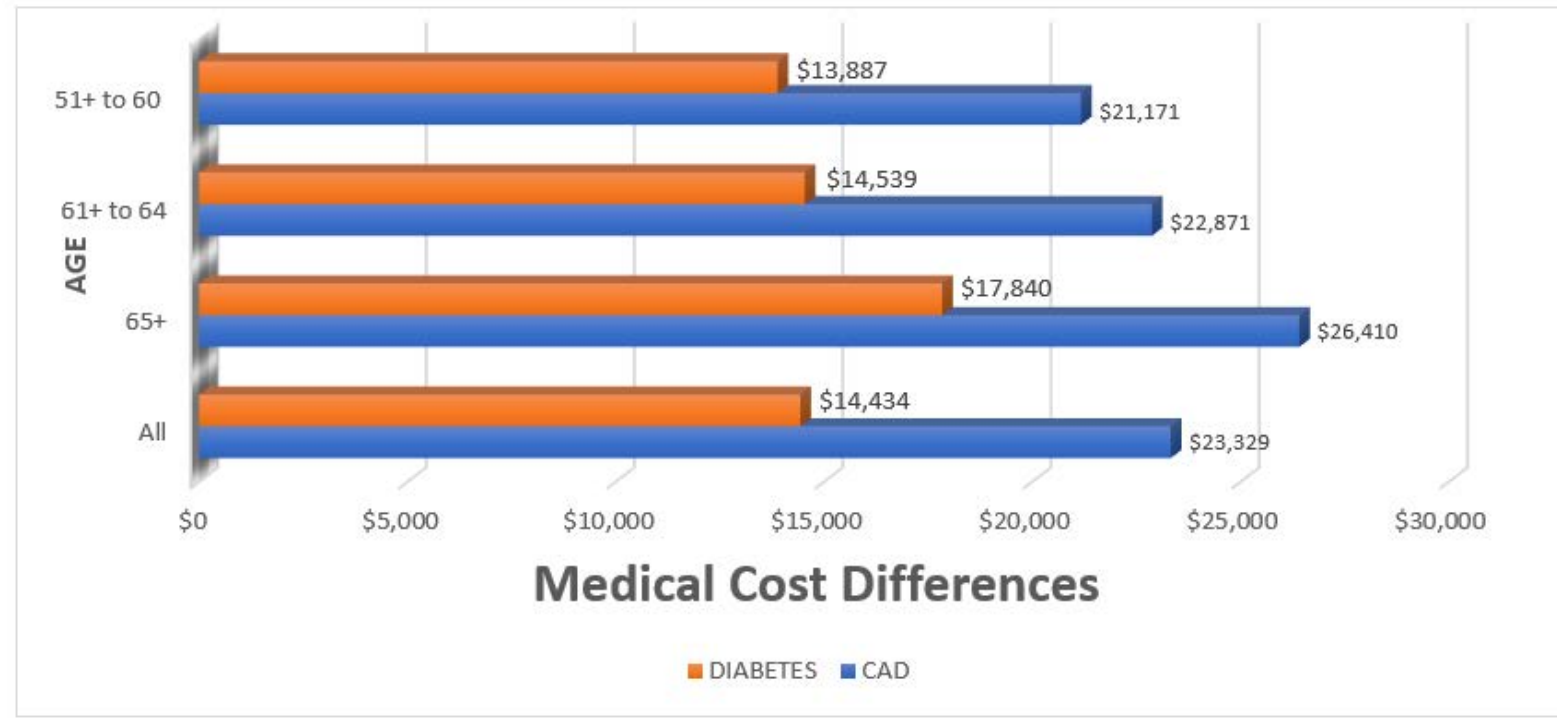
- 1 Member education** on the importance dental benefits has to overall health particularly those with a chronic condition.
- 2 Data integration** using diagnosis codes to identify eligible members based on condition for auto enrollment into program.
- 3 Personalized benefits** for qualifying members to improve overall health (e.g., specialized care programs, additional cleanings, periodontal scaling, etc.)
- 4 Targeted outreach** to identified members through direct mail, electronic communication and care coordination programs.



Average Medical Costs by Age Band for Members with CAD or Diabetes

MEDICAL COSTS

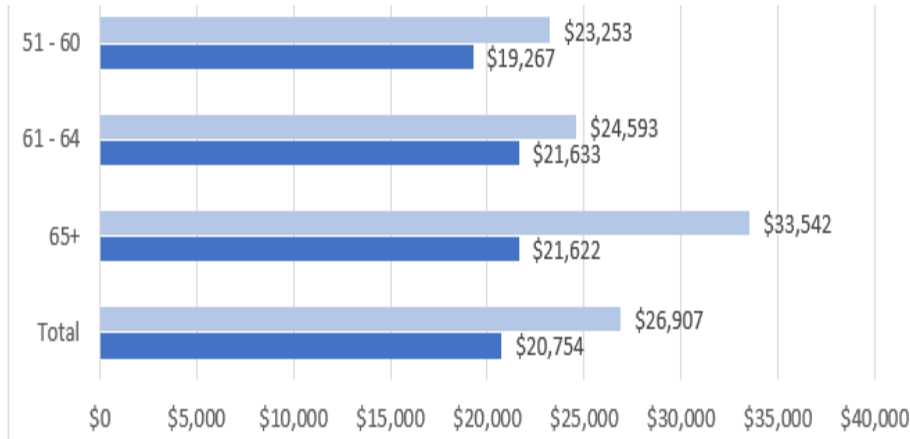
	ALL	51+ to 60	61+ to 64	65+
CAD	\$23,329	\$21,171	\$22,871	\$26,410
DIABETES	\$14,434	\$13,887	\$14,539	\$17,840



Impact of Dental Care on Total Medical Costs for Members with CAD and Diabetes Depending on if they were getting Dental Care

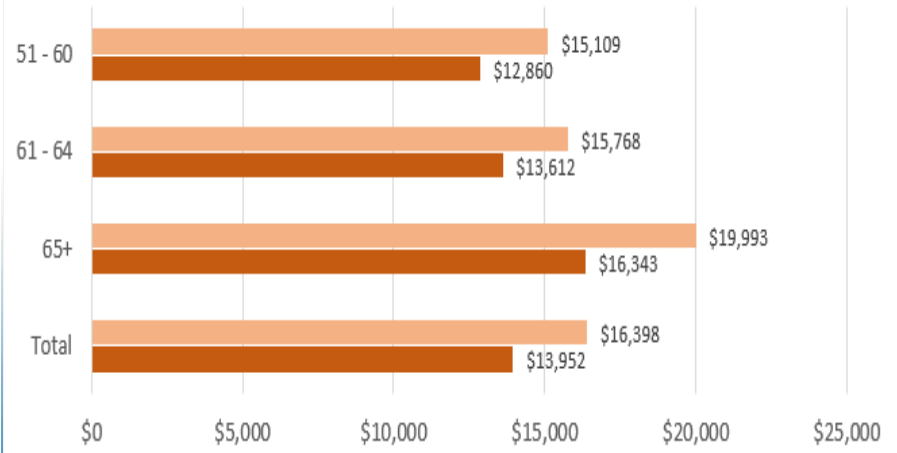
	All	51+ to 60	61+ to 64	65+
CAD	20%	17%	12%	36%
DIABETES	11%	15%	14%	18%

CAD



CLAIM FLAG NO (Members who didn't go to dentist)
CLAIM FLAG YES (Members who went to dentist)

DIABETES



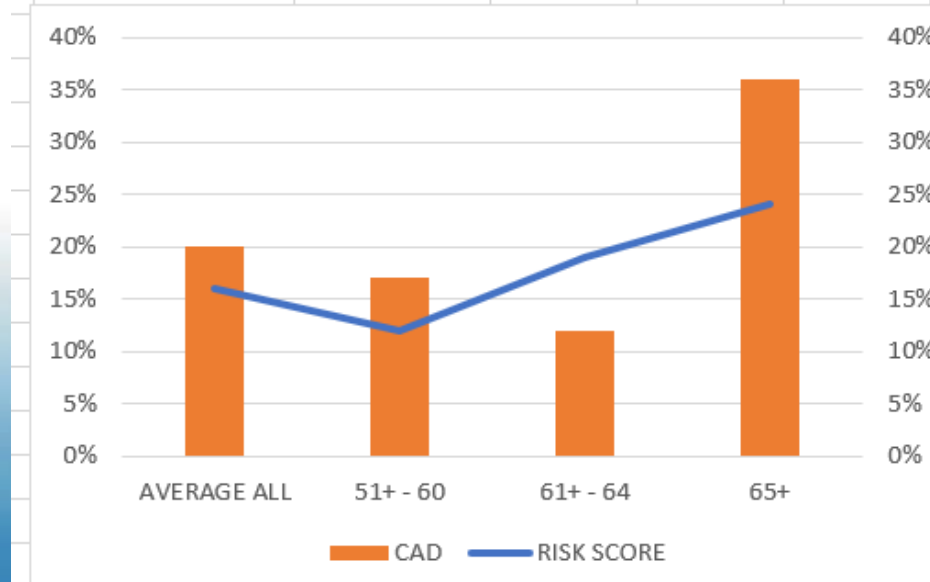
CLAIM FLAG NO (Members who didn't go to dentist)
CLAIM FLAG YES (Members who went to dentist)



Comparison of Total Medical Cost Differences Compared to Risk Scores

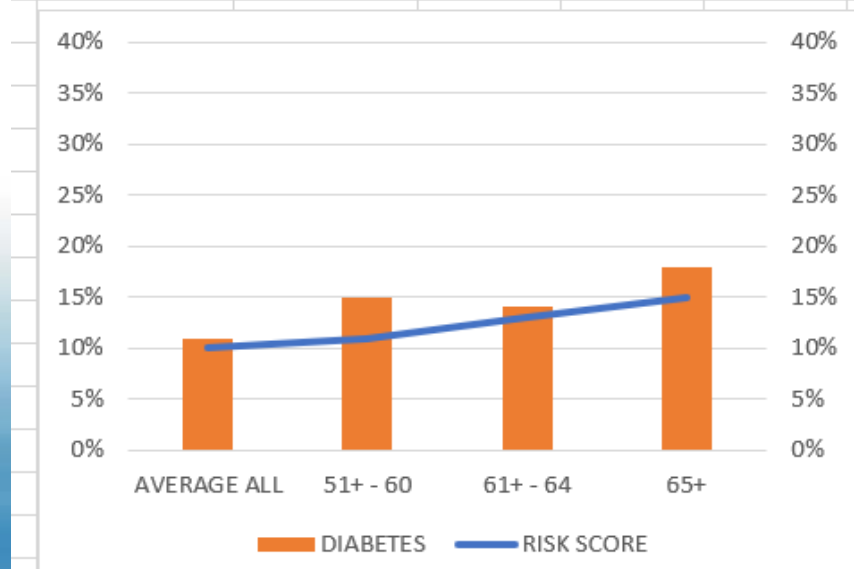
CAD

	AVERAGE ALL	51+ - 60	61+ - 64	65+
CAD	20%	17%	12%	36%
RISK SCORE	16%	12%	19%	25%



DIABETES

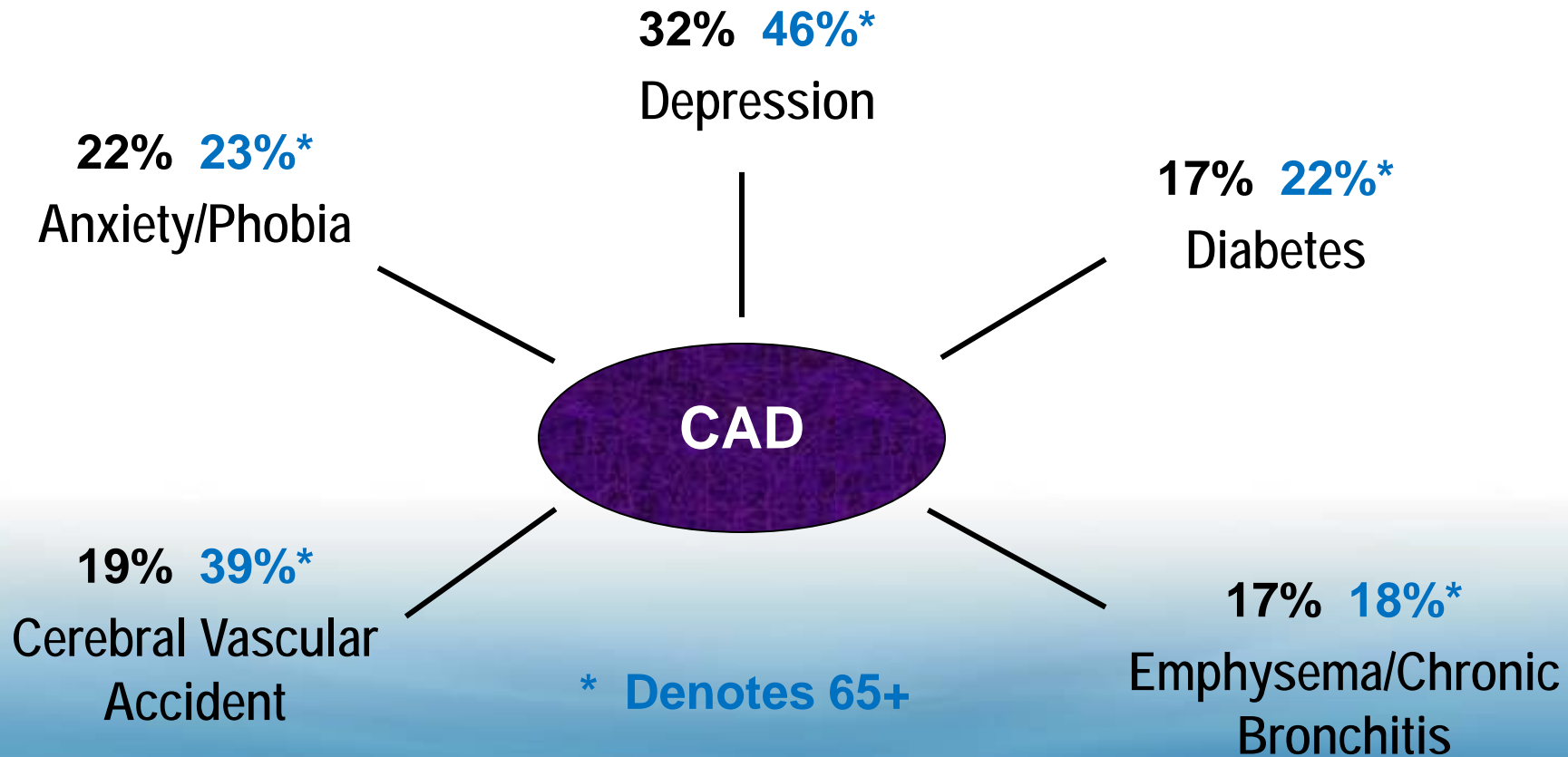
	AVERAGE ALL	51+ - 60	61+ - 64	65+
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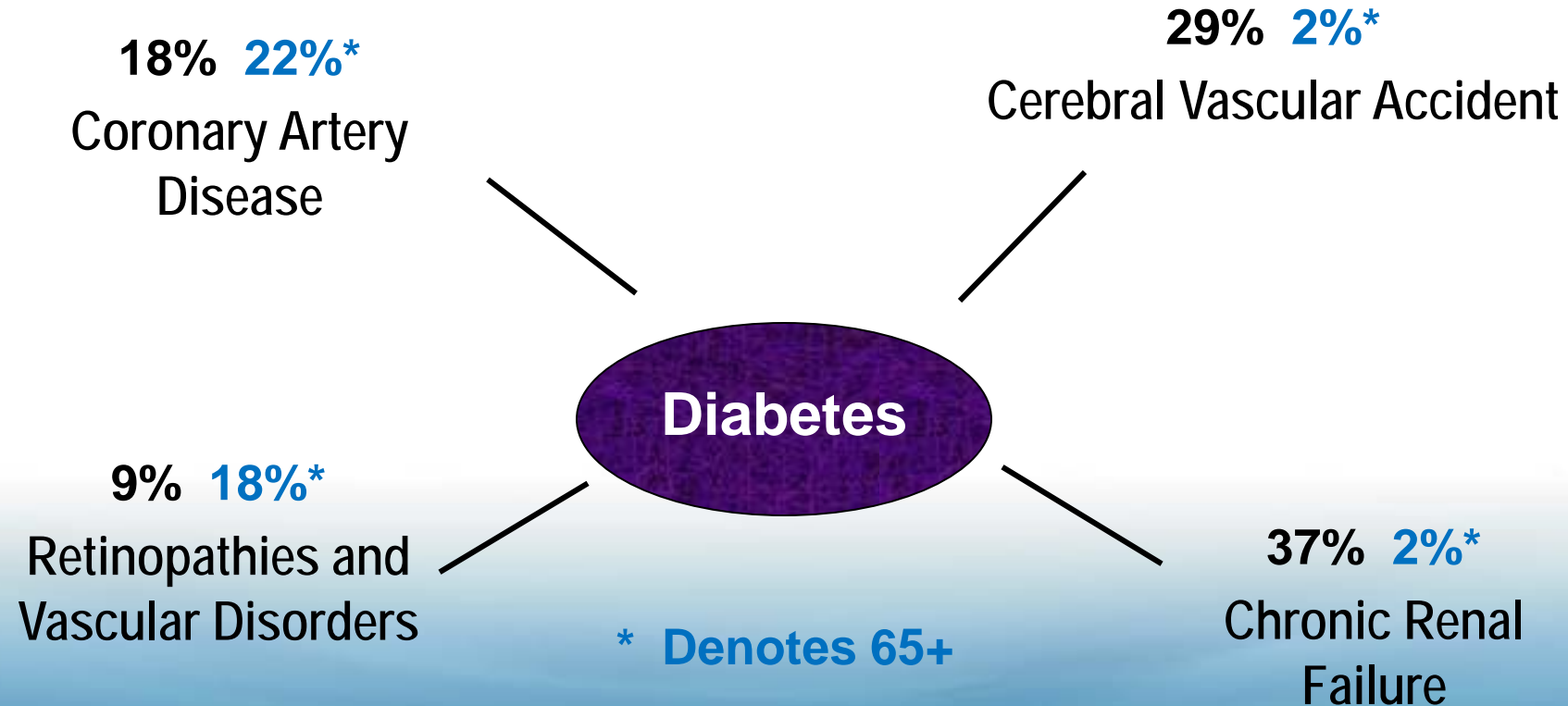
Member Count				
	All	51 - 60	61 - 64	65+
CAD	6,130	2,158	1,346	1,902
Diabetes	17,515	6,681	3,119	3,241



Medical Cost Difference of CAD Members with Additional Comorbidities Included



Medical Cost Difference of Diabetic Members with Additional Comorbidities Included



Medical and Co-Morbidity Costs All Members

BOOK OF BUSINESS MEDICAL COSTS (2017 12 through 2018 11)

		CLAIM FLAG YES (Member who went to dentist)			CLAIM FLAG NO (Member who didn't go to dentist)			
CAD MEMBERS	TOTAL COST	Claim Flag Yes	TOTAL COST	AVERAGE	Claim Flag No	TOTAL COST	AVERAGE	% Difference
Anxiety/Phobia-00402	\$ 13,499,133	306	\$ 6,894,676	\$22,532	228	\$ 6,604,457	\$28,967	22%
Cerebral Vascular Accident-00608	\$ 22,987,066	220	\$ 9,397,060	\$42,714	258	\$ 13,590,006	\$52,674	19%
Depression-00401	\$ 24,730,447	370	\$ 10,681,537	\$28,869	333	\$ 14,048,910	\$42,189	32%
Diabetes-00201	\$ 55,286,138	910	\$ 26,165,503	\$28,753	842	\$ 29,120,635	\$34,585	17%
Emphysema/Chronic Bronchitis-01003	\$ 20,418,213	182	\$ 7,032,866	\$38,642	286	\$ 13,385,347	\$46,802	17%

		CLAIM FLAG YES (Member who went to dentist)			CLAIM FLAG NO (Member who didn't go to dentist)			
DIABETIC MEMBERS	TOTAL COST	Claim Flag Yes	TOTAL COST	AVERAGE	Claim Flag No	TOTAL COST	AVERAGE	% Difference
Cerebral Vascular Accident-00608	\$ 23,826,767	270	\$ 9,675,379	\$35,835	279	\$ 14,151,387	\$50,722	29%
Chronic Renal Failure-01302	\$ 42,432,920	455	\$ 15,692,508	\$34,489	486	\$ 26,740,413	\$55,021	37%
Coronary Artery Disease-00802	\$ 55,824,946	913	\$ 26,169,028	\$28,663	847	\$ 29,655,918	\$35,013	18%
Retinopathies and Vascular Disorders-00708	\$ 6,754,879	167	\$ 3,312,796	\$19,837	158	\$ 3,442,083	\$21,785	9%



BlueCrossBlueShield Association (BCBSA)

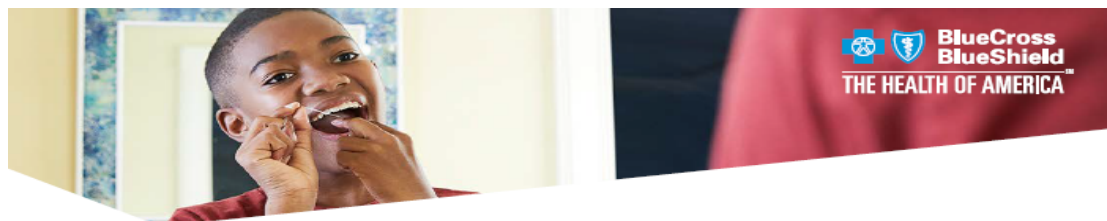


- **BCBSA** is a federation of 36 separate United States health insurance companies, providing health insurance in the United States to more than 106 million people (1 in 3 people in the US). All health information from the various Plans is collected centrally
 - There are over 200 conditions that can be identified by medical claim data that are assigned a mortality and disability index which creates a subtraction from an individual's overall life expectancy by actuarial and disability tables. If we know what someone's optimal life expectancy is based on overall mortality and disability factors, knowing the dental related medical diagnoses that have been assigned to these conditions will create a detractive factor from their healthy life expectancy.
- **BCBSA** has developed the Health of America Initiative. This initiative was developed to get data insights of the health of the American public from its medical database using analytical tools.
- This initiative created the **BCBS Health Index**.
- One of the BCBS Health Index Analyses was on medical claims with a dental related diagnosis called **Brush Up on Dental Health**.

A Serious Dental or Periodontal Condition may lead to a loss of 1.7 Years of Healthy Life.



Brush up on Dental Health



BRUSH UP ON DENTAL HEALTH

Taking good care of your mouth, teeth and gums can help you maintain good overall health.

ABOUT 3.7 MILLION* BCBS MEMBERS HAD A SERIOUS DENTAL OR GUM CONDITION IN 2016.



- Root Canals
- Tooth Loss
- Tooth and Mouth Infections
- Gum Disease:
 - Gingivitis
 - Periodontitis

MEMBERS WITH A SERIOUS DENTAL OR GUM CONDITION SPEND **2x MORE ANNUALLY** ON OVERALL HEALTHCARE COSTS

POOR ORAL HEALTH CAN AFFECT YOU LONG-TERM

Members diagnosed with dental and gum conditions are:



25% MORE LIKELY to suffer from heart disease**

2x AS LIKELY to visit the ER or have a hospital stay

LIKELY TO SUFFER FROM autoimmune disorders, anemia, gastro-intestinal disorders or renal disease



A serious dental or gum condition may lead to a loss of:

1.7 YEARS OF HEALTHY LIFE

*Source: BCBS Health Index 2016, only includes dental conditions identified through medical claims.

**For more information, see: <https://www.cdc.gov/oralhealth/basics/index.html>; <https://www.mouthhealthy.org/en/az-topics/h/heart-disease-and-oral-health>
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<https://bcbs.com/the-health-of-america>



Integration in action.

Ted is a 51-year-old who has medical and dental coverage with Blue Cross. We have access to more data, which has a positive impact on his health.



Ted participates in a biometric screening, and the results are shared with his physician.



A review of Ted's data raises concerns, and his physician schedules additional tests.



Ted's physician diagnoses Ted as a diabetic.



Because Ted also has Dental Blue coverage, we send him a letter telling him he's eligible for additional dental services to help control his diabetes, at no cost.



We monitor Ted's use of his dental benefits and reach out to him by mail, email, text or phone to educate and encourage him.






Ted's medical and dental care coordination is monitored by his nurse case manager, helping him stay in control of his condition, and maintain his health.





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**Blue Cross MA**
12/18/18, 12:16 PM


**Good Oral Health Leads to Better Overall Health**


Seeing the dentist regularly is good for your health, especially for those with heart disease. That's because dental checkups are about more than just cleaning your teeth. Dentists can also reduce the amount of plaque and bacteria in your mouth that can make conditions, such as heart disease, worse. Give yourself a bigger reason to smile and schedule an appointment today—it's covered!*

*Check your plan for details.

Learn How to Keep Your Teeth Healthy >

Find a Dentist >


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Good Oral Health Leads to Better Overall Health

Regular visits with your dentist can improve your overall health.

In addition to no-cost* regular dental checkups, members who qualify for Enhanced Dental Benefits can get additional preventive and periodontal dental care that can lead to improved overall health. This program also offers oral health support for members with chronic conditions, such as diabetes.

Learn how to keep your teeth healthy

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Learn how to keep your teeth healthy

*Check your plan for details.

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Conclusion

- Oral Health is a risk factor to Overall Health
- The effects of poor Oral Health appear to be greater in the 65+ population
- Risk scores generally underpredict the true medical cost difference when dental care is considered
- Decreased longevity is associated with poor Oral Health
- Health plans can integrate oral and overall health initiatives for members with chronic conditions for improved Overall Health

