# Exploring Paths for Dental Integration and Coordinated Care

**January 2019 AIDPH Colloquium**

Evolving the Dental Public Health Landscape

Interprofessional Practice and Value-Based Care

# NADP's Mission

To promote and advance the dental benefits industry to provide access to affordable, quality dental care

# NADP Programs & Services

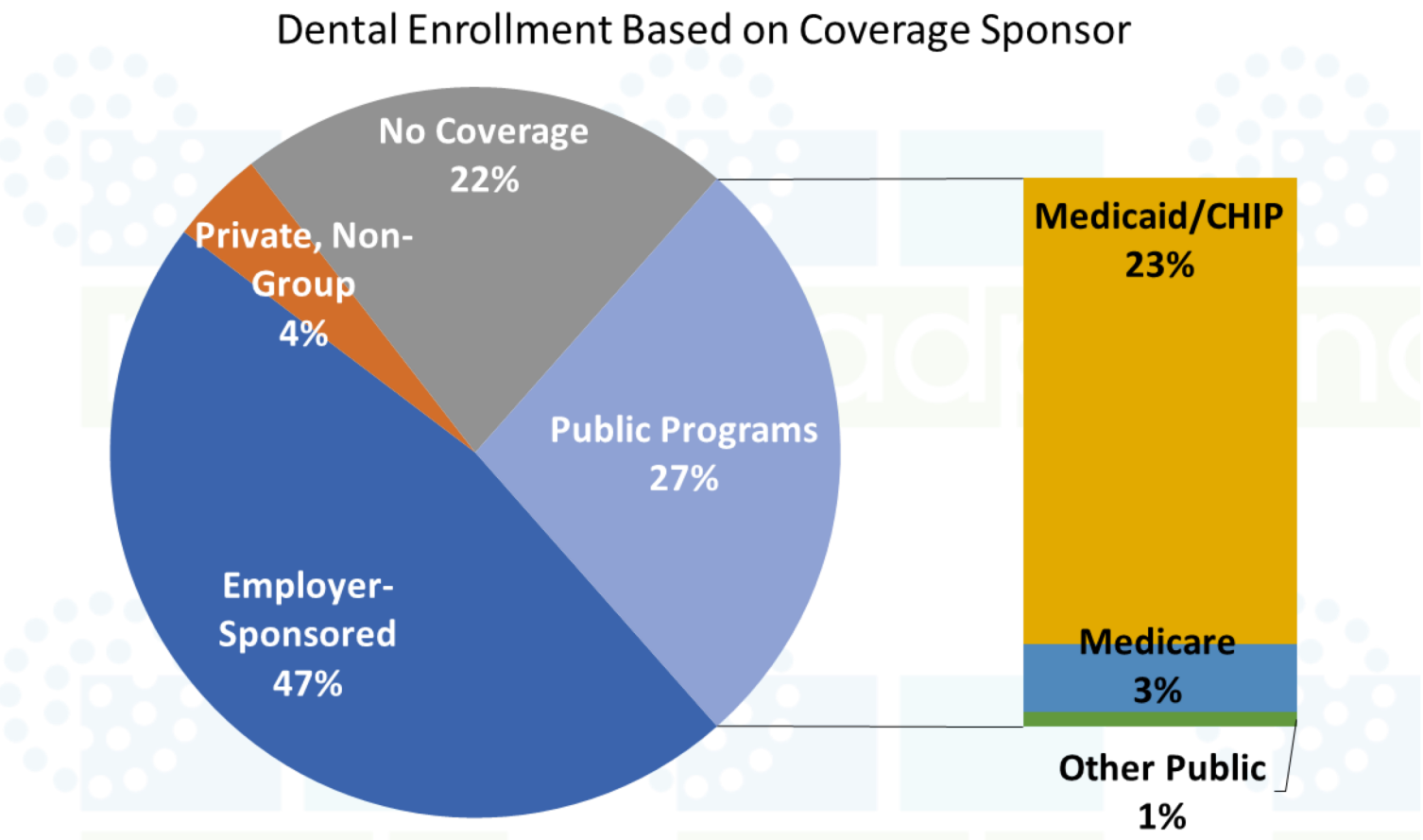
- **Government Relations**
  - State & federal legislative & regulatory tracking, comments & lobbying
  - Proactive initiatives
- **Research**
  - Industry benchmarks
  - Employer concerns/interests
  - Consumer concerns/interests
  - Specialized snapshots of a particular practice
- **Education & Communication**
  - Industry Conferences & webinars
  - Presentations to Others
  - Voice of the dental benefits industry to press and policymakers
- **Collaboration on Terminology, Standards, & Transactions**
  - X12 & HL7
  - SNOMED
  - DQA
  - CMC
  - DeCC
  - SCDI
  - DeCFAC
  - WEDI

# Learning Objectives

- Create a basic understanding of the dental benefits market and the impediments and opportunities it creates for dental/medical integration
- Share key findings of studies of dental treatment impacts on key medical costs in both the private and public sector.
- Discuss expansion of dental benefits in public programs as well as opportunities and risks for continuation of that coverage.
- Explore potential changes in the private market that could expand or supplement care delivery for public programs.


# Dental Enrollment Trends

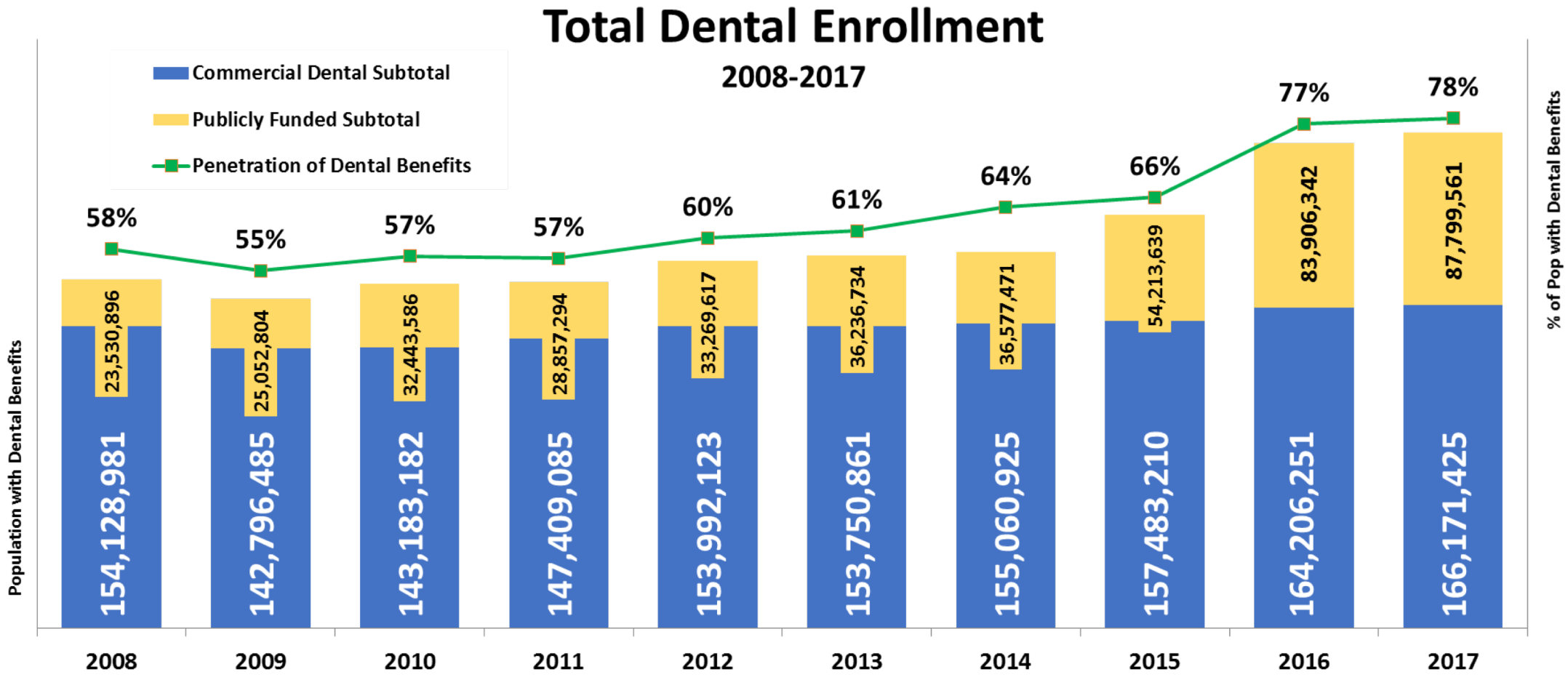
# 2017 Sources of Dental Coverage




- Only 22% of Americans have no dental benefits.
- A little more than half of the population gets dental benefits in the private market—through employers or by purchasing as an individual.
- Just over a quarter of the population gets dental benefits through a public program.
- About 4% of the population has individual coverage for dental services.

**SOURCE:** NADP 2018 Dental Benefits Report: Enrollment

# National Dental Enrollment




Source: NADP 2018 Dental Benefits Report: Enrollment

# Population Covered by Dental Benefits

| Line of Business | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| Dental HMO Fully Insured | **12,644,357** | **10,762,619** | **11,875,554** | **12,398,000** | **12,355,672** | **12,217,084** | 11,574,778 | 11,048,940 | 11,261,033 | 10,352,228 |
| Dental HMO Self Insured | | | | | | | 149,762 | 334,514 | 144,686 | 508,396 |
| **Dental HMO SubTotal** | 12,644,357 | 10,762,619 | 11,875,554 | 12,398,000 | 12,355,672 | 12,217,084 | 11,724,540 | 11,383,454 | 11,405,719 | 10,860,624 |
| Dental EPO Fully Insured | | | | | | 625,669 | 769,951 | 768,671 | 943,317 | 1,101,901 |
| Dental EPO Self Insured | | | | | | 841,123 | 64,770 | 69,905 | 105,823 | 231,250 |
| **Dental EPO SubTotal** | | | | | | 1,466,792 | 834,721 | 838,576 | 1,049,140 | 1,333,151 |
| Dental PPO Fully Insured | 55,372,701 | 52,838,087 | 50,532,502 | 54,626,844 | 55,418,049 | 55,786,462 | 60,305,006 | 60,325,659 | 62,537,417 | 67,878,029 |
| Dental PPO Self Insured | 47,203,344 | 45,398,695 | 54,946,570 | 59,150,390 | 65,329,852 | 65,255,114 | 66,998,652 | 67,996,481 | 70,450,784 | 73,166,595 |
| **Dental PPO SubTotal** | 102,576,045 | 98,236,782 | 105,479,072 | 113,777,235 | 120,747,901 | 121,041,576 | 127,303,658 | 128,322,139 | 132,988,202 | 141,044,624 |
| Discount Dental (Savings ) Plans | 14,841,684 | 12,973,418 | 8,531,500 | 6,972,830 | 8,572,529 | 8,826,779 | 5,742,910 | 6,167,625 | 7,394,146 | 7,506,821 |
| **Discount Dental Network Subtotal*** | **15,222,240** | **13,306,070** | **8,958,075** | **7,321,471** | **9,001,155** | **9,268,117** | **6,030,055** | **6,476,006** | **7,763,854** | **7,882,162** |
| **Dental Managed Care SubTotal** | **130,442,642** | **122,305,471** | **126,312,700** | **133,496,706** | **142,104,728** | **143,993,569** | **145,892,974** | **147,020,175** | **153,206,914** | **161,120,561** |
| Dental Indemnity Fully Insured | 12,217,209 | 10,703,769 | 6,920,515 | 5,853,260 | 6,078,344 | 5,903,230 | 5,236,164 | 6,084,242 | 6,676,780 | 2,921,133 |
| Dental Indemnity Self Insured | 9,899,602 | 8,347,503 | 8,510,110 | 7,454,246 | 5,209,760 | 4,647,461 | 4,493,870 | 4,086,296 | 3,817,726 | 1,640,513 |
| | 22,116,811 | 19,051,272 | 15,430,624 | 13,307,506 | 11,288,103 | 10,550,691 | 9,730,033 | 10,170,538 | 10,494,506 | 4,561,646 |
| **Dental Direct Reimbursement SubTotal** | **1,569,528** | **1,439,742** | **1,439,857** | **604,873** | **599,292** | **673,393** | **272,639** | **292,498** | **504,831** | **489,218** |
| **Commercial Dental Subtotal** | **154,128,981** | **142,796,485** | **143,183,182** | **147,409,085** | **153,992,123** | **155,217,653** | **155,895,646** | **157,483,210** | **164,206,251** | **166,171,425** |
| CHIP | | | | | | | 884,341 | 847,269 | 8,900,074 | 9,460,160 |
| Medicaid (includes CHIP through 2013) (Commerically administered only) | 19,288,603 | 20,027,589 | 29,033,795 | 25,284,823 | 29,349,567 | 30,725,441 | 31,125,600 | 44,572,417 | 65,878,500 | 65,178,409 |
| Medicare (supplement plans) | 2,840,066 | 3,603,547 | 1,829,536 | 1,992,216 | 2,232,714 | 3,925,380 | 3,257,943 | 6,006,165 | 6,485,423 | 10,914,992 |
| Other | 1,402,227 | 1,421,668 | 1,580,255 | 1,580,255 | 1,687,336 | 1,585,913 | [illegible] | 2,787,788 | 2,642,345 | [illegible] |
| **Publicly Funded Subtotal** | **23,530,896** | **25,052,804** | **32,443,586** | **28,857,294** | **33,269,617** | **36,236,734** | **36,577,471** | **54,213,639** | **83,906,342** | **87,799,561** |
| **Other** | | | | | | | 12,736,677 | | 1,013,187 | |
| **EST. Total Dental Benefits Market** | **177,659,877** | **167,849,289** | **175,626,768** | **176,266,379** | **187,261,740** | **191,454,387** | **205,209,794** | **211,696,849** | **249,125,780** | **253,970,986** |

Medicaid and CHIP enrollment are based on data published by the Center for Medicaid Services. Other public includes data from a variety of public sources, including the Department of Defense, Bureau of Indian Affairs, the Bureau of Prisons and other sources. All other data is reported by plans or through other private data available to NADP.

* Applied a 5% underreporting factor to subtotal

# Impacts of Oral Health on Overall Health

# Oral Health in America: A Report of the Surgeon General

among all Americans. The report, commissioned by Health and Human Services Secretary Donna E. Shalala, also focuses on the relationship between oral health and overall good health throughout life, the mouth as a "mirror for general health and well-being and the association between oral health problems and other health problems.

Dr. Satcher noted that major barriers to oral health include socioeconomic factors, such as lack of dental insurance or the inability to pay out of pocket, or problems of access that involve transportation and the need to take time off from work for health needs. While 44 million Americans lack medical insurance, about 108 million lack dental insurance. Only 60 percent of baby boomers receive dental insurance through their employers, and most older workers lose their dental insurance at retirement.

Department of Health and Human Services
U.S. PUBLIC HEALTH SERVICE

Meanwhile, uninsured children are 2.5 times less likely to receive dental care than insured children, and children from families without dental insurance are 3 times as likely to have dental needs as compared to their insured peers.

# Why are the links important?

**47.2%** of adults aged 30 years and older have some form of **periodontal disease** [1]

**Periodontal disease** increases with age, **70.1%** of adults 65 years and older have periodontal disease [1]

More than **29 million** Americans are living with **diabetes**, and **86 million** (more than a third of American adults) are living with **prediabetes**. The total estimated direct and indirect cost of diagnosed diabetes in 2012 was **$245 billion** [2]

About **92.1 million** American adults are living with **cardiovascular disease** or the after-effects of **stroke**. Direct and indirect costs of cardiovascular diseases and stroke are estimated to total more than **$316 billion** [3]

The United States **preterm birth rate** of **9.6%** equates to an economic burden of at least **$26.2 billion** in direct and indirect costs. [4]

[1] https://www.cdc.gov/oralhealth/conditions/periodontal-disease.html June, 2016
[2] https://www.cdc.gov/chronicdisease/resources/publications/aag/diabetes.htm July, 2016
[3] https://www.heart.org/idc/groups/ahamah-public/@wcm/@sop/@smd/documents/downloadable/ucm_491265.pdf January, 2017
[4] http://www.midwife.org/acnm/files/ccLibraryFiles/Filename/000000006389/MillionBabiesWhitePaper112916.pdf 2016

UNITED CONCORDIA® DENTAL
Protecting More Than Just Your Smile®

# Chronic Disease Study Overview

The study used data from 2005-2009 to analyze 1.7MM people, ~91,000 of which were diabetic patients with periodontal disease

- In patients with periodontal disease, the study compared primary outcomes including:
  - Medical costs
  - Number of Medical Visits
  - Number of Hospital Admissions

**Patients who remained untreated**

**VS.**

**Patients who received treatment and were maintained**

UNITED CONCORDIA® DENTAL
Protecting More Than Just Your Smile®

# Conclusions: Total Medical Costs

| Condition | | Annual Total Medical Costs Per Subject | | | |
|---|---|---|---|---|---|
| | | Periodontal Disease | | Difference | Significance |
| | | Untreated | Treated | | |
| Type 2 Diabetes (T2D) | | $7,056 | $4,216 | $2,840 (40.2%) | P<0.04 |
| Cerebral Vascular Disease (CVD) | | $13,895 | $8,214 | $5,681 (40.9%) | P<0.04 |
| Coronary Artery Disease (CAD) | | $10,222 | $9,133 | $1,089 (10.7%) | Varies by Year |
| Rheumatoid Arthritis (RA) | | $9,218 | $8,637 | $581 (6.3%) | No |
| Pregnancy and Delivery | First Instance | $3, 299 | $866 | $2,433 (73.7%) | P<0.001 |
| | Second Instance | $3,301 | $1,754 | $1,547 (46.9%) | No |

Source: Jeffcoat, M., et. al., Periodontal Therapy May Improve Outcomes in Specific Systemic Conditions; Evidence From Insurance Claims. Abstract, American Association of Dental Research, March 22, 2014

Jeffcoat MK, Jeffcoat RL, Gladkowski PA, Bramson JB, Blum JJ. *Impact of Periodontal Therapy on General Health: Evidence from Insurance Data for Five Systemic Conditions*, American Journal of Preventive Medicine, 47(2014) pp. 166-174. DOI: 10.1016/j.amepre.2014.04.001

# Conclusions: Inpatient Hospital Admissions

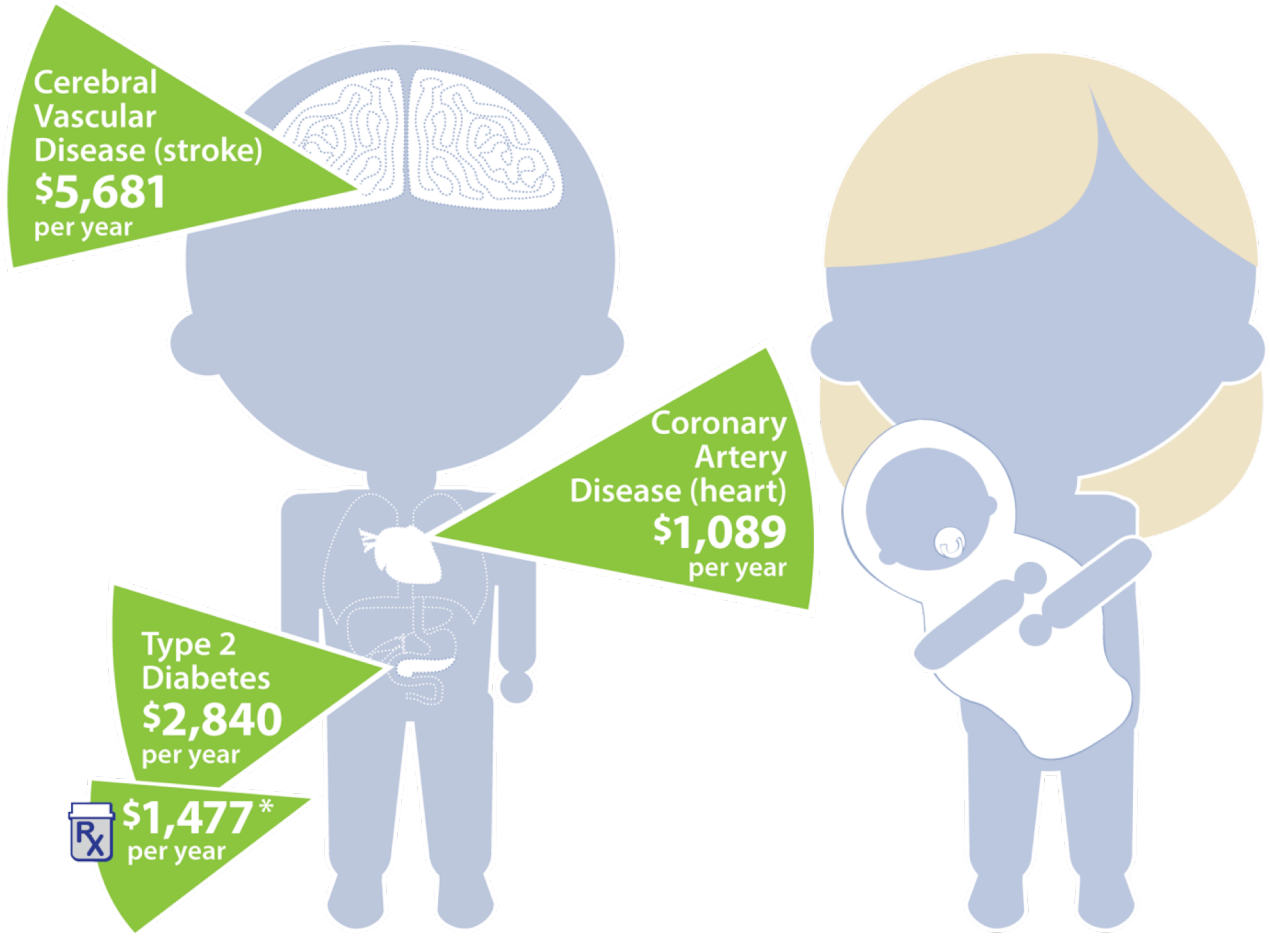
| Condition | | Annual Inpatient Admissions per 1000 Subjects | | | |
|---|---|---|---|---|---|
| | | Periodontal Disease | | Difference | Significance |
| | | Untreated | Treated | | |
| Type 2 Diabetes (T2D) | | 66.625 | 40.350 | 26.283 (39.4%) | P<0.05 |
| Cerebral Vascular Disease (CVD) | | 444.425 | 350.000 | 94.433 (21.2%) | P<0.02 |
| Coronary Artery Disease (CAD) | | 65.225 | 46.575 | 18.653 (28.6%) | P<0.001 |
| Rheumatoid Arthritis (RA) | | 142.650 | 136.275 | 6.383 (4.5%) | No |
| Pregnancy and Delivery | First Instance | Not Applicable | | | |
| | Second Instance | | | | |

Source: Jeffcoat, M., et. al., Periodontal Therapy May Improve Outcomes in Specific Systemic Conditions; Evidence From Insurance Claims. Abstract, American Association of Dental Research, March 22, 2014

Jeffcoat MK, Jeffcoat RL, Gladkowski PA, Bramson JB, Blum JJ. *Impact of Periodontal Therapy on General Health: Evidence from Insurance Data for Five Systemic Conditions*, American Journal of Preventive Medicine, 47(2014) pp. 166-174. DOI: 10.1016/j.amepre.2014.04.001

UNITED CONCORDIA® DENTAL
Protecting More Than Just Your Smile®

# Chronic Disease Savings




**$2,433** on costs associated with the mother's medical treatment prior to delivery of her first baby.

# Aetna-Columbia Study Results:
## *Retrospective Claim Analysis, Chronic Conditions*

**Episode Risk Group™ (ERG) scores for Diabetes, CAD & CVD participants**

*ERG™ is a Modeling tool to predict current and future health care utilization*

| *ERG*™ Risk Scores | Periodontal Services Risk Score | No Dental Services Risk Score | Reduction in Risk Score |
|---|---|---|---|
| Diabetes | 3.39 | 4.79 | 29.2% |
| Coronary Artery Disease (CAD) | 4.68 | 6.49 | 27.9% |
| Cerebrovascular Disease (CVD) | 6.23 | 8.26 | 24.6% |

**An examination of periodontal treatment and per member per month (PMPM) medical costs in an insured population** BMC Health Services Research, David Albert, Donald Sadowsky, Panos Papapanou Mary Conicella, Angela Ward BMC Health Services Research 2006 DOI: 10.1186/1472-6963-6-103

aetna®

# Aetna-Columbia Study Results:
## *Retrospective Claim Analysis, Pregnancy*

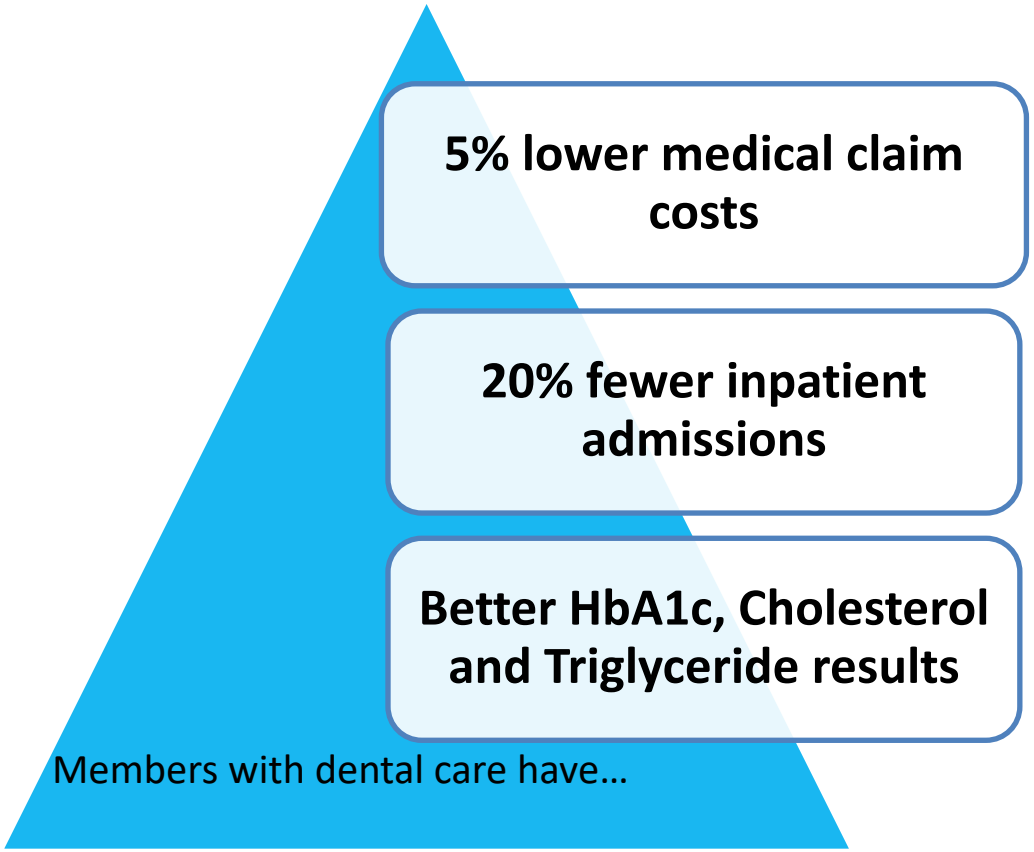
| Treatment Group Variable | No. | Observed Probability of Low Birth Weight,* No. | (%) | Observed Probability of Preterm Delivery,* No. | (%) |
|---|---|---|---|---|---|
| Received periodontal treatment | 1086 | 28 | 2.6 | 85 | 7.8 |
| Received prophylactic treatment | 8010 | 260 | 3.3 | 609 | 7.6 |
| Received other dental treatment | 2024 | 94 | 4.6 | 190 | 9.4 |
| No dental treatment of any kind | 12321 | 612 | 5.0 | 1241 | 10.1 |

*P < .001

**Examination of Periodontal Treatment, Dental Care, and Pregnancy Outcomes in an Insured Population in the United States**. Albert, D. A., Begg, M. D., Andrews, H. F., Williams, S. Z., Ward, A., Conicella, M., … Papapanou, P. (2011). An American Journal of Public Health, 101(1), 151–156. http://doi.org/10.2105/

aetna®

# Aetna 2017 Study Results
# Heart Disease/Hypertension & Diabetes




[2] 2017 Statistically valid study of Aetna clients with continuous dental coverage from 2013 through 2015 with and without Dental Care. Client demographics in age, gender, geography, risk score, dental & medical plan design and comorbidities were nearly identical.

aetna®

# Kaiser Permanente **Research: Description**

**Results**:

Compared to those who did not receive regular dental care, those who did, were statistically significantly more likely to have:

- Good control of HbA1C levels
- Lower diabetes-specific ED utilization
- Lower diabetes-specific hospital admissions

## Population Characteristics:

| Population Characteristics | Dental (N=493) | Non-Dental (N=493) | P-value |
|---|---|---|---|
| Age (Mean) | 61.4 | 61.3 | 0.94 |
| White (%) | 86.0 | 88.0 | 0.53 |
| Diabetes Control (%) | 54.8 | 43.2 | **<0.001** |
| Perio Risk (Elevated) (%) | 20.7 | 25.8 | 0.06 |
| 1+ ED visit in 2007 (%) | 10.1 | 16.2 | **0.005** |
| 1+ Hospital admission in 2007 (%) | 8.3 | 14.8 | **0.001** |

# Kaiser Permanente **Research: Results**

**Regular dental care is associated with lower utilization of healthcare**

After adjusting for other factors, regular receipt of dental care across a three-year period was independently associated with:

- 39% (statistically significant) decrease in odds of diabetes-specific ED utilization.
- 39% (statistically significant) decrease in odds of diabetes-specific hospital admissions.
- 29% increase in odds of HbA1C control.

# Kaiser Permanente **Research**

**Periodontal interventions associated with healthcare cost savings**

Diabetic population receiving dental care have lower costs **per member per month (PMPM)** than those NOT receiving dental care; after adjusting for patient characteristics.

**Overall costs:**

- Diabetic population receiving dental care had **$129 PMPM** lower costs overall than those NOT receiving dental care

**Inpatient costs:**

- Diabetic population receiving dental care had **$101 PMPM** lower inpatient costs than those NOT receiving dental care

**ED-Urgent care costs**

- Diabetic population receiving dental care had **$13 PMPM** lower ED/ urgent costs than those NOT receiving dental care

Medical + Dental
BETTER TOGETHER

KAISER PERMANENTE®

# Impact of Medicaid Preventive Dental on Medical Costs

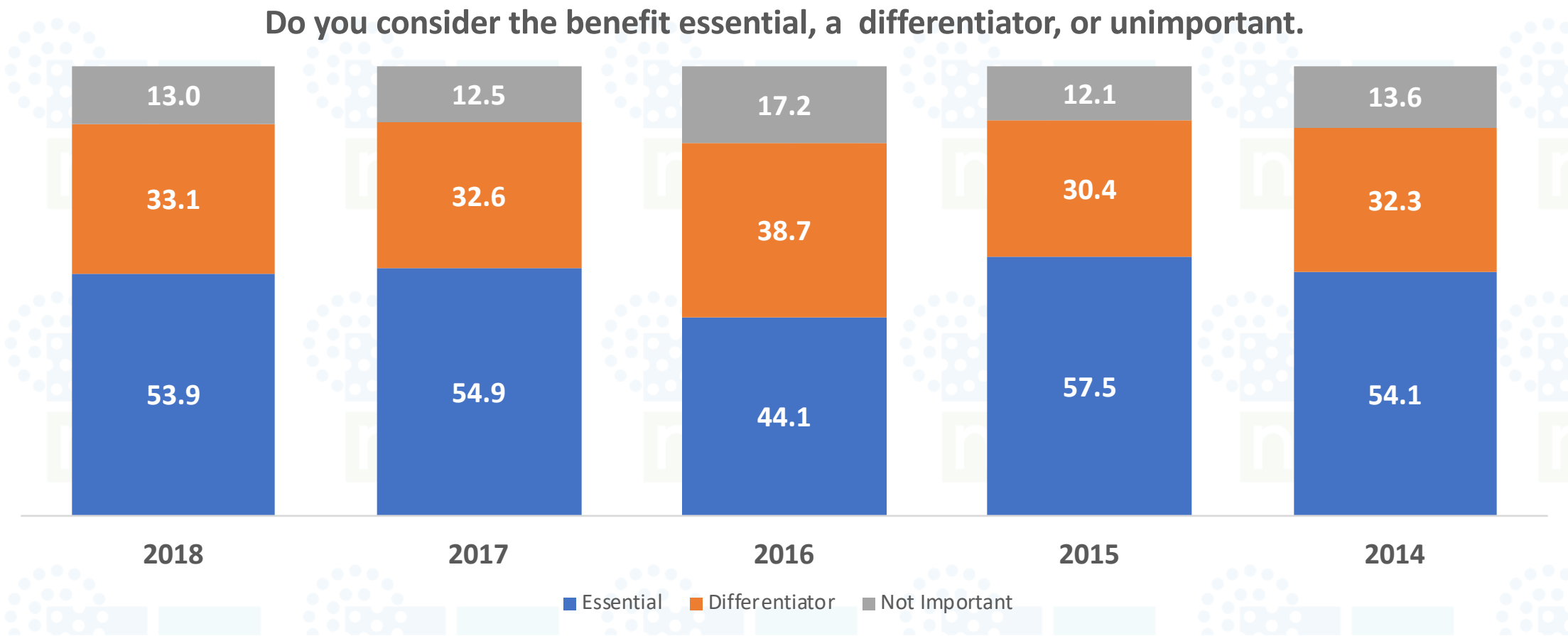
| Health Expenditures for Non-Elderly Adults by Health Condition and by Those with and without a Preventive Dental Visit, 2014 | | | | |
|---|---|---|---|---|
| | Total Population (in millions) [unweighted] | Mean Medicaid Payments ($) | | |
| | | With Preventive Dental Care | Without Preventive Dental Care | Expenditure as % of expenditure of patient without preventive dental care |
| Total Population | 15.481 [15,483] | $474 ($52) | $569 ($38) | |
| Diagnosis ever provided by physician: | | | | |
| **Coronary heart disease** | 3.381 [389] | $904* ($157) | $2,714 ($432) | 67% lower |
| **Diabetes** | 11.187 [1,277] | $1,554* ($287) | $2,422 ($279) | 36% lower |
| **High blood pressure** | 43.378 [4,344] | $830* ($128) | $1,197 ($107) | 31% lower |
| **Heart attack** | 2.638 [286] | $1,639* ($151) | $2,544 ($244) | 36% lower |
| **Stroke** | 2.860 [307] | $1,401* ($533) | $2,940 ($357) | 52% lower |
| **Angina** | 1.847 [184] | $1,625* ($25) | $2,975 ($360) | 45% lower |
| **Other heart disease** | 12.136 [1,035] | $843* ($218) | $1,524 ($192) | 45% lower |
| **Cancer** | 10.396 [822] | $515* ($84) | $1,549 ($220) | 67% lower |
| **High cholesterol** | 41.502 [3,941] | $649* ($96) | $1,136 ($106) | 43% lower |
| | | | | |
| **Asthma** | 14.274 [1,361] | $967* ($150) | $1,537 ($218) | 37% lower |
| | | | | |

**Source:** Based on a sample of 15,483 non-Medicare adults between the ages of 25 and 64 from the 2014 Medical Expenditure Panel Survey (MEPS). The unweighted sample sizes in total and by health condition appear in brackets "[ ]" beneath the corresponding weighted population totals in the first column.
**Note:** Preventive dental care indicates having at least one dental visit during the year in which there was a cleaning or examination or fluoride treatment or sealant. *Asterisk indicates a statistically significant difference. Conditions for which there was a statistically significant difference are highlighted in yellow.

Estimated standard errors of the means appear in parentheses "( )" and are adjusted for the complex sample design of the MEPS.

**SOURCE:** NADP Commissioned Study by the University of Maryland of MEPS data, Released Nov. 2017.

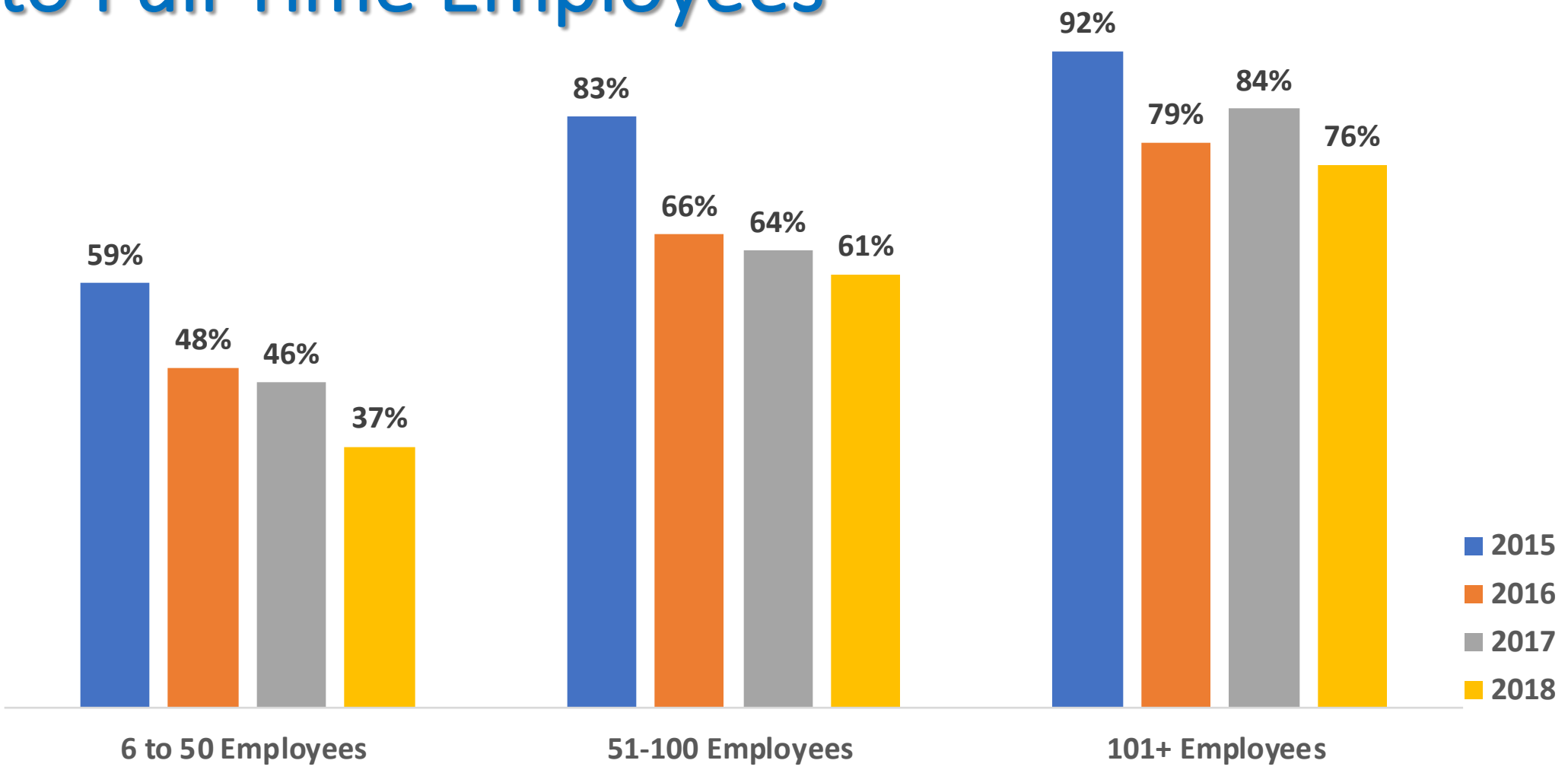
# Employer Attitudes about Dental Benefits






**Source: NADP 2018 Survey of Employers**

# Employers Offering Dental Benefits to Full Time Employees




Source: NADP Surveys of Employers

# Dental Growth in Public Programs

# Key Dental Growth Segments

## Medicaid

### Eligibility

- Historically, provided coverage to certain categories of people (e.g., low-income children, pregnant women, poor elderly)
- ACA expanded eligibility to include low-income adults

### Enrollment

- About 73 million individuals covered as of Oct 2018 *(not all have access to dental services and level of services available vary by state)*
- 16.3 million (22%) of those were newly receiving coverage since October 2013

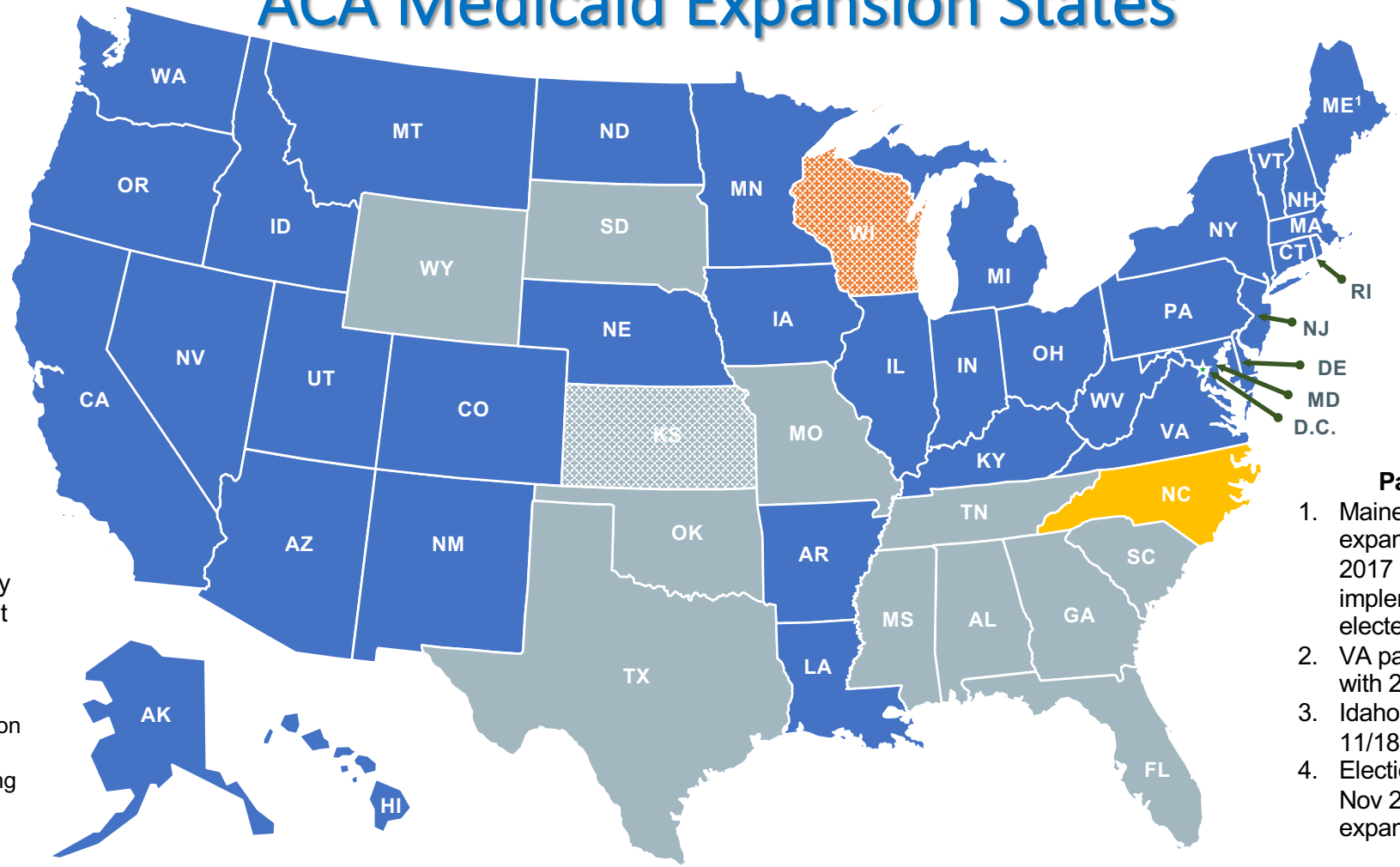
### Funding

- Jointly funded by the federal government and states
- States receive a percentage of matching federal funds from the federal government

ACA: Affordable Care Act; CMS: Centers for Medicare & Medicaid Services
Sources: CMS Medicaid & CHIP: February 2018 Monthly Applications, Eligibility Determinations and Enrollment Data. New enrollment in non-expansion states is largely expected to be due to the "woodwork effect," but data reporting errors could distort these figures. This analysis compares monthly Medicaid enrollment reported through February 28, 2018, to monthly enrollment reported from the July-September 2013 time period.

# Contribution to Dental Growth

## ACA Medicaid Expansion States




ACA: Affordable Care Act

Original SOURCE: Avalere State Reform 360; updated by NADP Jan 2019 (see notes at right)

**NOTE:** Eligibility adjustment states do not count as expansion states and do not receive the enhanced ACA federal matching rate.

**Path to More Expansion**

1. Maine passed a referendum to expand Medicaid on November 7, 2017 but the state has not yet implemented expansion. New Gov. elected Nov 2018 will implement.
2. VA passed expansion in May 2018 with 2019 implementation
3. Idaho, Nebraska and Utah passed 11/18 ballot initiatives to expand.
4. Election of Democratic Governors in Nov 2018 improves chances of expansion in Kansas and Wisconsin

**Expanded Eligibility** (36 + DC; more activity expected in 2019)

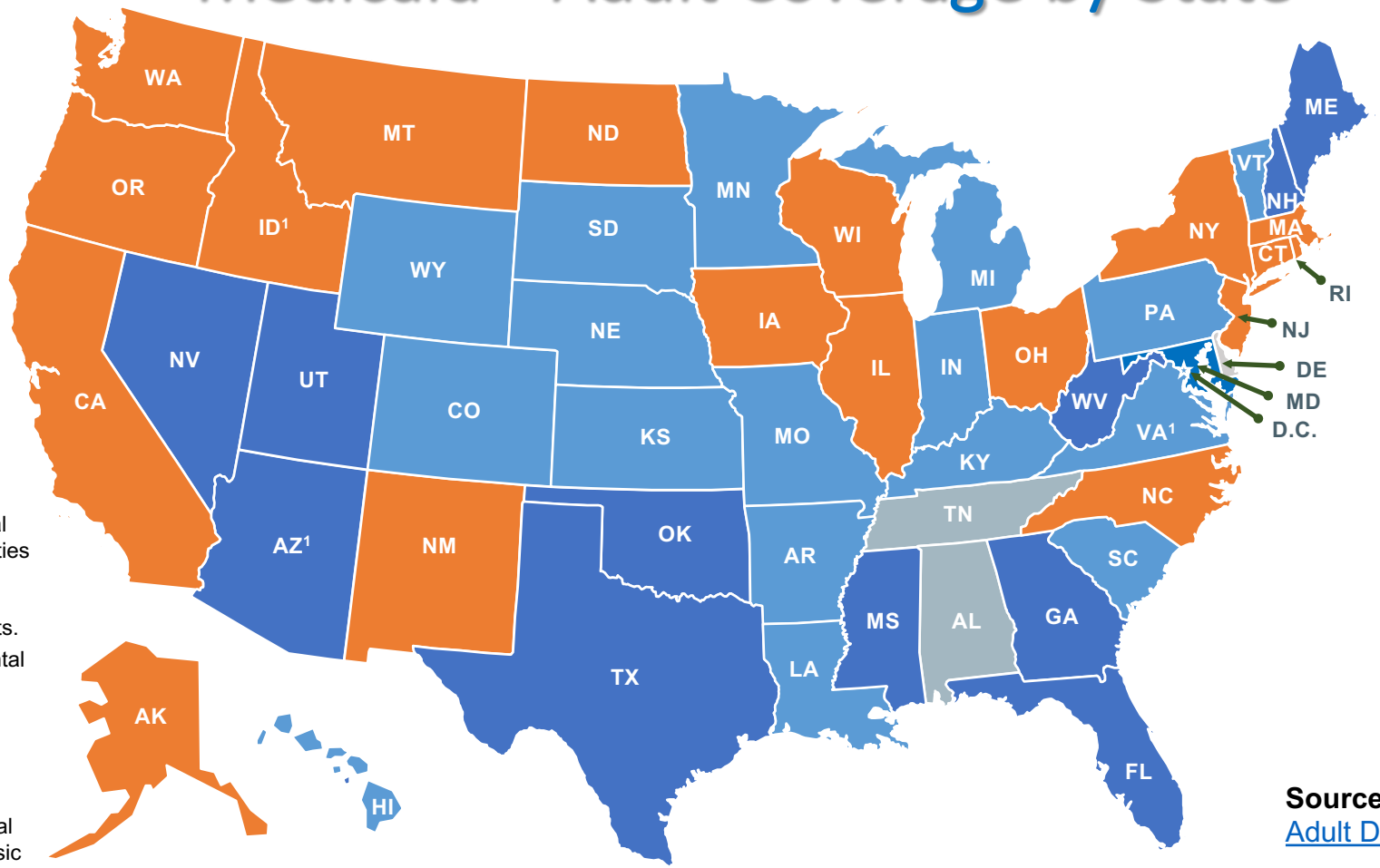
**Eligibility Adjustment** (UT moved from this category after 2018 election. WI remains)

**Movement Toward Expansion** (expected in Gov budget in March)

**Not Expanding** (14 could be reduced in 2019)

# Key Dental Growth Segment

## Medicaid—Adult Coverage by State




1. Idaho provides extensive dental coverage to adults with disabilities and other special health care needs; all other adult members receive emergency only benefits.
2. Virginia provides extensive dental benefits to pregnant women.
3. Arizona provided extensive benefits to persons with disabilities effective October 1, 2016.
4. Hawaii is expanding adult dental benefits from emergency to basic in 2019.

**Source:** Nov 2018 CHCS Medicaid Adult Dental Benefits: An Overview

Extensive (18 + DC) Limited (17) Emergency (12) None (3)

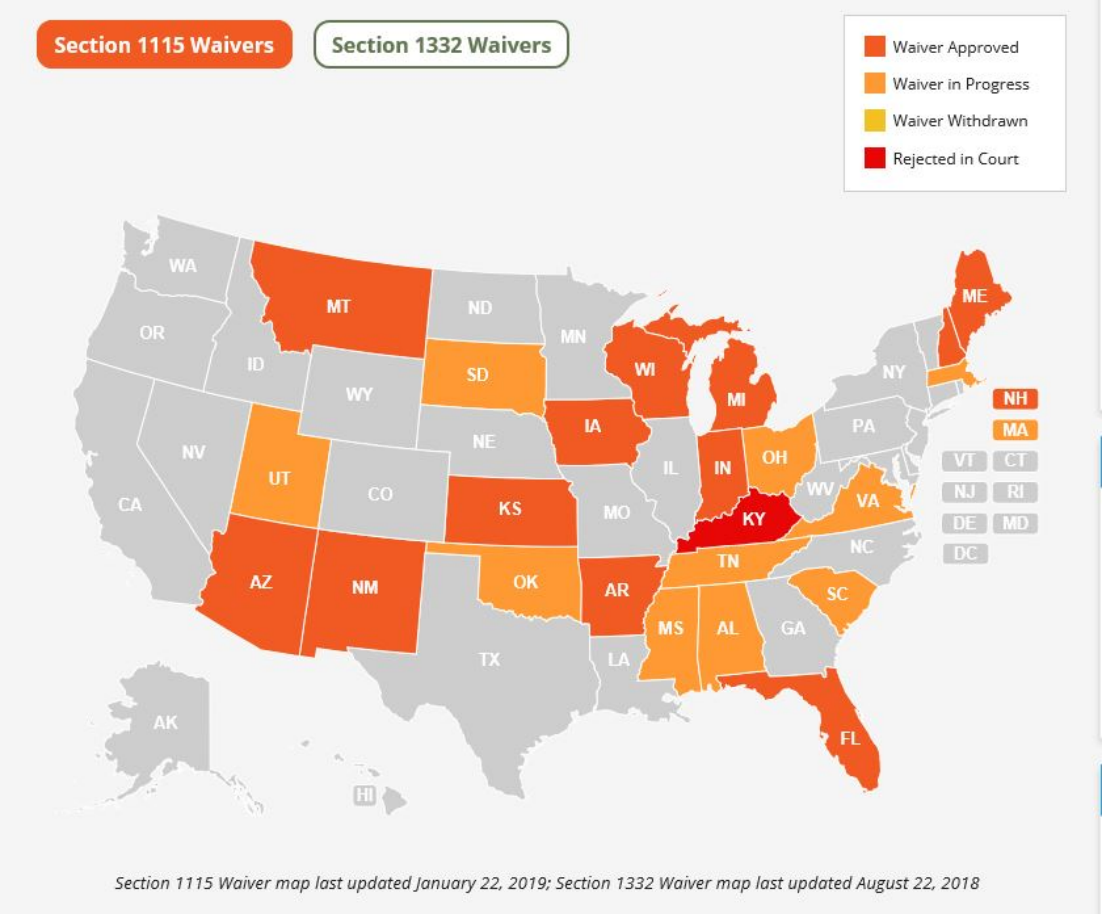
# Key Dental Growth Segments

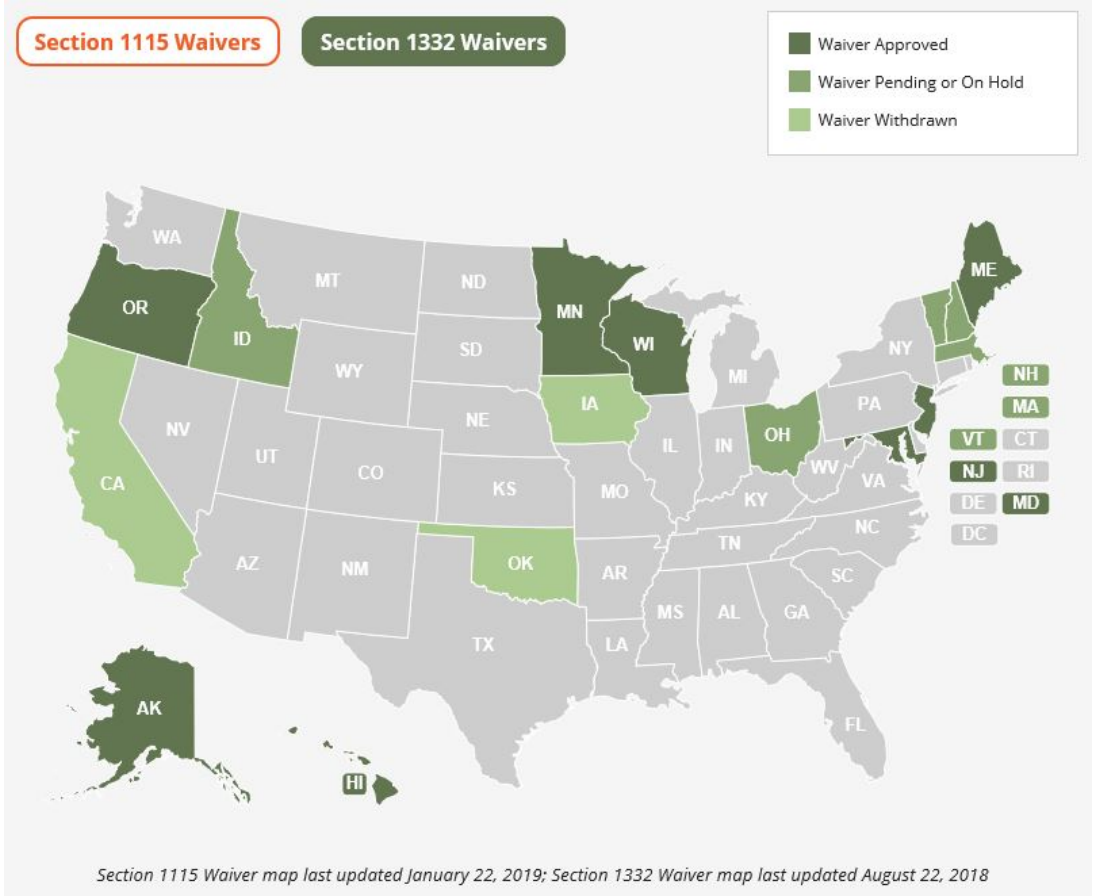
## Medicaid

### Categories of Medicaid Adult Dental Benefits

| Extensive | Limited |
|---|---|
| A more comprehensive mix of services, including many diagnostic, preventive, and minor and major restorative procedures. It includes benefits that have a per-person annual expenditure cap of at least $1,000. It includes benefits that cover at least 100 procedures out of the approximately 600 recognized procedures per the ADA's Code on Dental Procedures and Nomenclature | A limited mix of services, including some diagnostic, preventive, and minor restorative procedures. It includes benefits that have a per-person annual expenditure cap of $1,000 or less. It includes benefits that cover less than 100 procedures out of the approximately 600 recognized procedures per the ADA's Code on Dental Procedures and Nomenclature |
| **Emergency** | **None** |
| Relief of pain and infection. While many services might be available, care may only be delivered under defined emergency situations | No Dental Benefit |

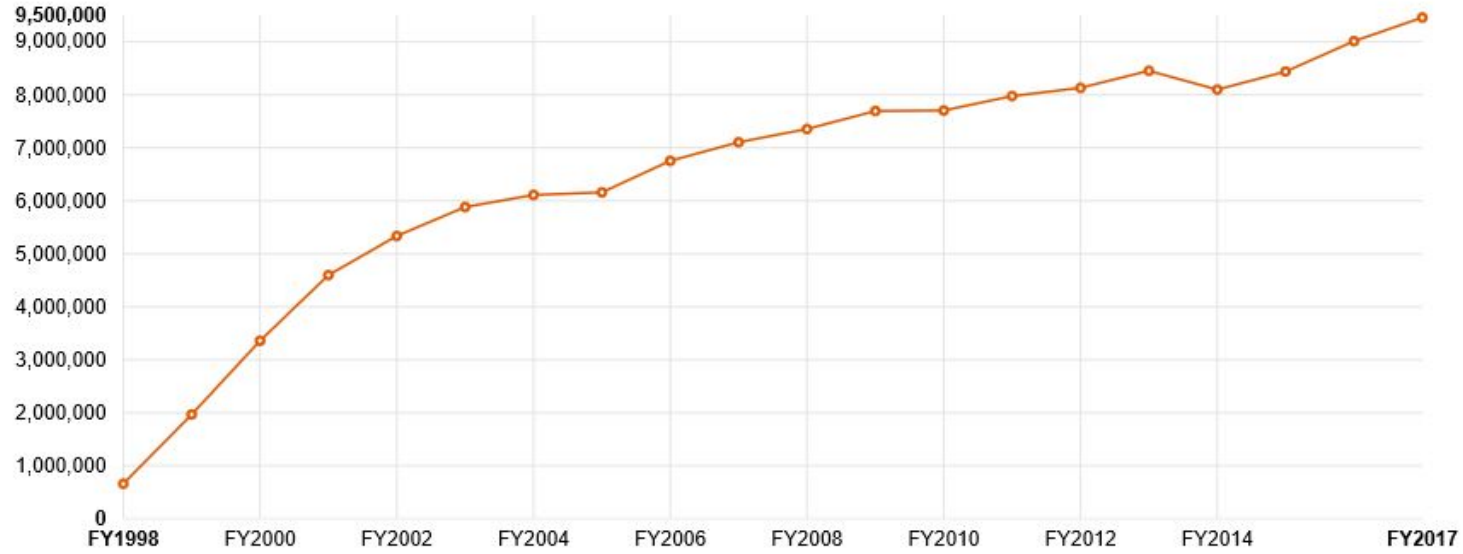
# Challenges to Medicaid Expansion




**SOURCE:** Families USA Waiver Strategy Center, accessed 1/22/2019

# Contribution to Dental Growth-- CHIP




CHIP Enrollment

United States

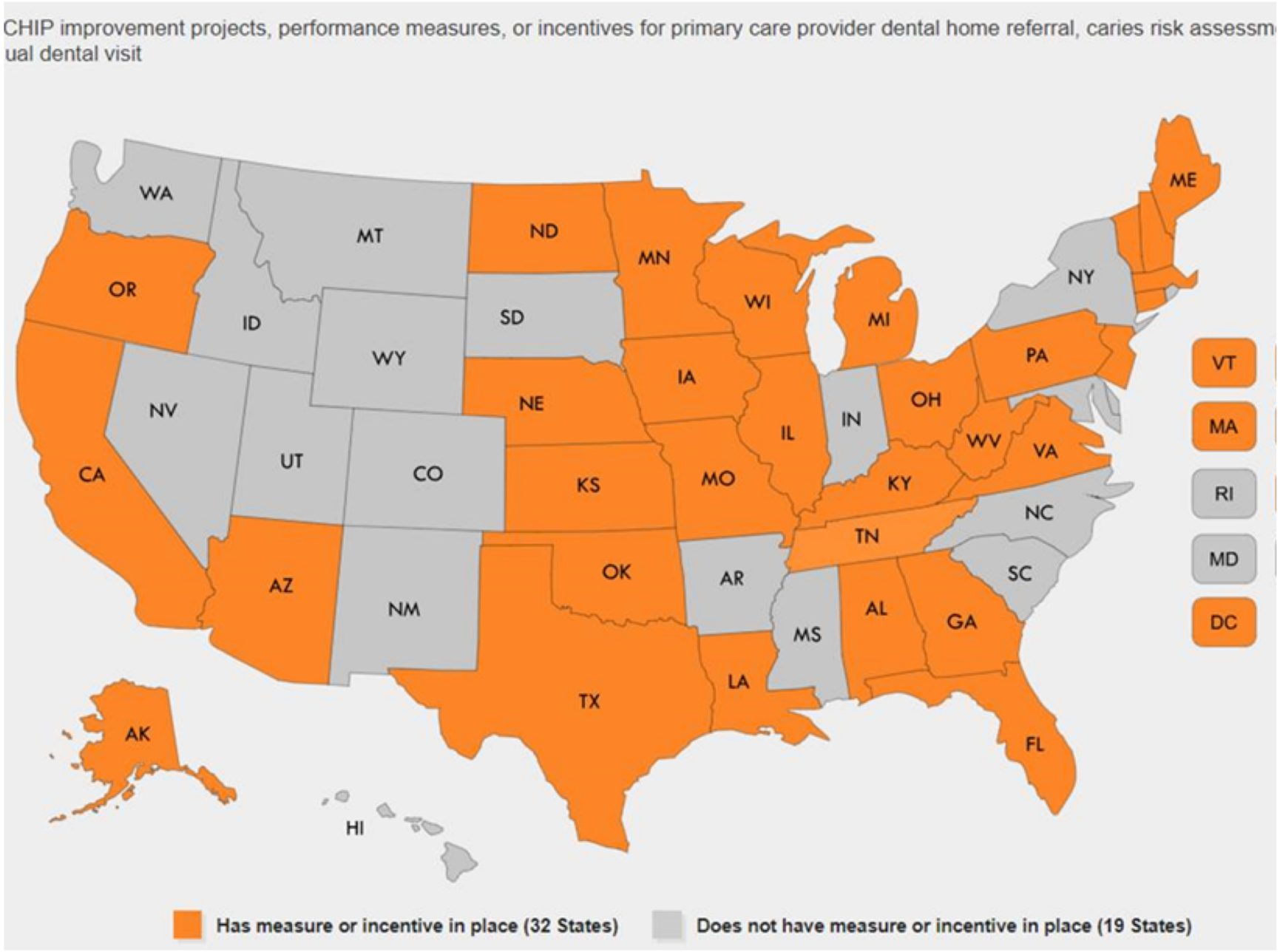
Accessed on KFF on 1/22/2019

| Location | FY2013 CHIP Enrollment | FY2014 CHIP Enrollment | FY2015 CHIP Enrollment | FY2016 CHIP Enrollment | FY2017 CHIP Enrollment |
|---|---|---|---|---|---|
| United States | 8,454,327 | 8,099,448 | 8,439,933 | 9,013,687 | 9,460,160 |

NOTES

**Sources**

Medicaid.gov, FY 2017 Number of Children Ever Enrolled in Medicaid and CHIP.

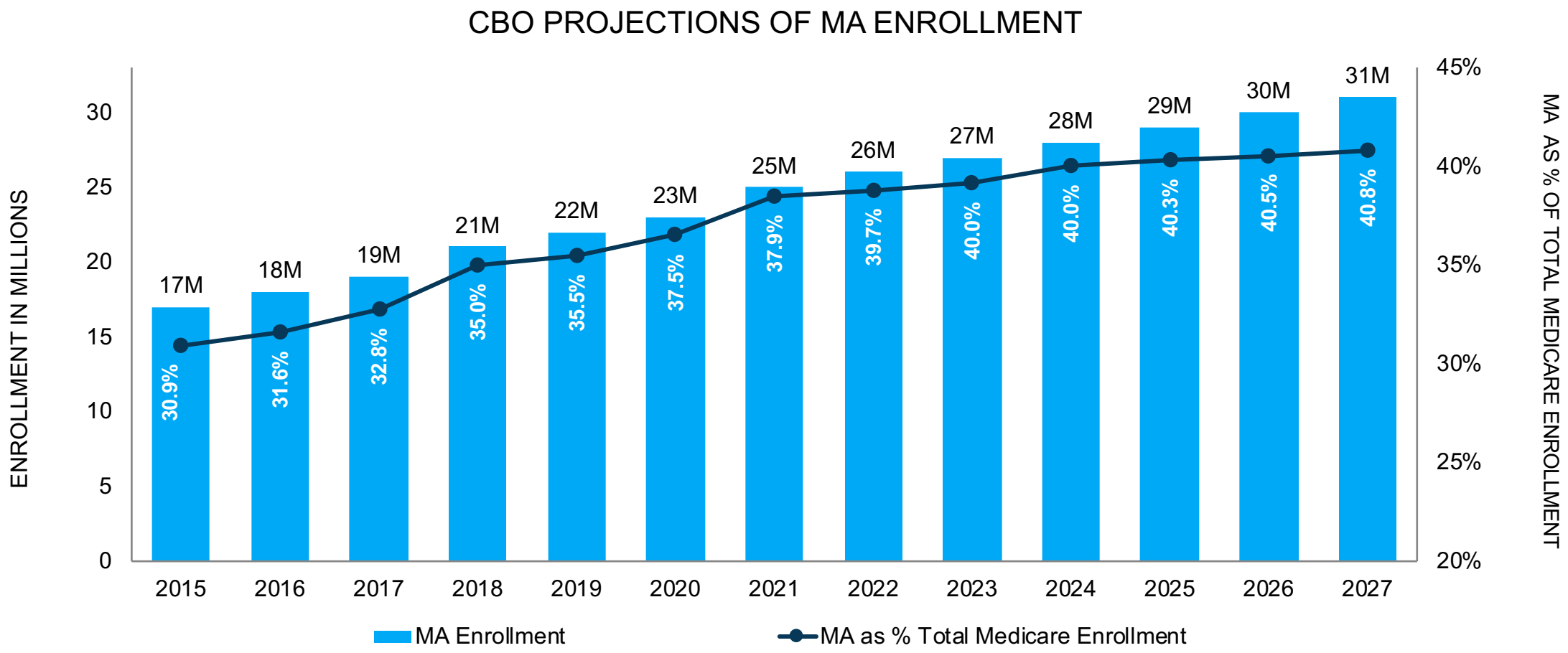



**National Academy of State Health Policy**, January 2019 Publication of State Strategies for Promoting Children's Preventive Services.

Maps and charts illustrate state-specific Medicaid or CHIP performance improvement initiatives that promote children's preventive services, including those recommended by the American Academy of Pediatrics' Bright Futures guidelines.

# Key Dental Growth Segment

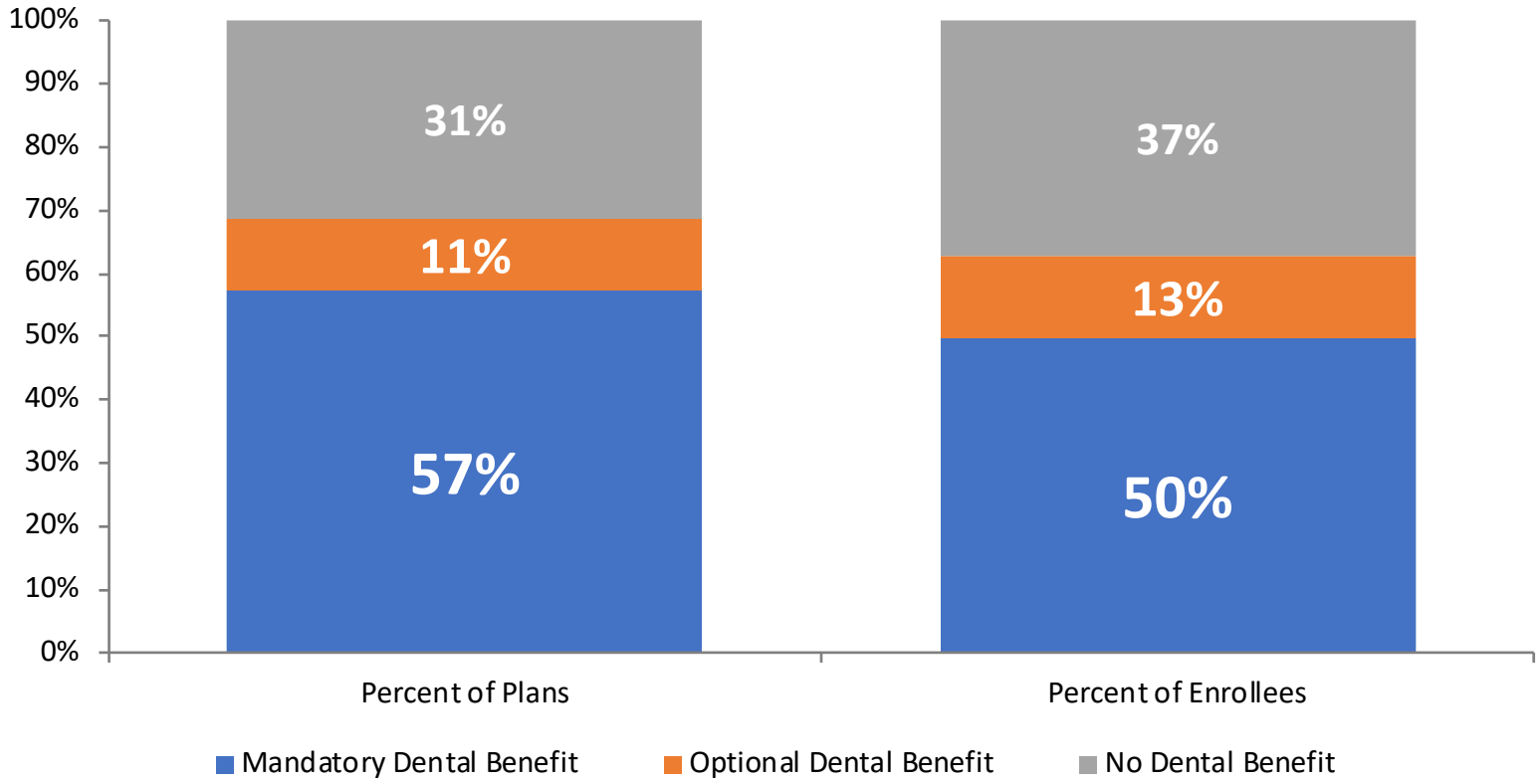
## Medicare Advantage




Source: Medicare Baseline Estimates. Congressional Budget Office. January 2017. Available here.

# Medicare Advantage Dental Offerings

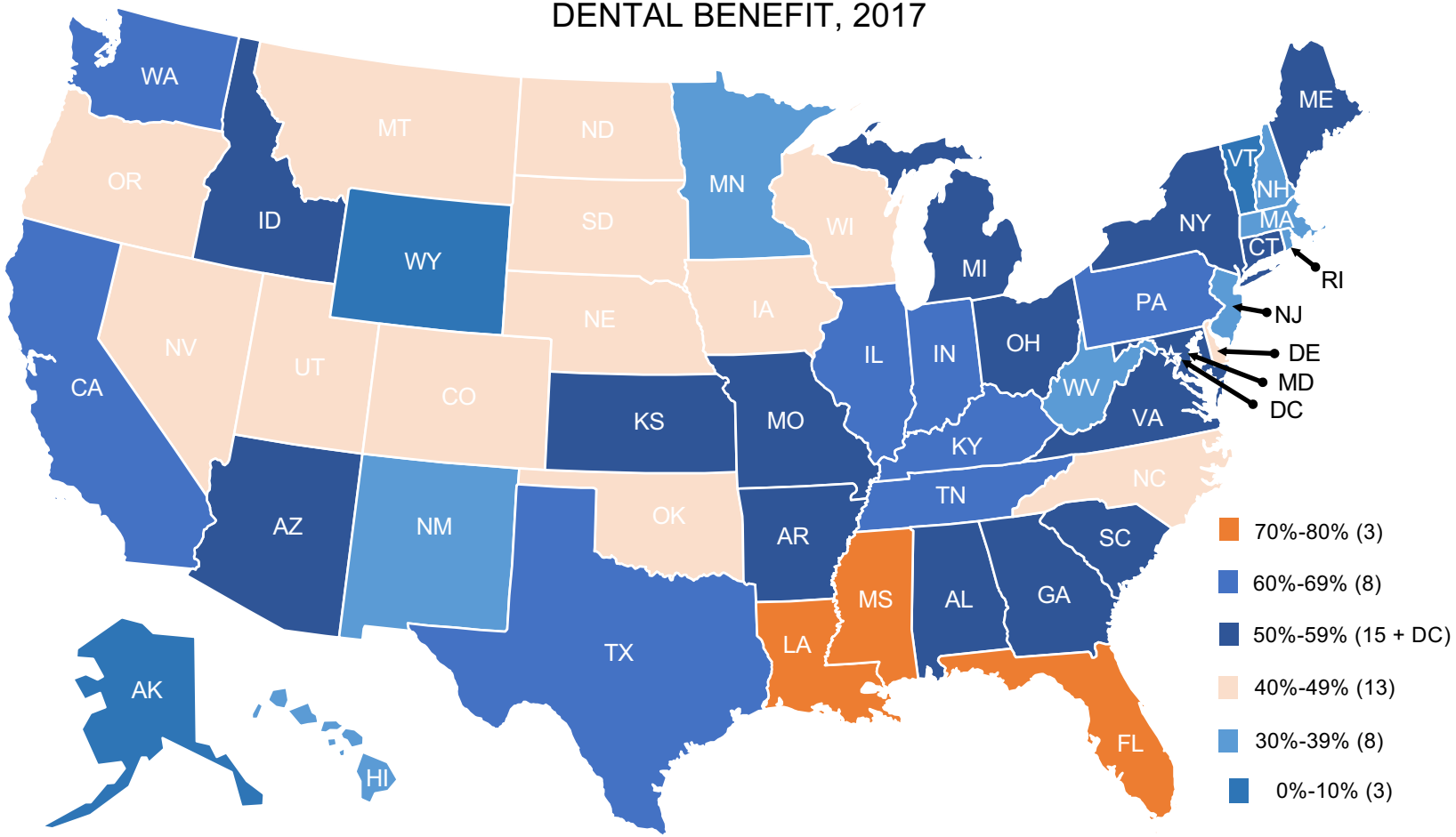
PERCENT OF MA PLANS AND PERCENT OF ENROLLMENT BY DENTAL COVERAGE TYPE AT THE NATIONAL LEVEL, 2017




Source: Avalere Health analysis using enrollment data released by the Centers for Medicare & Medicaid Services. The analysis uses enrollment files released in February of each year, from 2015 through 2017, reflecting enrollment effective in January of each respective year. *Includes HMO, local PPO, regional PPO, and PFFS plans

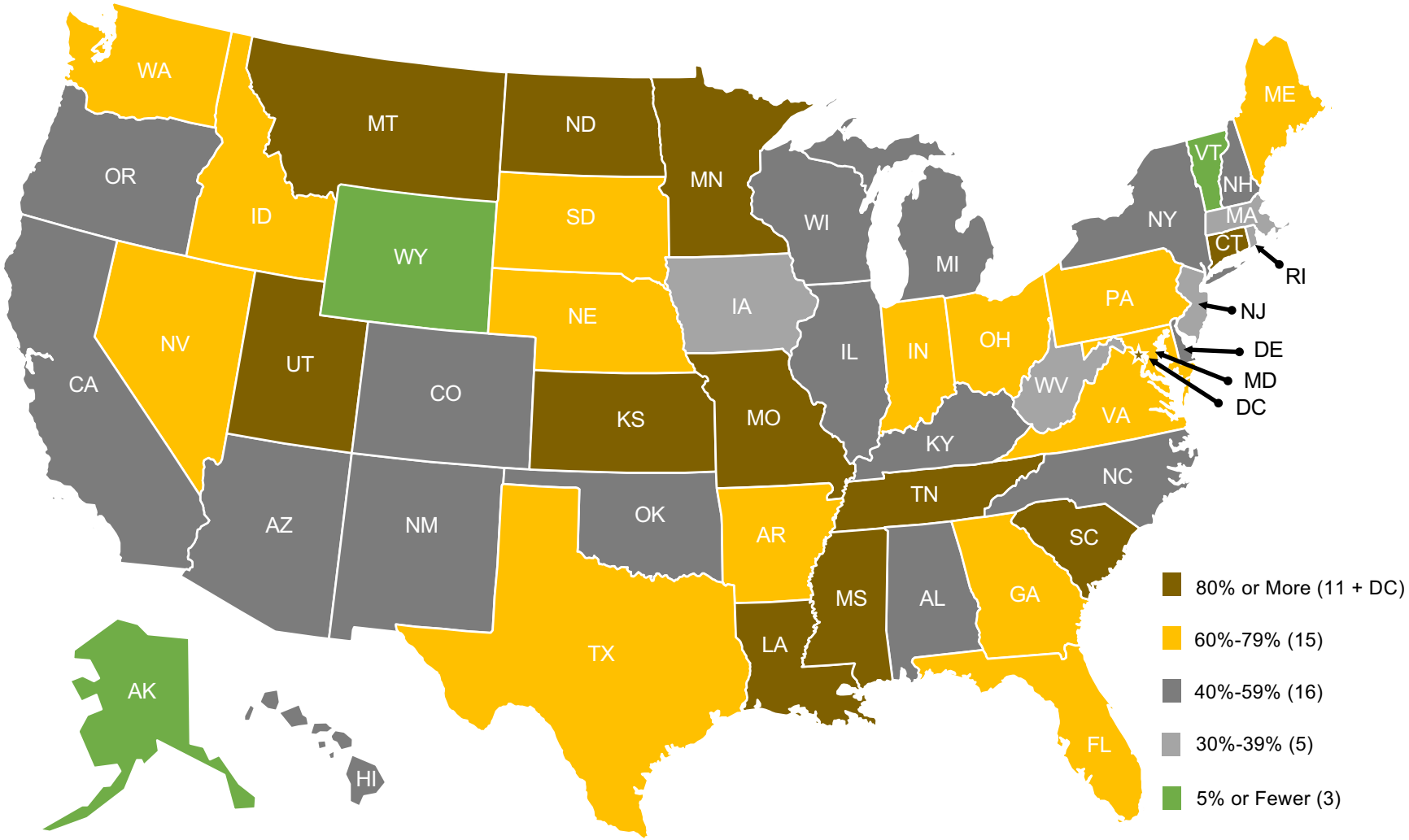
# Distribution of Dental
## Medicare Advantage

PERCENT OF MA PLANS OFFERING MANDATORY OR OPTIONAL DENTAL BENEFIT, 2017



# MA Dental Enrollment

PERCENT OF ENROLLEES IN AN MA PLAN WITH MANDATORY OR OPTIONAL DENTAL COVERAGE, 2017



# Dental Services Vary by MA Plan

**PERCENTAGE OF MA BENEFICIARIES WITH COVERED DENTAL SERVICES, 2015**

| Service Type | Total MA Beneficiaries Covered | Beneficiaries Covered with $0 Premium |
|---|---|---|
| Dental X-Ray | 58.1% | 48.6% |
| Oral Exam | 57.8% | 48.1% |
| Prophylaxis/Cleaning | 54.5% | 45.6% |
| Fluoride Treatment | 15.2% | 20.1% |
| Prosthodontics/Maxillofacial Surgery | 42.8% | 35.7% |
| Non-Routine Services | 19.5% | 21.7% |
| Diagnostic Services | 20.7% | 19.5% |
| Restorative Services | 31.1% | 26.6% |
| Endodontics/Periodontics/Extractions | 29.4% | 24.8% |

**SOURCE:** Pope, Christopher. "Supplemental Benefits Under Medicare Advantage." *Health Affairs*. January 21, 2016. Available here.

# Dental Cost Sharing Varies by MA Plan

**COST SHARING REQUIREMENTS FOR DENTAL SERVICES IN MA PLANS, 2017**

| Service Type | Percent of Plans with 0% Coinsurance | Range of Average Coinsurance* | Percent of Plans with $0 Copay | Range of Average Copay** |
|---|---|---|---|---|
| Preventive Services (i.e., X-Rays, Oral Exams, Cleaning) | 76% | 40%-45% | 70%-75% | Under $30 |
| Diagnostic Services | 3% | 42% | 8% | $16-$26 |
| Prosthodontics/ Maxillofacial Surgery | 0% | 60% | 16% | $21-$876 |
| Restorative Services | 0% | 39%-53% | 23% | $25-$340 |
| Endodontics/Periodontics/ Extractions | 0% | 41%-51% | 18% | $21-$317 |

* Excluding plans with 0% coinsurance ** Excluding plans with $0 copay

**SOURCE:** Avalere Health analysis using enrollment data released by the Centers for Medicare & Medicaid Services. February 2017. Includes HMO, local PPO, regional PPO, and PFFS plans.

# Expansion of Dental in Medicare

## Medicare Part B

**Community Statement on Medicare Coverage for Medically Necessary Oral and Dental Health Therapies**

The undersigned organizations are proud to join in support of Medicare coverage for medically-necessary oral/dental health therapies.

Avalere

**To:** Pacific Dental Services Foundation.
**From:** Avalere Health
**Date:** January 4, 2016
**Re:** Evaluation of Cost Savings Associated with Periodontal Disease Treatment Benefit

**Summary**

Pacific Dental Services Foundation asked Avalere Health to estimate the cost or savings to the Medicare program of a new benefit covering the initial and ongoing treatment of periodontal disease for beneficiaries with diabetes, coronary artery disease (heart disease), or cerebrovascular disease (stroke). A growing body of academic literature and retrospective medical claims studies support a link between oral health, periodontal disease treatment, reduced medical costs, and improved wellbeing, especially for individuals with one of the three chronic conditions included in this evaluation.

We drew from these and other data sources to construct an estimate of Medicare fee-for-service spending for individuals with periodontal disease and chronic conditions. Our estimate assumes that Medicare will begin paying for periodontal treatment in 2016 through a new Medicare Part B benefit, but limit coverage to individuals with one of the three conditions noted above.

We estimate providing a periodontal disease treatment benefit will produce a savings of $63.5 billion over the period 2016 to 2025 and should continue long-term. This savings reflects new costs of approximately $7.2 billion from covering periodontal treatment for Medicare beneficiaries with one of the three target chronic conditions. This new spending will be offset by an estimated $70.7 billion reduction in Medicare spending, largely related to fewer hospitalizations and emergency room visits.

**Table 1: Estimated Impact on Medicare Program Spending from Coverage of Periodontal Treatment ($ billions)**

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2016-2025 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Periodontal Benefit | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0 | 1.1 | **7.2** |
| Medical Savings | (1.1) | (2.8) | (4.1) | (5.4) | (6.4) | (7.5) | (8.7) | (10.0) | (11.5) | (13.2) | **(70.7)** |
| Total Impact | (0.5) | (2.3) | (3.5) | (4.8) | (5.7) | (6.8) | (7.9) | (9.2) | (10.6) | (12.2) | **(63.5)** |

$63.5 billion in savings over 10 years

GUEST EDITORIAL

**A national imperative**

Oral health services in Medicare

Harold C. Slavkin, DDS; for The Santa Fe Group

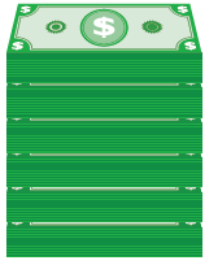
Dental benefits are not included in Medicare despite the reality that more Americans are living well beyond their 65th birthdays. In the United States, 10,000 people turn 65 every day, which drives the increasing cohort of seniors.[1] Today, the number of seniors—47 million—essentially will double by 2050 according to demographers, and there is no doubt that oral health and general well-being are inextricably bound together.[1,2] Many conditions that plague the body are manifested in the mouth, a readily accessible vantage point from which to view the onset, progression, and management of numerous systemic diseases. Periodontal diseases are generated by microorganisms that readily can enter the general circulation and cause bacteremia, resulting in adverse systemic effects that can promote conditions such as atherosclerosis, endothelial permeability, and adverse cardiovascular effects from periodontal diseases are due to a few high-risk oral microorganisms associated with the pathogenesis of atherosclerosis.[2] Study investigators assert that via increased lipoprotein concentrations in the arterial intima.[3] In this guest editorial we assert that oral bacteria influence the pathogenesis of atherosclerosis and a number of other chronic degenerative diseases. We argue that sufficient scientific and health economic evidence support providing oral health benefits to older adults through the Medicare mechanism.

Oral chronic degenerative diseases, such as periodontal diseases, often cause tooth mobility and tooth loss and serve as a portal for microorganisms, their by-products, and host-generated inflammatory mediators to enter the bloodstream, and they are associated with conditions in other parts of the body—pulmonary disease, type 2 diabetes, and cardiovascular diseases.[2] Furthermore, periodontal diseases share genetically determined risk factors with other chronic degenerative diseases with an inflammatory response such as ulcerative colitis, juvenile arthritis, and systemic lupus erythematosus. These conditions are associated closely with increased production of proinflammatory cytokines that serve as indicators of susceptibility to severe chronic degenerative diseases. The same cytokines expressed in inflammation in type 2 diabetes, cardiovascular diseases, and obesity also are expressed within periodontal diseases.[3] It is now evident that there is a confounding relationship among oral infections, host inflammatory response, and host genetic characteristics.

Major scientific discoveries support the thesis that oral health care begins during prenatal care and extends over the human life span.[4] Authors of a number of reports highlight significant benefits of prevention interventions in early childhood and thereafter.[5] Despite these advances, according to


# Challenges and Opportunities in Dental-Medical Integration

# The Dental Value Proposition: Scope of Economic Impact



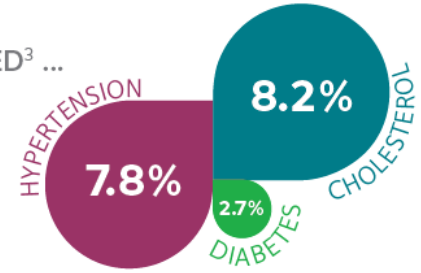
**$153 BILLION**

in lost productivity each year due to chronic disease[1]

**27 MILLION PEOPLE**

visit a dentist and not a physician each year [2]

RATES OF UNDIAGNOSED[3] ...



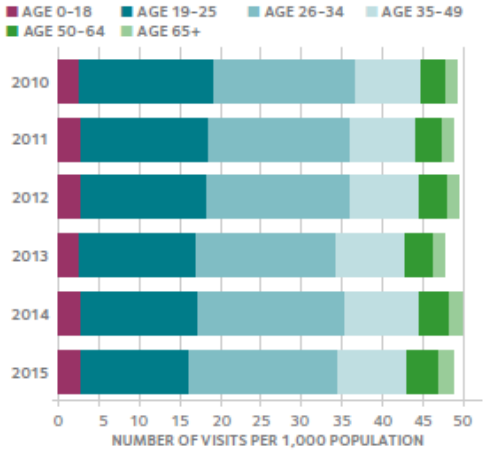

SCREENING FOR CHRONIC DISEASES IN DENTAL OFFICES COULD REDUCE U.S. HEALTH CARE COSTS BY ...

up to **$102.6 MILLION** per year

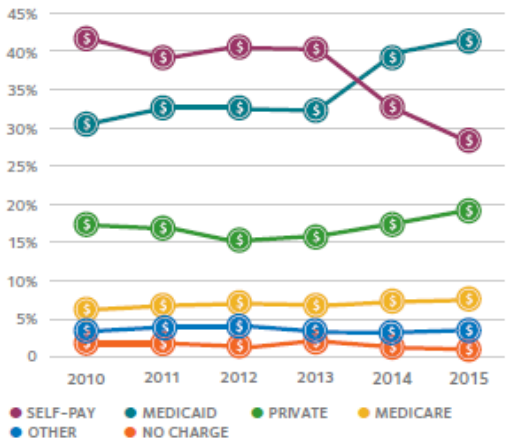
OR

up to **$32.72** per person screened[4]

EMERGENCY DEPARTMENT VISITS FOR DENTAL CONDITIONS BY AGE GROUP




EMERGENCY DEPARTMENT VISITS FOR DENTAL CONDITIONS AMONG ADULTS BY PAYER




**EVERY 15 SECONDS**

How often, on average, someone visits a hospital emergency department for dental conditions in the United States.

**2.2 MILLION**

Number of hospital emergency department visits for dental conditions in the United States in 2015.

**70%**

Percentage of hospital emergency department visits for dental conditions occurring outside of normal business hours.[5]

**$2 BILLION**

Amount spent on hospital emergency department visits for dental conditions in the United States in 2015.

**41%**

ADULTS

of hospital emergency department visits for dental conditions among **adults** in the United States are paid for by Medicaid.

**70%**

CHILDREN

of hospital emergency department visits for dental conditions among **children** in the United States are paid for by Medicaid.

# The Stage for Medical-Dental Integration

**Majority of Health Plans offer dental benefits and intend to aggressively focus on ancillary**

**68%**
**Health Plans currently offer dental benefits**

**Of medical plans that currently offer dental products…**

**50%** Offer standalone dental and administer the plan themselves

Offer standalone dental and leverage a partner for plan administration **34%**

westMONROE

**What are the three biggest factors that drive embedding of dental insurance into health insurance**

**62%**
Better technology/systems that facilitate a holistic view of covered lives

**50%**
Government actions (e.g. changes to Medicaid/Medicare, mandates)

**43%**
Convergence of overall health and oral health

**When it comes to beliefs on who has the advantage in the dental benefit market…**

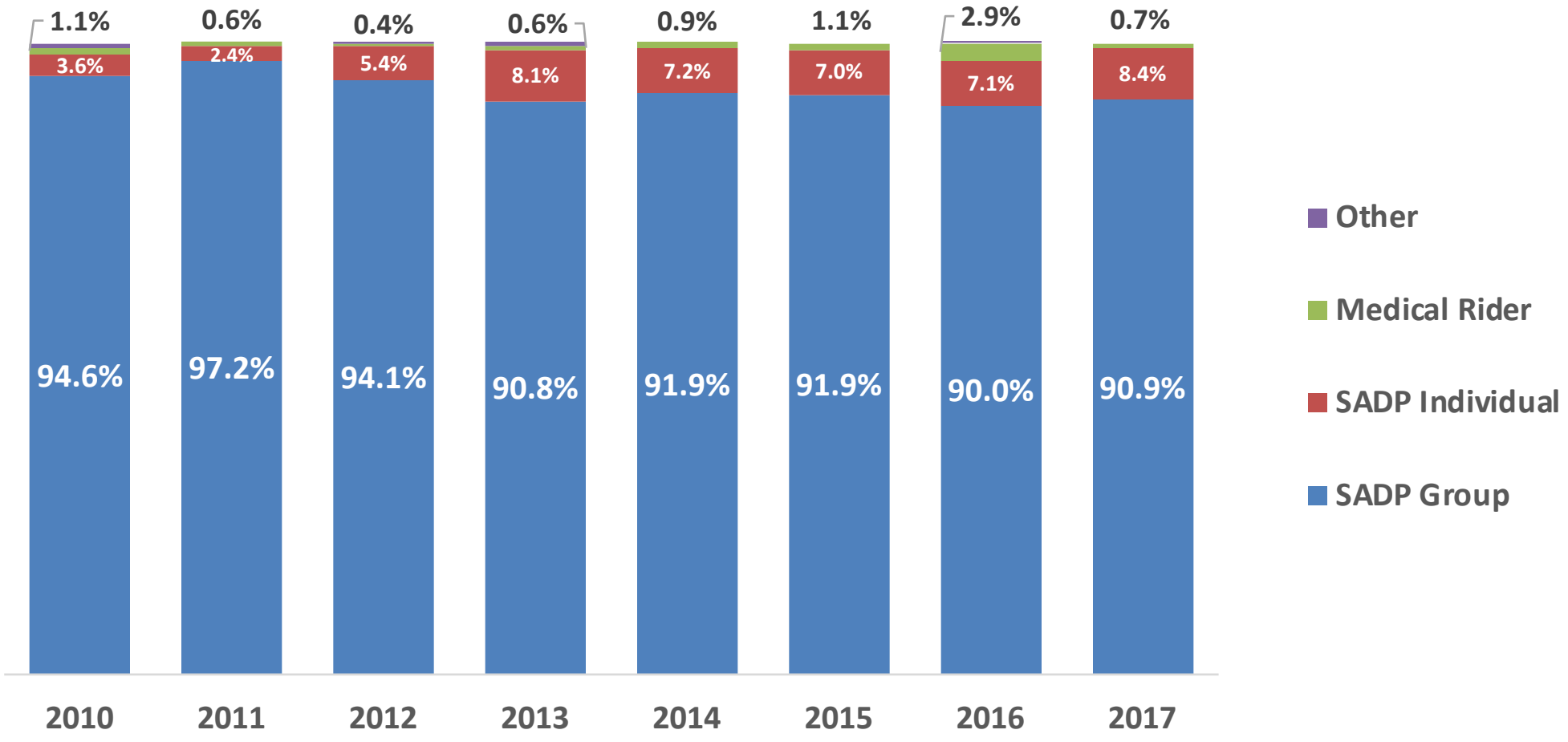
**80%**
(38% cite a SIGNIFICANT advantage)

of medical respondents believe that medical insurers have a clear or significant advantage over insurers whose primary line of business is dental

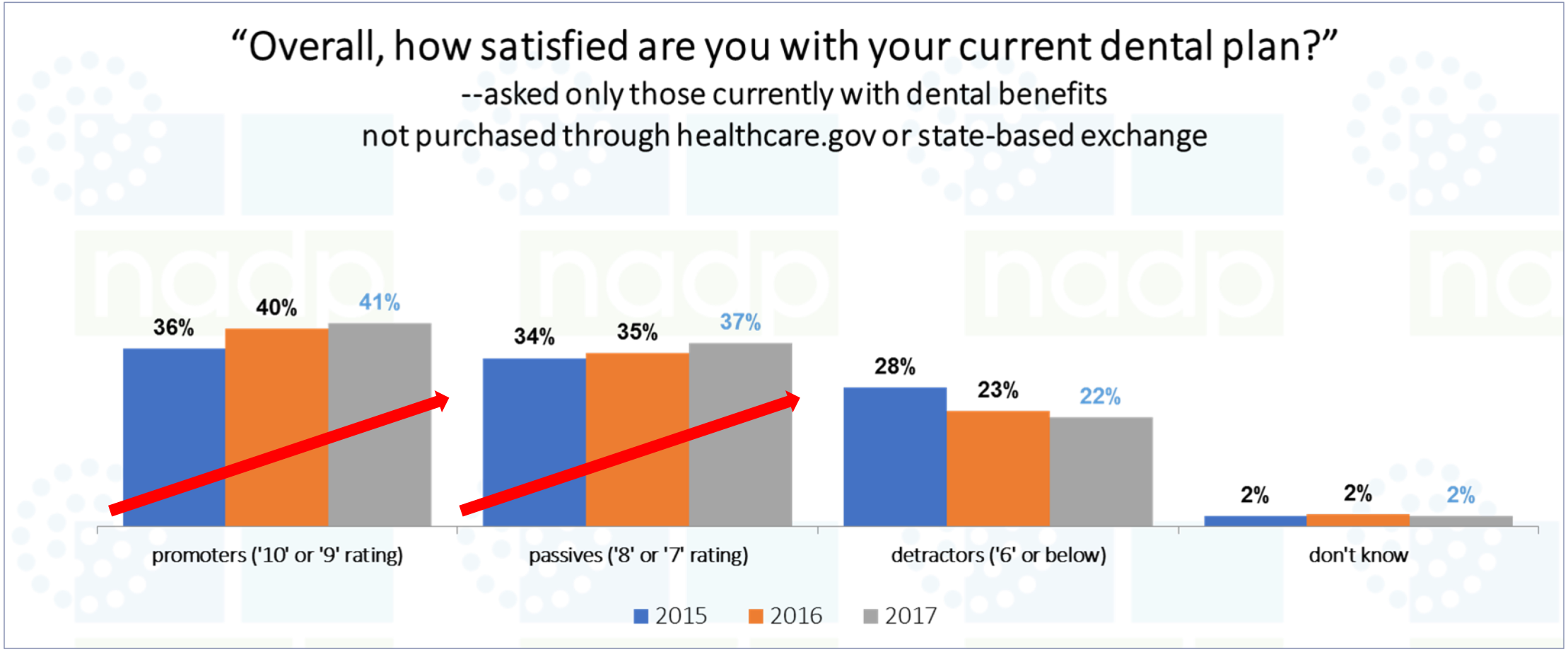
**DENTAL PLANS AGREE**

**82%** of dental respondents also feel that Health Plans have the advantage

# Commercial Dental Benefits Policy Structure

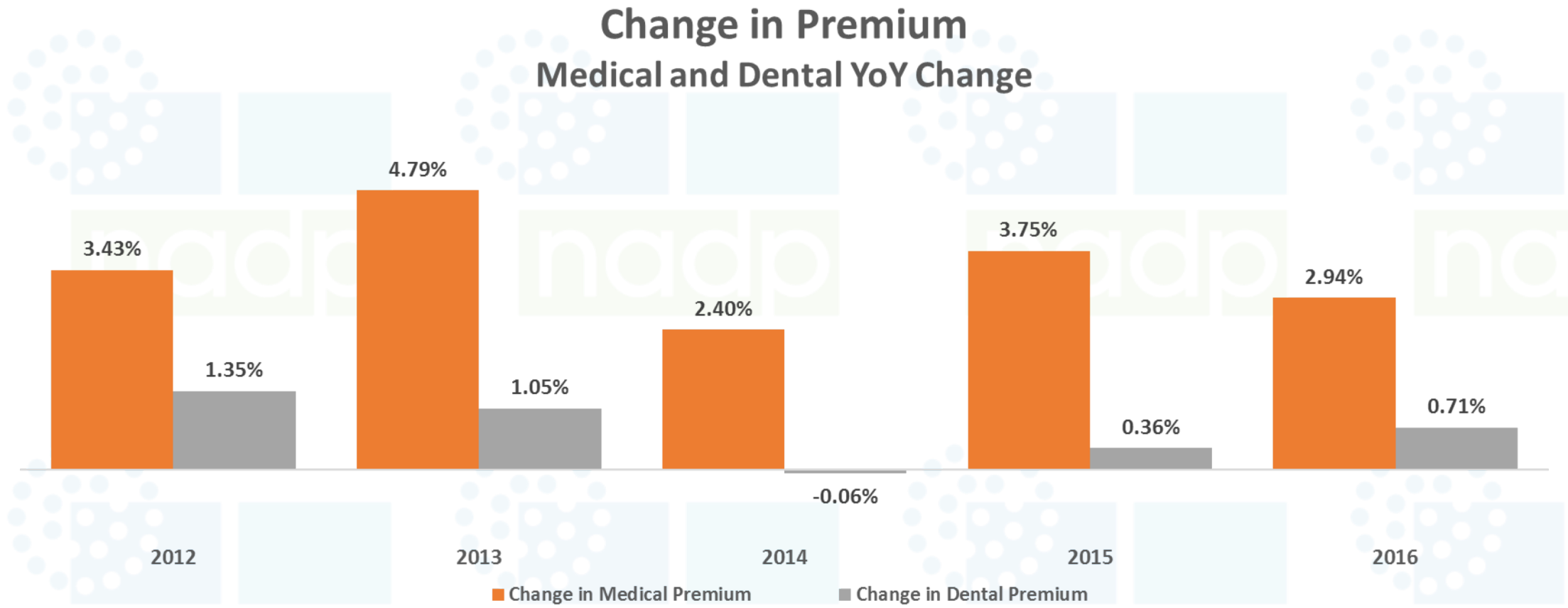


# Consumer Attitudes about Dental Benefits



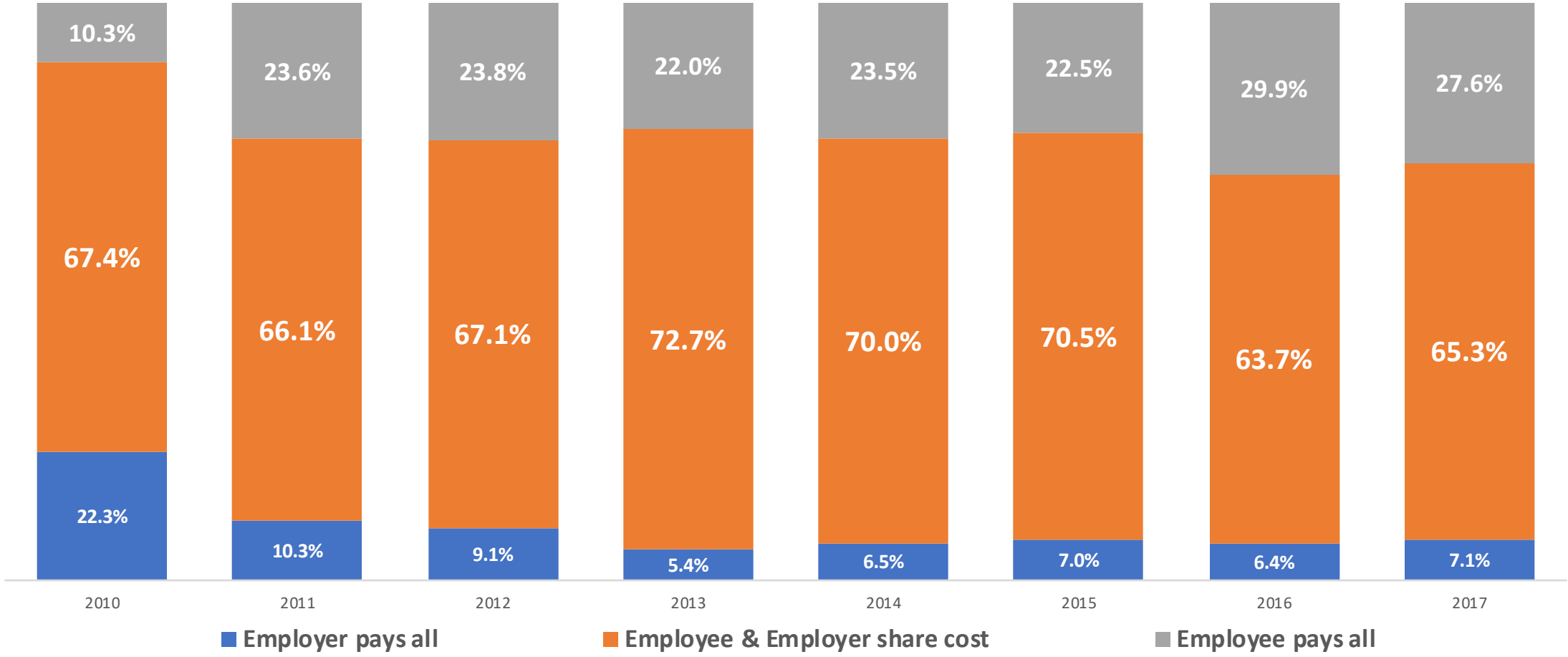

Source: NADP 2017 Survey of Consumers

# National Premium Trends



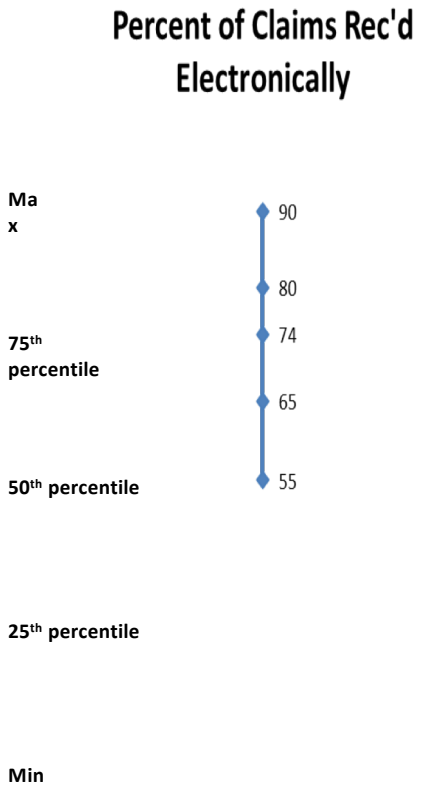

**Source: NADP 2017 Premium, Benefit Utilization and Benefit Design Trends Report**

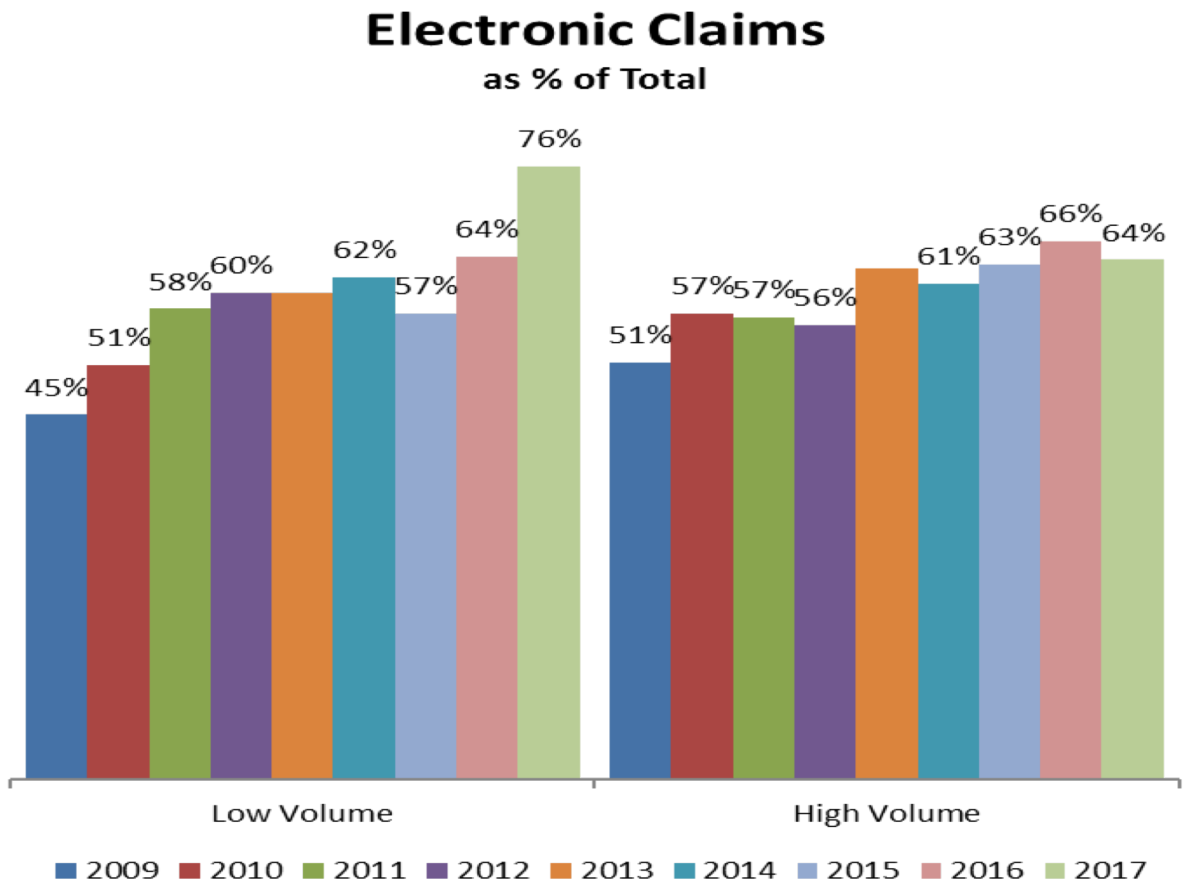
# National Dental Premium Funding Trends




**Source: NADP 2018 Enrollment Report**

# Electronic Claims




**Compared to last year:**

The industry average (weighted, based on volume of claims) for electronic claims received increased from 66% to 70%.

Low volume companies use of electronic claims increased from 64% to 76% of all claims.

NOTE: Data in this chart represents a weighted average based on the total number of claims reported. Not all respondents reported a total number of claims, so this chart represents a subset of the total number of respondents.


Excess administrative costs due to measurement and a range of other activities are estimated at $190 billion per year, and continually expanding measurement activities and requirements could cause this figure to increase (IOM, 2012). All told, the development and validation of measures; the collection, analysis, and maintenance of measurement data; and the reporting of measures have grown increasingly burdensome, with significant financial impact.

IOM Vital Signs 2015

# DQA Administrative Claims Based Program and Plan Level Pediatric Measures

DQA
DENTAL QUALITY ALLIANCE®
*Improving Oral Health Through Measurement*

| | Measure Name |
|---|---|
| **Evaluating Access and Utilization** | Utilization of Services |
| | Preventive Services for Children at Elevated Caries Risk |
| | Treatment Services |
| | Caries Risk Documentation |
| **Evaluating Quality of Care** | Oral Evaluation |
| | Topical Fluoride for Children at Elevated Caries Risk |
| | Sealants for 6–9 Year-Old Children at Elevated Caries Risk |
| | Sealants for 10–14 Year-Old Children at Elevated Caries Risk |
| | Care Continuity |
| | Usual Source of Services |
| | Ambulatory Care Sensitive Emergency Department Visits for Dental Caries in Children |
| | Follow-Up after Emergency Department Visit by Children for Dental Caries |
| **Evaluating Cost and Efficiency** | Per Member Per Month Cost of Clinical Services |

# DQA Administrative Claims Based Program and Plan Level Adult Measures

DQA
DENTAL QUALITY ALLIANCE®
*Improving Oral Health Through Measurement*

| | Measure Name |
|---|---|
| **Evaluating Access and Utilization** | Periodontal Evaluation in Adults with Periodontitis |
| **Evaluating Quality of Care** | Ongoing Care in Adults with Periodontitis |
| | Topical Fluoride for Adults at Elevated Caries Risk |
| | Oral Evaluation- Diabetics* |
| | ED visits by Adults for Non Traumatic Dental Conditions* |
| | Follow up after an ED visit by an Adult for Non Traumatic Dental Conditions* |

*Currently under Testing

# Use of DQA Measures

| CMS CHIPRA Core Set (Public Reporting, QI) |
| --- |
| Covered California – Health Benefit Exchange, Plan Contracts (QI) |
| MSDA: State Medicaid/CHIP Agencies Reporting Use |
| Michigan Healthy Kids Dental, Dental Plan RFP/Contract (QI) |
| Florida Medicaid, Dental Plan RFP/Contract (Public Reporting, QI) |
| Texas Medicaid and CHIP, Plan Contracts (Payment Program, Public Reporting, QI) |
| Massachusetts Delivery System Reform Incentive Payment, (Payment Program, Public Reporting, QI) |
| Oregon Health Authority (Payment Program, Public reporting, QI) |

DQA
DENTAL QUALITY ALLIANCE®
*Improving Oral Health Through Measurement*

## The Original EZCodes

- 1158 terms (1121 unique)
- 80 sub categories
- 13 major categories

## EZCodes 2011

- 1321 terms (1250 unique)
- 84 sub categories
- 14 major categories

## EZCodes 2012

- 1358 terms (1284 unique)
- 90 sub categories
- 15 major categories

## EZCodes 2013

- 1355 terms (1291)
- 89 sub categories
- 15 major categories

## EZCodes 2014

- 1735 terms (1529 unique)
- 106 sub categories
- 17 major categories

# Ongoing Revision

## DDS Dental Diagnostic System 2014

- 1714 terms (1518 unique)
- 106 sub categories
- 17 major categories

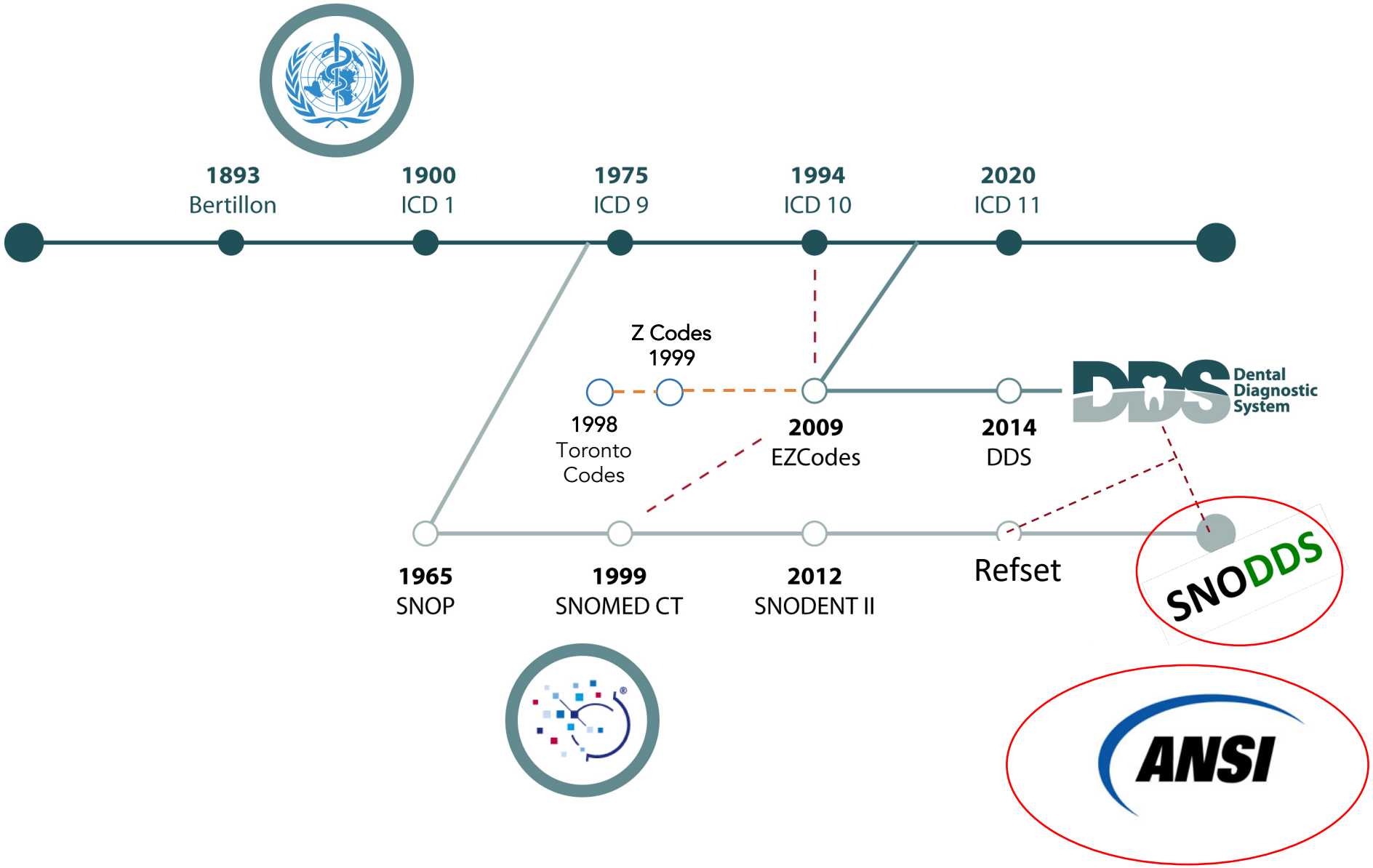
## SNODDS 2015

- 1789 terms (1578 unique)
- 89 sub categories
- 17 major categories

## SNODDS 2016

## SNODDS 2017

1729 terms (1477 unique)


1893
Bertillon
1900
ICD 1
1975
ICD 9
1994
ICD 10
2020
ICD 11
Z Codes
1999
1998
Toronto
Codes
2009
EZCodes
2014
DDS
Dental
Diagnostic
System
1965
SNOP
1999
SNOMED CT
2012
SNODENT II
Refset
SNODDS
ANSI

# SNODDS to ICD to Dental Claim Form (paper or electronic works the same way)

| 27. Tooth Number(s) or Letter(s) | 28. Tooth Surface | 29. Procedure Code | 29a. Diag. Pointer | 29b. Qty. | 30. Description |
|---|---|---|---|---|---|
| | | D0150 | | 01 | COMPREHENSIVE ORAL EVALUATION |
| | | D0274 | | 01 | BITEWING - 4 FILMS |
| 32 | | D0230 | | 01 | INTRAORAL-PERIAPICAL ADDL FIL |
| | | D1110 | B | 01 | PROPHY - ADULT |
| 32 | | D7140 | C | 01 | SIMPLE TOOTH EXTRACTION |
| 30 | O | D2391 | A | 01 | COMPOSITE 1 SURF - POSTERIOR |
| 19 | O | D2391 | A | 01 | COMPOSITE 1 SURF - POSTERIOR |
| 8 | ML | D2331 | A | 01 | COMPOSITE 2 SURF. - ANT. |
| | | D1206 | | 01 | TOPICAL FLUORIDE VARNISH (FGP |
| | | | | | |

each missing tooth.)

10 11 12 13 14 15 16
X X

23 22 21 20 19 18 17

34. Diagnosis Code List Qualifier B ( ICD-9 = B; ICD-10 = AB )

34a. Diagnosis Code(s) (Primary diagnosis in "A")

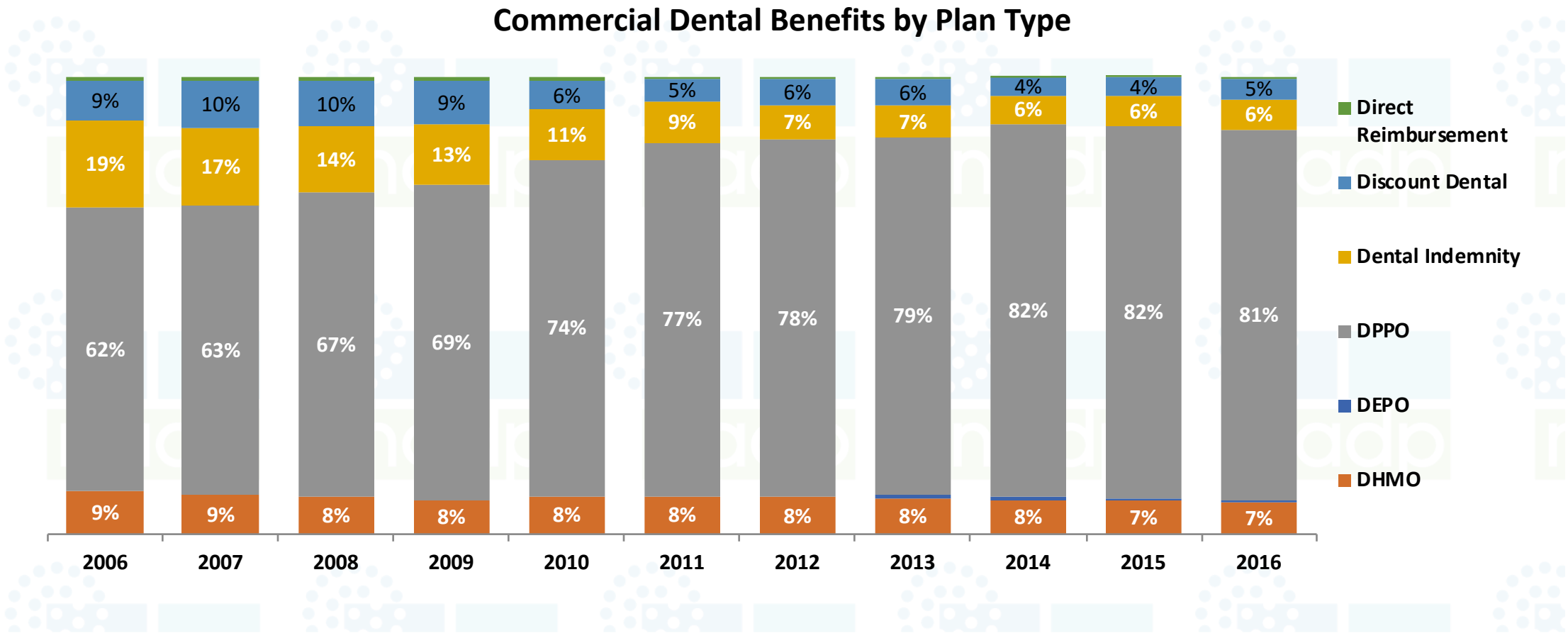
A 521.02 C 523.41

B 523.00 D

31a. Other Fee(s)

32. Total Fee

# National Dental Enrollment

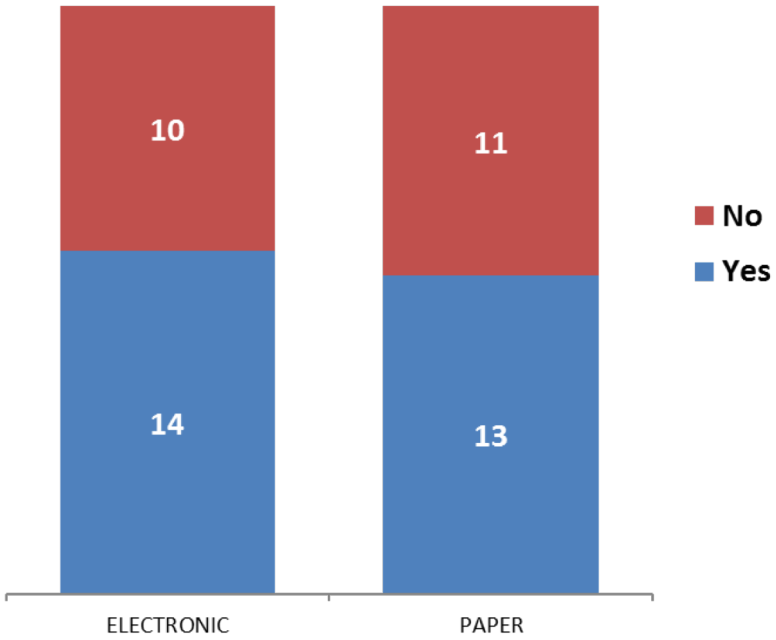




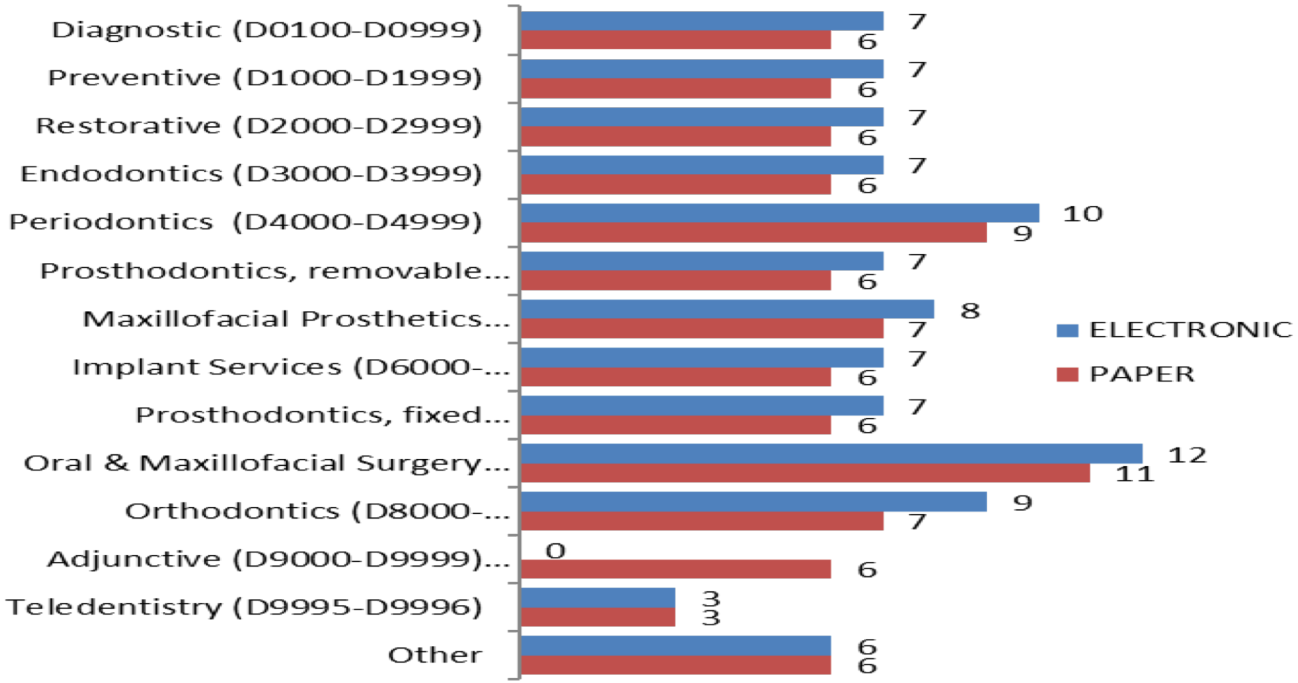

**Source: NADP 2017 Enrollment Report**

# Diagnostic Codes on Claims

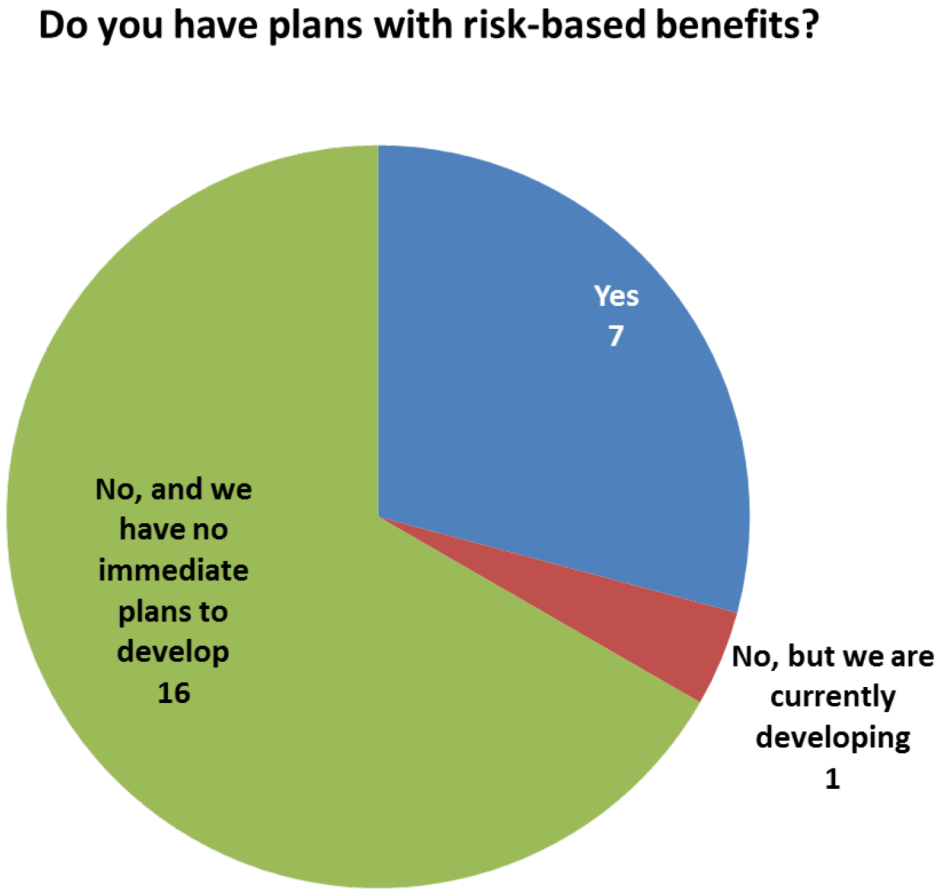
**Are you receiving submissions of diagnostic codes on dental claims?**




**Which of the following categories of claims have included diagnosis codes?**
**(N=14)**



# Diagnostic Codes and Risk Based Benefits




**Are you currently utilizing diagnostic codes you receive for the adjudication of dental claims?**

Of the 7 plans that have plans with risk-based benefits all of them are currently utilizing diagnostic codes for the adjudication of dental claims.

# Medicare Advantage FDR Basics

## First Tier

Any party that enters into a written agreement, acceptable to CMS, with a Medicare Advantage Organization (MAO) or Part D sponsor or applicant to provide administrative or health care services to a Medicare eligible individual under the Medicare Advantage (MA) or Part D program.

## Downstream

Any party that enters into an acceptable written arrangement below the level of the arrangement between an MAO or Part D sponsor and a first tier entity. These written arrangements continue down to the level of the ultimate provider of both health and administrative services.

## Related Entity

Any entity that is related to an MAO or Part D sponsor by common ownership or control and: performs some of the MAO or Part D sponsor's management functions under contract or delegation; furnishes services to Medicare enrollees under an oral or written agreement; or leases real property or sells materials to MAO or Part D plan sponsor at a cost of more than $2,500 during a contract period.

## Common FDR Examples

Pharmacies • Pharmacy Benefit Managers (PBMs) • **Dental** • Behavioral Health • Vision • Network Providers • Provider Credentialing Services • Claims Processing Entities • Fulfillment Vendors • Sales and Marketing Agents

# What FDRs are now required to do

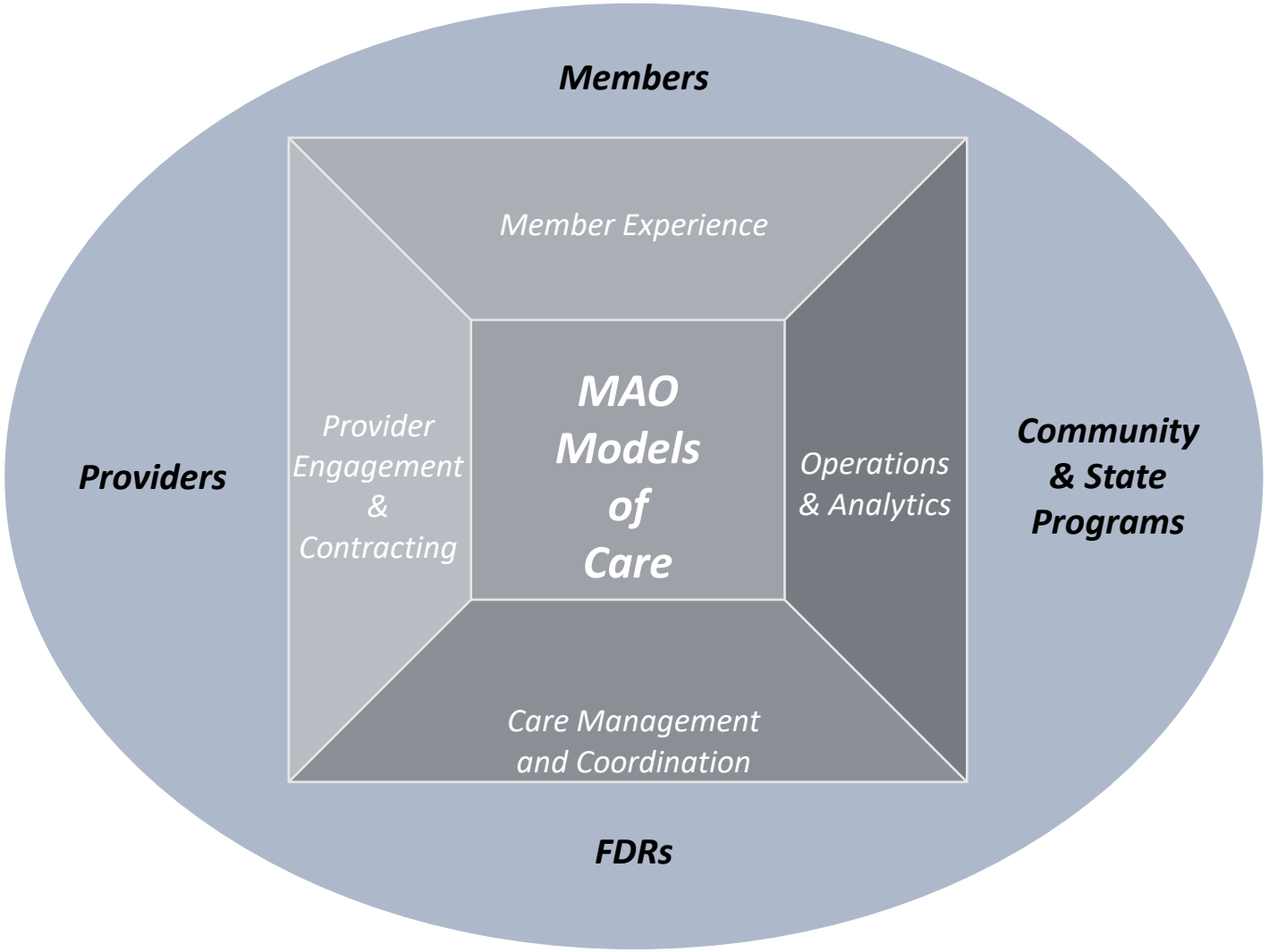
1. Exercise oversight of MAO's compliance efforts
2. Maintain an effective compliance program that meets all of the compliance program requirements
3. Investigate, correct and document all instances of suspected non-compliance
4. Have systems in place to train employees on job functions and general compliance (Standard of Conduct, FWA, privacy)
5. Have a formal delegation oversight function (e.g., vendor management program), if functions are delegated to the FDR

# What Dental FDRs are not required to do

Value-based Payments are voluntary / focused on medical

- End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
- Hospital Value-Based Purchasing (HVBP) Program
- Hospital Readmission Reduction (HRR) Program
- Value Modifier (VM) Program (also called the Physician Value-Based Modifier or PVBM)
- Hospital Acquired Conditions (HAC) Reduction Program
- Skilled Nursing Facility Value-Based Program (SNFVBP)
- Home Health Value Based Program (HHVBP)

# Future MA Models of Care




*As care delivery evolves through more effective Models of Care, MAOs will continue to work with and expect delivery partners to participate in building stronger and more effective programs for their members, included payment models.*

*FDRs, like dental plans should move ahead in exploring how these systems can work in their care systems.*

# CONTACT INFORMATION:

Evelyn F. Ireland, CAE
NADP Executive Director
eireland@nadp.org
972-458-6998 x101
www.nadp.org