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## AMERICAN ASSOCIATION OF DENTAL CONSULTANTS

Updated May 2022

Terms expire annually in May

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President’s Message

Jonathan W. Rich, DMD, AHFI, CDC

President

American Association of Dental Consultants

It is a WONDERFUL time to be part of the AADC! For those who attended our annual meeting, you will find this President’s Message sounds familiar. For those unable to attend, please know you were missed. It is my hope you will be able to join us next year, May 15-18, 2024, at the Hyatt Coconut Point Resort and Spa in Bonita Springs, Florida!

I consider it an honor to serve as your President this year and know that I will do so with humility and dedication. May we join together to strengthen our mission and message to both our members and the establishments for which we work.

I would be amiss not to thank Dr. Rosenthal for his excellent leadership over the last year and look forward to his continual guidance as Immediate Past President. I would also like to share my gratitude to our officers, members of our board, our Executive Director, and members of this outstanding association. Without all of whom none of this would be possible.
As we progress through the year, two thoughts cross my mind for the vision for our association. First, “If it ain’t broke don’t fix it”, which is the Kentucky version of Bert Lance’s statement “if it isn’t broken don’t fix it”. Our past leadership and direction have proven successful. I see no reason for disruption of that which is functioning well. While we may not be perfect, we have a solid mission set before us with proven success.

Second, and piggybacking on my first statement, “Change is easy, improvement is far more difficult”. From farm tractors to a horizontal rear engine sports car that defied the sports car and racing industry, Ferdinand Porsche lived this philosophy. From the first Porsche 911 ever made in 1963, to the present model, the car has evolved yet maintains its original form.

To be relevant, we of course must change. The key is what changes we make and our ability to be logical in execution and delivery of those improvements. I am proud of where we are as an association and have faith in the direction our association is heading. I will work tirelessly toward those improvements that can be gleaned during my presidency.

So, who am I? What makes me qualified to be your president? Personally, I am a husband and a father of three. I grew up and still occasionally practice dentistry in a small town in Kentucky between Lexington Kentucky and Cincinnati Ohio where my family has been treating members of that community for nearly 100 years. Professionally, aside from practice, I have served in multiple capacities for health boards, universities, as well as local, state, and national dental associations. I have been a member of the AADC since 2013, Certified Dental Consultant since 2014 and working in the industry since 2011. Presently, I am honored to serve as a dental director for one of the leading Medicaid and Medicare administrators.

With each opportunity I have been afforded I am always humbled with the opportunity to lead an effort toward improving what has been set before me. I believe in leading with passion and integrity but also listening intently to the ideas and direction expressed by those whom I serve. In most of all things, I enjoy laughter and making the best of what has been given. I am looking forward to having a fun and vibrant year of improving our association. Please know I will strive to always be available to help in any way needed. Thank you for the honor and your confidence in me to lead.
The Effects of Medication on Oral Health

Niki Carter DMD, MPH
Dental Director
Delta Dental of Arkansas

Medications have a huge impact on oral health. The Centers of Disease Control and Prevention (CDC) reports in the years 2015-2018, the percent of US citizens taking at least one prescription drug in the past 30 days is 48.6%. People taking three or more prescription drugs in the past 30 days is 24.0%, and those taking five or more prescription drugs in the past 30 days is 12.8%. Any drug can have side effects, and those side effects frequently occur in the oral cavity.

While some patients don’t exhibit any symptoms from oral side effects, others suffer a great deal. There are multiple classes of drugs which cause adverse effects in the oral cavity. The most common medications adversely affecting the oral cavity will be discussed.

There are over 1800 drugs from 80 drug classes which can cause xerostomia, better known as dry mouth. Not only can xerostomia be uncomfortable, but the mucosa can also become ulcerated and infected, causing significant pain. The lack of saliva can indirectly cause digestive problems, as saliva is the natural moistener for food when chewing and swallowing. Saliva also starts the process of digestion. When there is decreased or a lack of saliva, this can present a myriad of health issues, such as indigestion or choking.

Xerostomia is a major concern for patients, as saliva is a natural protectant for the intraoral hard and soft tissues. Patients who suddenly experience
xerostomia can experience an increase in caries on the coronal portion and root surfaces of their dentition. Colonies of bacterial plaque form and attach to these areas of the teeth more easily, due to lack of saliva, which can accelerate the cariogenic process. The gingival and mucosal tissues become uncomfortable affecting oral hygiene since it can be painful to properly brush and floss.

Psychotropic medications can have quite a few intraoral side effects both directly and indirectly. These mood-altering drugs affect the oral cavity negatively since they may cause lethargy, fatigue, memory and motor impairment, as well as xerostomia. This can alter a patient’s regular practice of oral hygiene, due to their inability to carry out the daily regimen of hygiene techniques. In prescribing medications, the healthcare provider must be cognizant of side effects affecting the oral cavity. It is imperative to make their patient aware as well and should supplement the patient’s oral hygiene home care with a fluoride rinse, artificial saliva tablets, and/or individual instructions for varied brushing and flossing techniques. It may even become necessary to create a written oral hygiene schedule for patients taking these types of drugs to serve as a reminder that oral hygiene is critical to reducing the damage to oral tissue due to drug side effects.

There are medications that alter the pH in the oral cavity. Antacid tablets, antifungal medications, liquid cough suppressants, chewable vitamins, and dissolving tablets all have the ability to change the pH intraorally. Numerous liquid medications for children are high in sugar content, and parents need to be especially mindful of this fact. Adults should be aware that many vitamins designed to dissolve in the mouth can create an acidic pH, thus producing an environment favorable to bacteria, and resulting in deterioration of the dentition.

The bisphosphonate class of drugs is a particular group which has a huge impact in oral health. This specific medication class is commonly prescribed to treat osteoporosis, Paget’s disease, and several types of cancers including multiple myeloma, metastatic breast and prostate cancers. These drugs are prescribed to aid in preventing bone fractures and also to prevent the spread of cancers in bones. These therapeutics are available in oral, injection or infusion form. It is essential for patients to inform their dental professionals that they are taking these medications. It is also vital for physicians to inform these patients of the oral side effects.

Bisphosphonate drugs are excellent for assisting in the prevention of fractures, however, if dental surgery is needed after this prescription has been taken, it can have significant implications. The drug’s action on osteoclast cells impairs bone healing and remodeling and increases risk of development of osteonecrosis of the jaw. Osteonecrosis is bone death, which results from a loss of blood supply to the bone. Basically, the osteoclasts inhibition results in these cells being unable to be resorbed during the normal healing phase, and the jawbone dies due to the lack of blood supply. The mechanism that initiates osteonecrosis is unclear, despite ongoing research. This side effect was discovered several years ago, and before this fact was known, many patients lost a good portion
of their jaw, depending on the surgery performed on the jawbone and also on the amount of this medication in their system. The good news today is that this fact is known by both medical and dental healthcare providers who prescribe and/or treat patients taking bisphosphonates.

For those patients taking bisphosphonates, it is recommended a drug “holiday” be taken to rid the drug in the patient’s system if dental surgery is to be performed. It is ultimately best to have dental treatment first, before taking bisphosphonate. Injections and infusions have the largest impact, but a patient who has taken oral bisphosphonates for multiple years can have a CTX test completed. This test measures the bisphosphate amount in the patient’s system and gives a baseline number. It evaluates the rate of bone turnover and provides healthcare providers information in determining if patients are at risk of developing osteonecrosis if they have taken this drug.8

Cardiovascular medications, non-steroidal anti-inflammatory drugs, respiratory inhalants, chemotherapy, and smoking cessation drugs can cause dysgeusia (altered taste) or ageusia (loss of taste) in the oral cavity. Usually, sweet sensations are lost initially, followed by dysgeusia, then ageusia. For patients undergoing radiation therapies, dysgeusia is reported as a side effect in 70% of patients receiving this mode of therapy.8

Gingival overgrowth, or tissue hypertrophy, can be caused by anticonvulsants, immunosuppressants, and calcium channel blockers.10 The gingival tissues become swollen as it grows over the teeth, which can increase the risk of developing periodontal disease. Often this excess tissue must be surgically removed if it is unable to be maintained adequately with proper oral hygiene. This occurs especially in the special-needs population, epileptic patients, and those who do not exhibit meticulous oral hygiene.11

Mucositis can be caused by chemotherapy medications and radiation therapy.12 This painful swelling can lead to intraoral ulceration and bleeding. This condition makes it difficult to eat and swallow. Many times, it can be so severe and debilitating that a feeding tube is required for the first couple of weeks after receiving anticancer therapy, until the inflammation has subsided. Use of alcohol and tobacco products, poor oral hygiene, diabetes, HIV or kidney disease can worsen the condition.

Anticoagulants, or blood thinners, are commonly prescribed for many stroke, arrhythmia, and cardiovascular disease patients. The key is knowing and comprehending the dosage and using a multidisciplinary approach in treating the patient to avoid a thromboembolic event.13 These drugs not only make oral tissues bleed when given to a patient with poor oral health, but these drugs can also cause mouth irritation due to inflammation which results in patient discomfort. Many stroke patients are advised not to stop anticoagulants before dental treatment or surgery as it is a risk for stroke. It is extremely important to know and interpret platelet levels in the patient on anticoagulant therapy before proceeding with dental surgery.

Stopping anticoagulant therapy is an option, although this presents a risk for the stroke patient. If stopping this
therapy is the best option, it is important to complete as much treatment as possible in a single visit, versus delivering treatment in multiple visits and ceasing the anticoagulant multiple times. Other treatment modalities can be utilized such as tranexamic acid, which is used topically in liquid form when performing tooth extractions.\textsuperscript{14} Tranexamic acid is an antifibrinolytic agent used to control bleeding at the extraction site. This tranexamic medicament decreases the risk of stroke since they do not discontinue their anticoagulant medication.

Interdisciplinary treatment of the patient by both the dental and medical provider is essential. Through future policy changes promoting education of the whole-body approach in both academics and clinical practice, the public will benefit in optimal health outcomes.\textsuperscript{15} Communication in interdisciplinary practice has proven to promote positive health outcomes which serves the patient’s best interest.

Numerous peer-reviewed articles and studies conclude it is not possible to have good overall health without good oral health.\textsuperscript{16} When medications become necessary to sustain, lengthen, and save lives, it is essential to understand the effects medications have on oral health. Recognizing and understanding the effects of medications on oral health before any ill-effects have occurred is key to maintaining a healthy oral cavity, thus achieving positive outcomes for overall health.
References:

Certified Dental Consultant (CDC) Committee Update:

Linda Vidone, DMD Chairperson  
Certified Dental Consultant (CDC) Committee

On behalf of the CDC Committee, I am happy to report that Dr. Hudson Graham, Dental Director for Guardian Life Insurance successfully passed the Certification Exam in May. Congratulations Dr. Graham!

At the 2023 Annual Workshop for the first time all Certified Dental Consultants and AADC Past Presidents enjoyed a champagne breakfast together. This event was such a huge success we will make this an annual breakfast at the AADC workshop.

For those of you who are Certified Dental Consultants remember that in order to maintain your certification you must attend (3) three of the previous (5) five American Association of Dental Consultants (AADC) workshops. (Note: In May 2016 the AADC Board of Directors defined “Attendance of AADC Workshop” as requiring presence for at least two days of a Workshop.) As a reminder 2020 is a
“harmless year” for all Certified Dental Consultants (CDCs) since there was no spring workshop—-in other words it will not be included in the rolling 3 out of the last 5 years to maintain certification. For the years 2021, 2022 and 2023 they will count as usual in the rolling 3 out of the last 5 years to maintain your certification.

For those that are not certified, I encourage you to take the exam once you meet the requirements. Please review the following requirements:

1. You must have a dental license in good standing to practice dentistry in the United States, a dependency of the United States, the Commonwealth of Puerto Rico, Canada, or any other recognized foreign entity. In other words, you must be a dentist!!

2. You must have at least five years’ experience in the clinical practice of dentistry as a dentist.

3. You must have been retained, employed, or working in the dental benefits industry for a minimum of three years.

4. You must have attended two of the three AADC Spring Workshops prior to sitting for the examination.

5. You must submit an article accepted for publication in The Beacon. This article must be a minimum of 3-5 pages on a topic pre-approved by the Beacon Editor (Dr. Clayton Pesillo: copdha@sunlink.net). A one or two paragraph “summary” (stating objective) may be submitted prior to drafting an article to ensure that the topic would be acceptable. Please note if you have NOT submitted an article or it has NOT been approved for publication please do NOT fill out an application- your application will automatically be declined.

6. You must properly complete the CDC application form which is located on the AADC website: www.aadc.org and submit the required fees with the CDC application form to the Executive Director Ellen Kessler at ellen@aadc.org.
In late 2021/early 2022, a select committee of the AADC drafted “Policy on Diversity, Equity, Inclusion and Belonging” for our organization. The committee chaired by Dr. Terrence Poole included Drs. Andy Elliott, Mitch Couret, Madeline Thomas, Thaddous Archie, Robert Rosenthal, Jonathan Rich, and Ms. Mary Essling.

The committee researched several existing policies addressing diversity, equity, inclusion, and belonging (DEIB). Using the concepts of many of those policies and mixing in their own ideas, the committee drafted a DEIB policy suitable for our association given our unique position in both dentistry and the dental benefit industry. The policy, approved by the Board on February 8, 2022, reads as follows:

**Policy on Diversity, Equity, Inclusion and Belonging**

The American Association of Dental Consultants (AADC) is committed to a culture of diversity, equity, inclusion, and belonging to foster a safe and equitable environment for its membership.

In this environment representation matters and members are provided opportunities to make meaningful contributions. Diverse viewpoints and needs are heard, valued, and respected.

The AADC embraces diversity, equity, inclusion, and belonging to ensure a relevant and sustainable organization and deliver purposeful value to members, prospective members and stakeholders.

The AADC’s commitment to diversity, equity, inclusion and belonging will strengthen our mission to serve the best interests of patients, consumers, purchasers of healthcare benefits and the dental profession and to follow our vision of support for our members.
We were honored to have Dr. Joy D. Void-Holmes as our Donald S Mayes Keynote Address speaker at our 2023 Annual Workshop in Phoenix, Arizona. Dr. Joy’s presentation entitled “Straight Talk about DEIB (Diversity, Equity, Inclusion and Belonging) was well received by our members. Attendee evaluations heaped high praise and most favorable comments regarding her presentation.

Following our workshop, Dr. Terrence Poole, our DEIB committee chair, asked our Executive Director, Ellen Kessler, to forward our newly approve diversity statement to Dr. Joy and asked if she would review and critique our statement and offer suggestions for any recommended changes.

Dr. Joy and her colleagues felt that our policy was well crafted and meaningful. She did suggest that as our understanding of DEIB continues to grow, that the AADC revisit and update the policy annually. This will ensure that it remains relevant and accurately reflects the organization’s evolving perspectives.

She was delighted that we enjoyed her presentation and was looking forward to potentially presenting again in the future and continuing our collaboration.

We can all take pride in our organization’s commitment to Diversity, Equity, Inclusion and Belonging.

Editor
Pay-for-Performance Initiatives Toward Quality Improvement in Preventive Care Utilization

Authors:
Jeffrey Chaffin, DDS, MPH, MBA, MHA
Linda Vidone, DMD
Julie C. Reynolds, DDS, MS

Abstract
Despite evidence of effectiveness and recommendations for preventive dental services receipt of these services remains low. The aim of this article is to describe dental commercial payer-based initiatives intended to increase preventive dental care utilization via quality measurement and pay for performance initiatives. Both programs utilized standardized metrics related to preventive service utilization for high-risk patients and provided dentists with their own metric results via dashboard or report at regular intervals. The programs used financial incentives to engage providers and reward improvement and achieved varying levels of provider engagement. Lessons are shared for future system-level quality improvement initiatives.

Key words
value-based care, quality measurement, quality improvement, program evaluation, dental insurance

Knowledge Transfer Statement
This paper presents information about commercial payer-based pay for performance demonstration projects. Dental practitioners have little information available on value-based care. Our objective is to provide information about two real-world examples of projects whose purpose is to improve preventive dental services utilization via pay for performance initiatives, a first step toward value-based care.
**Introduction**

Preventive dental care is a key driver in the ability to achieve and maintain optimal oral health. Despite evidence supporting prevention’s effectiveness and recommendations for preventive dental services such as sealants and fluoride varnish, the provision of these services to children remain low (Weyant, et al, 2013). For example, in 2011-2016, only 42% of children aged 6-11 and 48% of adolescents aged 12-19 had received at least one dental sealant (Centers for Disease Control, 2019). Appropriate use of services, including preventive services, consistent with recommended standards of care is a key component of healthcare quality.

One key category of stakeholders with considerable interest, leverage, and potential system-level impact on quality care and the provision of preventive services are dental payer organizations, also known as dental insurers or dental benefit plans. For payer organizations and other system-level entities, quality measures can be used to indicate how well the system is meeting the needs of its members, as well as inform quality improvement initiatives. Preventive care is a key area where payers have an opportunity to use quality measurement to identify gaps and create systems that aim to improve members’ utilization of evidence-based preventive care where needs exist, with the ultimate goal of improving members’ oral health outcomes.

Value-based care (VBC) is a person-centered approach to health care delivery designed to improve health outcomes and lower the cost of care. Value based payment (VBP) is a health care delivery model in which payers reimburse for value and/or quality of care instead of the volume of procedures performed. VBP’s have been widely used in medical care, though the evidence of their effectiveness has been limited, in part, due to significant variation in how models are implemented and evaluated (Yuan, He, Meng, 2017; Chee, Ryan, Wasfy, Borden, 2016; Zarensani, 2021). VBP has gained significant interest in dentistry, although there are very few examples of it being utilized. While full implementation of this model would require significant payment reform, pay for performance (P4P) is an example of a first step towards VBP implementation. In P4P systems reimbursement is partially tied to quality metrics, whereby a portion of payment is based on meeting performance targets for existing quality measures such as the percentage of individuals who receive recommended preventive care. Two previous studies have evaluated pay-for-performance dental programs in staff-model payer organizations where dentists are employed by the organization (Conrad, et al, 2021; Gesko, Worley, Rindal, 2020). However, no previous studies have reported on or evaluated P4P initiatives by commercial dental insurers. The objective of this article is to describe commercial payer-based initiatives in two states whose goal was to increase preventive care utilization among members via quality measurement and improvement systems along with some degree of pay for performance. Lessons learned from these initiatives and suggestions for future system-level quality improvement initiatives are provided.

**Methods**

*Delta Dental of Iowa (DDIA): Data Analytics for Dental Quality Improvement*

In the early 2000’s, the Delta Dental Plans Association developed a report that provided metrics on preventive
dental care use among members, such as sealant and fluoride utilization for high-risk individuals. The report provided state-level data which created momentum for state Delta Dentals to work toward improvement in preventive dental care utilization. Among Iowa high-risk child members, the report showed low utilization of dental sealants; 21.97% (2017), 23.52% (2018) and 24.22% (2019) of high-risk children aged 6-9 received at least one first molar sealant.

As a follow-up to this report and with the aim of informing providers about preventive dental utilization among their own patients with Delta Dental insurance, DDIA partnered with five other state Delta Dentals and a company called White Cloud Analytics to develop a program called Dentalytics. Dentalytics is a web-based dashboard to which all DDIA network dentists had free access, and which allowed dentists to see their individual provider metrics as well as the practice-level metrics if applicable.

The goals of the Dentalytics dashboard included:

- Automate the integration, metric calculation, prioritization, weighting, and analysis of key performance metrics to rapidly facilitate improvement opportunities and propagate best practices.
- Provide dentists in all practice settings with their performance information through broadly distributed scorecards delivered via a desktop web browser.
- Align care providers to foster collaboration to accelerate bottom-up performance improvement across the organization.

The long-term goal of the program was to improve quality and outcomes through transparency and benchmarking. Prior to Dentalytics, providers did not have access to information regarding how their individual practices performed compared to their peers using standardized quality measures. This dashboard allowed providers to compare their own metrics to statewide benchmarks as well as with providers in their region. This approach, called “gamification”, has been utilized in medical quality initiatives (e.g., mammography screening), where providers can compare their own scores to their peers, creating internal motivation to improve (Johnson, et al, 2016). At a practice level, this method aims to incentivize team collaboration to better understand their practice and create goals and activities toward improvement.

Most of the initial metrics in the Dentalytics dashboard were adapted from metrics from the American Dental Association Dental Quality Alliance (DQA), which undergo rigorous assessment and testing (Ojha, Aravamudhan, 2016). Metrics included:

- Percentage of enrollees aged 6-18 at risk for caries who received 1 fluoride application
- Percentage of enrollees aged 6-18 at risk for caries who received 2 or more fluoride applications
- Percentage of enrollees aged 6-9 at risk for caries who received first molar sealants
- Percentage of enrollees aged 10-14 at risk for caries who received second molar sealants
- Percentage of adults at risk for periodontal disease who received a periodontal maintenance visit

The Dentalytics dashboard included personalized metrics for each individual dental provider. This dashboard utilized claims data to calculate and compare standardized metrics, and metrics were updated monthly. Dentists also had the ability to view patient-level information, including patients who met a particular metric and those who did not, which allowed providers to target preventive services to patients who had not yet received them.
Dentalytics was offered free to Iowa dentists starting in 2015. Marketing was used to educate providers on the dashboard and encourage adoption in their practices. Intended process and outcome measures included the number of providers using the dashboard and subsequent change in the metrics previously listed.

From 2015-2018, approximately 50 dentists (out of a total of 1700 network dentists) signed up for the dashboard, and among those very few were routine users. Subsequently in 2019, in an effort to increase provider use of the dashboard and increase member utilization of evidence-based preventive services, DDIA created a bonus pool within its PPO network based on use of the Dentalytics dashboard. To qualify for the bonus, providers were required to do three things: 1) be a general dentist and enrolled in the Delta Dental PPO; 2) receive their Delta Dental reimbursements through electronic funds transfer; and 3) be an active user of Dentalytics, defined as signing on to the application at least once in three of the four calendar quarters. In the first year, the Professional Relations Department reached out to providers to help sign them up for Dentalytics. The team used postcard mailings, digital and hard copy newsletter stories, and spoke to provider offices during routine visits and at conferences. During the first year of the bonus pool, the Professional Relations representatives monitored utilization and called offices if they found no active users prior to the end of that quarter.

**Delta Dental of Massachusetts (DDMA): Preventistry Program**

Recognizing that dental disease is largely preventable and that prevention and early diagnosis are fundamental to sustaining good oral health, DDMA developed a program called Preventistry. The aim of this program was to develop an integrated system of oral health management that targeted the care of high-risk patients, supported best practices of oral health care, and led to better outcomes. There were multiple components to the Preventistry program, but this article focuses on the quality improvement component and how DDMA implemented a provider incentive program.

In 2009 (predating the initiation of the Dental Quality Alliance), DDMA developed its first quality measures, which focused on increasing preventive care for patients at the highest risk of dental disease. Based on the American Dental Association’s (ADA) evidence-based recommendations for professionally applied topical fluoride and the American Academy of Periodontology’s position paper on periodontal maintenance, DDMA developed two measures: one for the pediatric and one for adult populations (ADA, 2006; Cohen, 2003). The ADA recommendation for professionally applied topical fluoride provided high quality evidence that moderate- and high-risk children benefited from having topical fluoride at least every six months. According to the AAP’s position paper “Many patients presenting with recurrent gingivitis without additional attachment loss after definitive periodontal therapy may be adequately maintained with PM [periodontal maintenance] performed semiannually. For most patients with a history of periodontitis, however, numerous clinical studies suggest that PM should be performed at intervals of less than 6 months. In general, data suggest that most patients with a previous history of periodontitis should obtain PM at least four times per year,
since that interval will result in a decreased likelihood of progressive disease, compared to patients receiving PM on a less frequent basis.” (Featherstone et-al, 2007)

Prior to implementing the program, claims data were analyzed to estimate baseline rates of utilization among children with low, moderate and high caries risk. Using claims data from calendar years 2008 and 2009 combined, approximately 94% of children aged 6-15 received a dental prophylaxis in the calendar year, with slightly fewer children receiving one fluoride treatment in the year. However, only 45% of children in this age group received two professional fluoride treatments per year. Among children aged 16-18, a similar proportion had received a prophylaxis but only 45% received one application of fluoride varnish, and only 25% received two applications. Interestingly, rates of utilization of both types of services were comparable at all risk levels. This finding suggested that all patients were being treated the same in the dental office regardless of risk status. These data provided opportunities to improve utilization of recommended preventive services, particularly among high-risk children.

During the same time period (2008-2009), claims data were also analyzed for adults who in the previous three years were treated for periodontal disease and followed them for 24 months to examine utilization of follow-up periodontal care. After 24 months, one-quarter of these members had not received any follow-up maintenance care.

Following these baseline estimates and opportunities for improvement, DDMA formalized specifications for two quality measures to be tracked, and the results given to providers to facilitate improvement. These measures were:

1. The percentage of elevated caries-risk children receiving professionally applied topical fluoride applied during a six-month period
2. The percentage of members aged 18 and older with a history of treatment for periodontal disease during the prior three years that received a periodontal maintenance procedure (D4910) or an adult prophylaxis (D1110) during a six-month period

Given the lack of diagnostic codes, children were identified as “elevated risk” if they had a history of at least one restoration during the prior three years as recent experience with active disease has been shown to be the strongest predictor for future disease (Featherstone et-al, 2007). DDMA then established a pilot study implementing these quality measures. Collaboration between the payer and providers was established by inviting input from the dental community during the conception of the pilot.

In 2011, DDMA began providing participating primary care dentists (general dentists and pediatric dentists) in the DDMA PPO network a semi-annual, customized Preventive Patient Report based on claims data to help the dentists identify specific higher-risk Delta Dental members in their practice who would benefit the most from preventive and therapeutic (and covered) treatment. The two services measured were fluoride treatments on high-risk children ages 6-18 and periodontal maintenance in adults ages 18+ who had been treated for periodontal
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disease. The first reports were sent in February 2011 and then every 6 months thereafter. The goal of these reports was to help dental offices identify patients who had not received the recommended therapy and act on this information to get these higher-risk patients back into the office for appropriate preventive care.

Starting in 2012, DDMA paid a bonus to participating dentists who successfully reached a threshold for utilization of these services among their high-risk patients. The target benchmarks for the fluoride and periodontal incentives were established based on baseline estimates from January-June 2011 when no incentives were offered. Two goals were established for each measure. The first goal was based on the network average score and the second goal was based on the threshold measurement for providers in the top quartile for each measure. Providers who achieved or exceeded the first period network average score during the second period would receive a bonus. Providers who achieved or exceeded the first period top quartile threshold score would receive an additional bonus. The first and second goal thresholds were set at 45% and 65% for fluoride and at 50% and 70% for periodontal maintenance, respectively. There was no financial penalty if they didn’t achieve the bonus benchmark; this didn’t change provider reimbursement fees.

**Results**

**DDIA**

In the first year of the PPO Bonus (2019), 23% (n=118) of Iowa PPO General Dentists qualified for the bonus. Payments to individual dentists ranged from $3,000 to $12,000 depending on the volume of PPO patients they treated. In 2020, only 17% (n=87) of the PPO General Dentists qualified for the bonus payment, with payouts ranging from $3,000 to $15,000. Because there were fewer dentists receiving the pay for performance bonus, payments to dentists were increased resulting in the top tier dentists receiving $15,000. Payment amount similarly correlated the number of PPO patients that each office treated. In 2020, the Professional Relations Department continued to educate providers/offices on the bonus program and Dentalytics but did not proactively call dental offices to ensure providers continued to be active Dentalytics users.

Despite strong marketing efforts and financial incentives for providers, the overall use of Dentalytics in Iowa was low. Utilization increased moderately when there was a financial incentive. Anecdotal feedback from some dentists suggested that providers did not want DDIA to have access to their utilization data. However, in reality, the insurers always have access to this data, but this initiative’s objective was to make the data useful for providers and ultimately improve population oral health. DDIA is currently evaluating options for the next phase of the program but has the desire to include quality metrics in an effort to improve outcomes.

**DDMA**

The results of the seven six-month measurement periods are presented in Figure 1. Following introduction of the financial incentives, 11,825 elevated risk children out of 19,568 received topical fluoride, which was an increase from 46.3% to 59.9%. Among the 10,775 periodontal patients, 6,613 received maintenance/prophylaxis which was an increase from 49.1% to 61.8%. This represented a 13.6% percentage point increase for fluoride and a 12.7%
percentage point increase for periodontal maintenance/prophylaxis in just six months. Similar levels of utilization were found when the program was repeated for a second six-month period and continued until June 2014.

From this pilot program DDMA found that:

- Approximately 60% of the 710 network primary care dentists who saw children achieved the fluoride goal, which affected approximately 12,000 members.
- Approximately 75% of the 665 network primary care dentists who saw adults achieved the periodontal goal, which affected approximately 6700 members.
- Between the fluoride and periodontal goals, 85% of dentists received a financial bonus.
- The largest bonuses were in the $7,000 to $8,000 range for the six-month periods.
- The average bonuses were in the $500 to $700 range for the six-month periods.

This pilot allowed DDMA to gain experience and insight into the development of performance measures based on evidence of effectiveness. It demonstrated that, if framed as an opportunity for both the dental profession and payers to achieve common goals for improved quality care, measurable improvement is possible and can be implemented in a non-threatening and non-punitive manner that benefits high-risk patients, providers, and payers. DDMA is currently working to enhance and evolve the initial pilot program.

**Discussion**

This paper presents experiences from two commercial payer-based quality improvement programs that utilized pay-for-performance to engage providers in an attempt to improve preventive care utilization for high-risk patients. Whereas one program had difficulty engaging providers in viewing their metrics, another saw considerable initial provider engagement and improvement in utilization among high-risk members. Both programs successfully implemented standardized quality measures that allowed comparisons across providers and over time. However, both programs also ran into challenges with provider engagement, whether in the initial phase of the program in Iowa’s case, or with continued improvement after the initial phase in Massachusetts’ case.
In contrast to large medical care delivery systems with more capacity and support for quality assessment and improvement activities, quality improvement programs in dentistry must employ considerable effort and resources to engage individual dental providers and convey the continued value to providers and their patients. As of 2019, 50% of private practice dentists were in solo practice, indicating probable limited staff time and resources available to dedicate to quality measurement and improvement (Health Policy Institute, 2021). A key lesson learned is that it would be helpful for future programs to develop dashboards that are able to integrate with dental practice management systems or provider portals, so providers don’t need to visit a separate website. While an integrated dashboard would have value, one barrier is that dental providers use a variety of electronic health records and embedding quality measures within those multiple dental records would be challenging. One initiative within the American Dental Association, called the Dental Experience and Research Exchange, is aiming to reduce barriers for practices of all sizes to engage in quality-related activities by allowing the program to populate practice-level dashboards using data from dental practices’ electronic dental records that have enrolled in the program (ADA, 2022).

Beyond support for logistics of measurement and improvement, a culture shift is needed within dentistry to see QI (Quality Improvement) activities as opportunities for growth, particularly with respect to access and prevention, instead of threats to autonomy. Dentists are steeped in the importance of technical quality (e.g., restoration margins, remakes) and may have difficulty framing measures of access, prevention, and patient experience as indicators of quality. Therefore, more provider education is needed on the scope and opportunities for quality measurement and improvement in dentistry.

Regarding the role of financial incentives, these programs found that the bonuses were likely a necessary, but not sufficient, approach to facilitate improvement among providers. DDMA used a pay-for-performance model where providers were reimbursed fee for services but also earned bonuses for meeting benchmarks on a defined set of performance measures, and DDIA used bonus payments to incentivize provider use of a quality measure dashboard. Both programs took the first steps to change the payment structure and move towards value-based care. However, both programs experienced challenges with either initiating or sustaining provider engagement. This could be because bonuses were not sufficient enough to make large-scale changes in their practice, or because providers are content with the existing fee for service model. Further, the concepts of alternative payment models (APMs) and value-based care are new for many dental providers. In a 2020 survey of approximately 2,700 DentaQuest-participating dentists, 51% had never heard of APMs in dentistry, and 35% had only heard of APMs or knew a little about them (Apostolon et al, 2020).

Very few studies have documented payer-based quality measurement and improvement programs in dentistry. While previous studies have examined pay-for-performance dental programs in staff-model payer organizations where dentists are employed by the organization (6,7), this is the first article to the authors’ knowledge that describes payer initiatives among the full provider network.
Limitations to this work include the inability to implement scientifically rigorous program evaluations due to capacity constraints. These results may not be generalizable to other states or payers, but the challenges and lessons learned may be useful to other organizations incorporating quality measurement and improvement activities.

Given the increasing interest in value-based care in dentistry, it is critically important to find effective ways to measure and track value. Payers need tested, standardized and meaningful measures coupled with effective implementation and payment models to achieve improvement in access and prevention for members. These initiatives demonstrate a step toward value-based care, which will require a culture change and engagement with all types of stakeholders, including payers, providers, and patients.

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Conflict of Interest Statement
The authors have no reported conflicts of interest.
References


I am truly humbled that Clay Pesillo asked to spotlight me in *The Beacon*. My exact response was, “I would consider it an honor to be highlighted, although not sure I have much of a story to be told compared to prior spotlight honorees”.

MARC ZWEIG
Marc Zweig, DMD, CDC
Past President AADC

I graduated from the University of Kentucky with a BS degree in 1968, DMD degree from the University of Louisville in 1972, and my specialty certificate in Periodontics from the University of Maryland in 1974. I was fortunate to join a periodontal practice in Plainfield, New Jersey in 1974 with a well-known and respected periodontist who had both clinical and administrative skills second to none, and who was a driving force in fine tuning my periodontal expertise. I practiced four and a half days per week and taught one day per week at Fairleigh Dickinson School of Dentistry. I taught both undergraduate dental students and post graduate periodontal residents. My teaching career ended when Fairleigh Dickinson School of Dentistry closed in 1990 amid a great deal of controversy (any rumors that I had anything to do with Fairleigh Dickinson School of Dentistry closing are unfounded)! With my additional available time, I decided to open a second office in Warren, NJ, while continuing to practice in my original office in Plainfield, NJ.

My first wife, Karen, was diagnosed with breast cancer in 1990 and after undergoing chemotherapy and surgery, she remained in remission for two years. In 1993 she developed metastatic liver cancer. After many consultations at Johns Hopkins and other cancer treatment hospitals, we decided to seek treatment at Memorial Sloan Kettering in New York City. Unfortunately, she passed away 6 months later in early 1994 at 46 years of age. I continued to practice for another few years, and after seeing what my wife went through, I decided life was too short and I wanted to spend more time with my two daughters, one of whom was still in high school at the time and my other daughter was in her sophomore year in college. I sold my practice in 1996 and took a one day per week position in a local dental hygiene college (Middlesex County College, School of Dental Hygiene) with both teaching and clinical responsibilities. I continued teaching at the college for 17 years. In 1997 I was contacted by Delta Dental of New Jersey asking if I would consider a consulting position with their plan. They estimated a time commitment of 10 hours per week. They wanted me to develop their periodontal benefit guidelines as well as assist in claims review. Well, the 10 hours...
per week became 3 days per week, which became full time. My title was Manager of Professional Review. I took responsibility for all of the company’s Dental Consultants including hiring, providing input into claims review policies, budgets, scheduling, dental consultant calibration/standardization exercises, etc. I would be remiss if I did not give a shout-out to my boss at Delta Dental, our own (AADC) Dr. Scott Navarro. Scott took me under his wing and was a mentor to me in connection with everything related to dental insurance and/or benefits determination. What could be better than having a mentor who was always supportive and had a vast knowledge and experience to draw upon. After 16 years at Delta Dental, in 2013, Delta Dental made a corporate decision to cut costs. They offered 15 employees who met certain criteria (age/length of service, etc.), which included both Scott and me, a voluntary separation/severance package to retire. It was completely voluntary, but it was a package that had never been offered before with no guarantees it would ever be offered again. I accepted the package and retired. Within 30-60 days, I received a call from Cigna Dental. They asked that since I was no longer employed at Delta Dental, would I consider a consulting position with Cigna? I accepted and have been at Cigna now for 10 years.

I joined AADC in 1997 or 1998 and became a CDC in 2002. I quickly realized what a terrific organization it is, not only for the knowledge that is imparted, but for the many friends I have made (too many to list specific individuals with the absolute probability of inadvertently leaving someone off the list). Throughout my years with AADC, I was co-chairman of the membership committee, served on the initial web design and implementation committees, was a participant with the Clinical Position Papers committee (I was the primary author for the Soft Tissue Grafting Position Paper), led and presented the annual workshop claims review sessions for 6-8 years, served on the Board of Directors for two terms, served as President 2016-2017, and served on the Board as past president (2017-2018). I’ve had a hand over the years in bringing in and motivating many potential AADC members. I would recommend that all members get involved and join a committee. Trust me, you will receive much more from AADC than you input.

I have numerous stories over the years relating to dental consulting but one of the most memorable was in 2016 when the ADA Council on Dental Benefits invited me to present to their ADA council members in Chicago on what exactly we do as dental consultants. One of the primary tenets of public speaking is to know your audience and I realized/assumed that going into that meeting before these select members of the ADA Council on Dental Benefits was synonymous with beating a hornet’s nest. With that understanding, I walked into the ADA conference room which has an oblong table that seats approximately 20 people, and I’m prepared to meet with what “some” might consider to be our adversary (for example, ADA policy on Direct Reimbursements, etc.). As I walk into the room, I cannot see, but I can smell, the cauldron of hot tar and feathers that I’m about to step into. I start my PowerPoint presentation entitled “Dental Insurance/Dental Benefits, as told from the Dark Side” with the cover slide of Darth Vader and the music from Star Wars playing in the background (The Imperial March-Darth
Vader’s Theme). The rest is history. I was able to successfully remove the tar/feathers after only a few weeks. In reality it was a good meeting and I reinforced what we do as dental consultants with honor and integrity.

I married Beth, in 1997, 4 years after Karen had passed, and between us we have 4 daughters, who are married and have given us a total of 8 grandchildren. I remember very clearly after my younger daughter got married, we were trying to give her some advice, and my son-in-law reminded me she was under “new management”. Beth was a little taken back by the comment, but to this day I have to admit that I am very happy to have my daughter be my son-in-law’s responsibility. I still love thinking about that story, however. We have traveled on multiple vacations with “the family” (18 of us now), but it has become much harder over the years to get everyone’s scheduling conflicts in perfect alignment (grandkids soccer/wrestling/dance/football/basketball/schooling), and Beth and I have become literally “world travelers”. We have been to all seven continents, but my most memorable excursions have been to Antarctica, literally standing among over 100,000 penguins who are waddling over to us, and gently pecking, as if to say, “what is that”. We have “trekked” with Gorilla’s in Rwanda’s Volcanoes National Park where we had guides and trackers with machetes cutting through the jungle for two hours until we were guided to meet the Iisha family of 32 gorillas. It was truly a once in a lifetime experience. We had to apply two years in advance for permits from the Rwanda government. The permits are strictly limited since the gorillas are in the wild and the government restricts the amount of time for human interaction with the gorillas in their natural habitat.

I have retired probably 3 times over my 50 + years in dentistry, but the one thing I have retained is the passion and purpose for what we do as dental consultants. Our contributions to the plans we serve are to provide the necessary fiduciary oversight for the benefit of our companies, our providing dentists, the patients they serve, and the groups who purchase dental benefits for their employees/members. It is this responsibility that continues to give me the passion to carry the eternal flame. I would suggest to my fellow dental consultant colleagues to surround yourselves with other knowledgeable, experienced members in the dental benefits industry, i.e., AADC, learn from them, and look to assist your fellow colleagues in always being available to share information learned over the years.

And yes, there are those days where as dental consultants we may be fortunate enough to be the pigeon; and there are those unfortunate days where we are the statue-- for example, when the dentist on a peer to peer call goes right for your jugular with statements such as: “Have you examined my patient, are you an ACTUAL dentist, and are you licensed in Wyoming?”. Since no two days are ever completely predictable, I have learned through experience to wear my hooded raincoat to work.
2023 AADC Spring Workshop Recap

Linda Vidone, DMD
Program Chair

The 2023 annual spring workshop, “The Power of AADC Connection: The Consultant Experience” at the delightful Arizona Grand Resort in Phoenix was a huge success! The heavily attended event featured a wide variety of timely and pertinent lecture topics with an outstanding array of accomplished speakers, even the weather was perfect which allowed for plenty of outdoor networking and socializing. The feedback from attendee surveys was extremely favorable.

The workshop was preceded on Tuesday and Wednesday with a presentation by the American Academy of Pediatric Dentistry on “Minimally Invasive Dentistry” and meetings with American Association of Orthodontics as well as the American Academy of Periodontology and the American College of Prosthodontics who shared dental plan policy and guideline concerns and ideas with Dental Directors.

Wednesday’s events included the Dr. Larry Browning Memorial Golf outing, the Certified Dental Consultant examination, and a wonderful training seminar “Consultant 101: Anatomy of a Claim Review” given by Dr. Clay Pesillo. In the evening, the board and program committee members welcomed all new AADC members from 2022-2023 at the New Member Reception, establishing mentor relationships and networking opportunities. Another well-attended event that set the stage for the next few days.
The continuing education program opened on Thursday with our keynote speaker, Dr. Joy Void Holmes who discussed the role of diversity, equity, inclusion, and belonging (DEIB) in dentistry. We then heard Dr. Hamed Abbaszadegan discuss “AI” and “Automation in Health Delivery” applications. This was followed by a panel consisting of Drs. David Gesko, Daniel Croley, and Krishna Aravamudhan and led by Drs. Marie S Schweinebraten and Linda Vidone on how dental practices, payers, and the Dental Quality Alliance define quality and quality improvement in dentistry. We were fortunate this year to have two Thursday Lunch and Learn’s featuring Overjet AI and claims review and Mental Health for the Dental Professional. Both were sold out! The program committee will continue these Lunch and Learn sessions for the 2024 workshop.

The Afternoon sessions began with Mr. Dennis McHugh who continued a discussion that the ADA and AADC had during the 2018 meeting on how both organizations can collaborate to help streamline the claim adjudication process for dentists and payers. Next Dr. Mark Jurkowich gave an enlightened presentation on diagnostic coding and its importance in dentistry. Our last Thursday speaker, Ms. Leslie Icenogle, detailed the behind-the-scenes basis of dental and medical billing. That evening Dr. Robert Rosenthal, our outgoing president, welcomed the entire group to his President’s Reception. This well attended informal reception gave all an opportunity to network, connect with old colleagues and friends, and meet and make new ones.

Our Certified Dental Consultants and Past Presidents began Friday with a wonderful special breakfast where they enjoyed sharing their leadership experiences and friendships. The general session on Friday started with an engaging presentation on dental photography by Dr. Guy Acheson. This was followed by the timely topic of digital workflow in implant dentistry presented by Dr. Hussam Batal. Next, Mr. Michael Urbach shared information on how AI image review is being deployed in claims review and its quantifi-
able impact on utilization review. After another well-attended Novodynamics AI Lunch and Learn and our annual business meeting, a claims review session followed led by Dr. Stewart Balikov with cases that stimulated significant participation by attendees.

Saturday morning was our usual short session which included a closing keynote speaker, Dr. Brian Novy, who discussed what payers need to know about caries management. His presentation offered a dramatic paradigm shift relating to oral healthcare that was stimulating, thought provoking, as well as entertaining. AADC was extremely grateful to Dr. Mario Conte who filled in at the last minute and closed the program with a lively claims review session.

A well-deserved thank you to the entire Program Committee for their support, input, and arduous work to make this workshop so special and successful: Suzanne Achenbaugh and Dr. Marie Schweinebraten. And we simply could not have pulled this off without our tireless executive director, Ellen Kessler, and her partner in life, Chuck Kessler!

A special thanks to our sponsors and exhibitors: Fluent (formally P & R Dental Strategies), Novodynamics, Overjet, Academy of General Dentistry, Practice Booster powered by eAssist, Voco, GC Dental Corporation, AAOMS, Delta Dental, Pacira, Z Dental, and Northeast Delta Dental. They all help make our workshop a success.

Make sure you mark your calendars for the 2024 Spring workshop May 15-18 at the Hyatt Coconut Point Resort & Spa in Bonita Springs, Florida.

We are anticipating another fun and exciting program.
The Dr. Israel “Sonnie” Shulman Award For Meritorious Service

Dr. Linda Vidone and Dr. Mitch Couret were this year’s recipients of The Dr. Israel “Sonnie” Shulman Award for Meritorious Service.

Some newer members may not be aware of this award which is rarely given to an AADC member (this year for TWO members) who, over the years, has exhibited extraordinary service to the AADC. The decision to bestow such a prestigious award is made through a nomination by a member of the board followed by a unanimous vote of approval. It was not created to be an annual award. In fact, the award is not given at any specified time interval.

The award was created by the AADC Board of Directors back in 1998 and the first recipient of the award at the May 1998 workshop, fittingly, was Dr. Shulman, a founding member of the organization. The award was bestowed posthumously.

The five members receiving the award between the 1998 workshop and the 2015 workshop are etched on a plaque typically displayed at the AADC registration desk during the spring workshops.

This year, two members were nominated. Rather than choosing one, the board unanimously voted to bestow the honor to both nominees.

Congratulations to both Dr. Vidone and Dr. Couret for their years of dedicated service to the American Association of Dental Consultants.