



Dental Category Newsletter

Winter 2022

Volume XIX, Issue 1

ADA “SmileCon” 2021

By: CAPT Michael Windsor Johnson

USPHS Delegate to the ADA

Greetings to our fellow United States Public Health Service dentists! You were represented at the 2021 American Dental Association (ADA) House of Delegates (HOD) by RADM Tim Ricks, CAPT Michael Windsor Johnson, CAPT Renée Joskow who participated virtually, and CDR Carol Wong. The 2021 ADA session was held at the Mandalay Bay Resort and Casino in Las Vegas from 13-16 October. As the legislative and governing body, the HOD is the supreme authority in the ADA. The HOD represents the 162,000 dentist members of the Association and the dental profession in the United States and its territories.

During the opening session retiring ADA Executive Director Kathleen T. O’Loughlin, D.M.D., and our very own RADM Timothy L. Ricks, DMD, Chief Dental Officer of the U.S. Public Health Service, were honored with Distinguished Service Awards, the highest honor the ADA Board of Trustees can bestow. Although this was the first time a USPHS officer and CDO received that ADA Distinguished Service Award, RADM Ricks accepted it on behalf of the Category as he considered it a group award to recognize the work of the entire USPHS Dental Category during the pandemic.



2021 American Dental Association “Fighting 4th” District – VA, USPHS, Army, Air Force, Navy, NJ, DC, DE, MD, Puerto Rico and Virgin Islands

As your USPHS Delegation, RADM Tim Ricks, CDR Carol Wong, CAPT Renée Joskow and I were engaged in the activities of the HOD, Reference Committees, and the Fourth District Caucus, as well as interacting with our fellow Federal Service colleagues. I am particularly grateful to CAPT Nathan Mork for assisting us with monitoring the testimony given at the Reference Committee Meetings. The function of the reference committees is to present well-informed recommendations to the House of Delegates. As a side note, due to unforeseen circumstances, a 4th District committee member to Reference Committee D was unable to fulfill their role. Subsequently, I was solicited to take their slot and appreciatively accepted the appointment to serve as a member to Reference Committee D for the 2021 House of Delegates. This committee considered the reports of the Council on Advocacy for Access and Prevention, Council on Communications, Council on Ethics, Bylaws and Judicial Affairs and Council on Government Affairs. (continued on [page 7](#))

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The USPHS Dental Category Newsletter is published two to three times a year and distributed electronically through the USPHS Dental Bulletin Board and agency distribution lists. If you have suggestions or comments about the newsletter, or would like to submit an article, please contact the co-editors [CDR Titania Brownlee](#) or [LCDR Grant Abernathey](#). This newsletter is for informational purposes only and does not reflect official views of the United States Public Health Service Commissioned Corps or USPHS leadership.

USPHS DENTAL OFFICER ROSTER UPDATE

Special Welcome to our **New Accessions!** Welcome aboard!

- LCDR Michael Goins
- LCDR Sarah Kim
- LT Patrick Trad
- LCDR Katie Wilson

Farewell and Following Seas to our **Retiring USPHS Dental Officers!** Thank you for your Service!

- CAPT Carol McDaniel
- CAPT Heather Judd
- CAPT Randall Smith

ATTENTION USPHS DENTISTS!! You can become an ADEA member at **no cost**. Starting almost 20 years ago, the U.S. Public Health Service Dental Category became a corporate member of the American Dental Education Association (ADEA) because of the number of educational programs offered by our agencies/operating divisions, including dental residency programs. For those working in the USPHS or agencies served by the USPHS – BOP, CDC, CMS, FDA, HRSA, IHS, IHSC, NIH, USCG, etc. – you can activate your FREE membership and gain access to ADEA Connect, the dental education community network; a free subscription to the online version of the Journal of Dental Education; learning and professional development resources, award opportunities, and more. To activate your membership, click [here](#) and under “institution,” select U.S. Public Health Service in the drop-down menu and follow the prompts for the remaining parts of your profile.



RADM Tim Ricks

Chief Dental Officer Remarks

RADM Tim Ricks

“We must find time to stop and thank the people who make a difference in our lives.” – John F. Kennedy

As I write this last column of my Chief Dental Officer term, I think of the above quote by the late president and think of all of the mentors I had early in my career, the mentors I still have today, and the many people who have supported me in not just my role as the CDO but also throughout my career as a public servant. I know that each of you also can think back to the beginnings of your career and remember all of the people who have helped you during your service to our country, and I hope that you occasionally take a pause to thank those people, including your family.

The last four years have gone by so fast. I still remember receiving a call in August 2018 from then-Deputy Surgeon General Sylvia Trent-Adams congratulating me. The only problem was that I was on a cruise ship, and even though I was in port in Honduras, the phone conversation dropped repeatedly because of poor reception and I wasn't quite sure why she was congratulating me. Looking back on these past four years, I am so appreciative of the opportunity to serve as your chief dental officer. It has been an honor and privilege to stand with you as we all continued to serve in our various agency roles while also navigating through some uncertain times.

Back in early 2001, shortly after joining the USPHS Dental Professional Advisory Committee, I created the *USPHS Dental Category Newsletter* as a way to communicate with officers, with the approval and support of then-CDO RADM Dushanka Kleinman. Later on that same year, I created the USPHS dental listserv for the same reason, and I am pleased that these two communication tools still exist and will continue long after I'm retired. Thanks to the many listserv administrators and newsletter editors over the years that have helped keep these communication tools going!

Communication is the key to success, whether it is in explaining treatment options to our patients or whether it is sharing our vision or ideas through newsletters, conference calls, e-mails, or the many Zoom meetings arising from the pandemic. One communication philosophy that I have shared with you through a few all-hands meetings, in newsletter communications, and through emails, is that each of you is a leader in dental public health. As leaders, you each have wonderful opportunities to not just lead your respective dental programs, but to emerge as national leaders to promote the oral health of our Nation. I continue to encourage each of you to engage with external stakeholders on public health issues, educate them about the persistent oral health inequities we have in this country, and work with both internal and external stakeholders to develop innovative solutions to address these issues.

As I look back on these past four years as your CDO, I think about some of the things that were accomplished collectively: (1) publication of a second major report on oral health, *Oral Health in America: Advances and Challenges*; (2) 61 issues, and counting, of the *USPHS Chief Dental Officer Newsletter* which helped improve communications with external stakeholders; (3) highlighting of oral health inequities in multiple publications; (4) over 300 presentations at events around the country, including visits to more than 30 states and almost 40 dental schools; (5) development of an external pandemic response group of 50+ organizations, a group that continues today and which helped streamline communications regarding the pandemic across the country; (6) development of Healthy People 2030 oral health objectives which will guide our country for the next decade on oral health strategies; (7) bridging the gap with our other federal dental services by bring back the National Oral Health Conference federal dental services session and supporting the continuation of the AMSUS oral health session; and (8) elevating oral health issues at every opportunity, among other things. These were not MY accomplishments, but the accomplishments of many dedicated dental officers and public servants.

In conclusion, as I wrap up my term as your CDO, I want to circle back to the beginning of this column and thank all of those who have supported me, but especially my wife, Julie; my two adult children, Kristen and Tyler; my IHS boss, Dr. Tim Lozon; and my 4-year aide-de-camp, now-CAPT Nathan Mork. It has been an honor to serve as your CDO, and I wish all of you success in your careers and thank each of you for your dedicated service to our Nation! - TR

Dental Professional Advisory Committee

Outgoing Chair Remarks

CDR Jason Single

Last year was a busy year for the Commissioned Corps as well as the Dental Category. When I started my term as the DePAC Chair in January 2021, my vision was for our category to remain versatile and adaptable as we adjust to a new normal. As I look back upon the year, I am proud of the hard work and sacrifices made by our Dental Officers in 2021 as well as the roles our Dental Officers have filled along the way. We have seen our officers deploy in non-dental roles in support of multiple missions. We have seen our officers train to administer COVID tests and vaccines, and we proved our value as a category in the United States Public Health Service.

It has been an honor and a privilege to serve as your DePAC Chair in 2021. As a PAC, our Subcommittees (SC) and Workgroups (WG) have completed many high-quality projects to benefit our category and profession.



CDR Jason Single

- The Public Health SC created 16 Leadership Briefing Documents highlighting topics affecting our profession both now and in the future.
- The Women's Initiative, Minority Initiative, and Public Health SCs helped to provide continuing education credits by co-sponsoring CDE webinars through the IHS Continuing Dental Education system and through the two 2021 Virtual Category Days held in May.
- The Membership WG implemented a new voting member application protocol this year to ensure a more objective and unanimous process.
- The Recruitment WG continued to publish the monthly vacancy list as well as securing a recruitment booth at the annual ADA meeting. Recruitment materials have been improved to include an updated PowerPoint on the Regular and newly formed Reserve Corps.
- The Communications WG oversaw a complete update of the DePAC website and led the charge to bring back the Dental Category Newsletter.
- The Retention and Mentoring WG published an updated Resource Manual and Supervisors Guide to assist civilian supervisors of our officers.
- The Readiness WG worked hard helping officers to remain basic ready, resulting in a 100% readiness for the Dental Category in March.
- The Awards WG worked hard this year to process twenty-one DePAC Award packets and assisted officers with individual and unit award write-ups.

DePAC worked to maintain open communication in the category, sharing information through the Dental Bulletin Board (DBB) listserv including the Public Health minutes, readiness reminders, and promotion tips and tricks.

I will conclude by thanking all of our voting members and volunteers for donating their time and skills to help make our Category better. I have enjoyed the role of serving as DePAC Chair over the last year and I am confident that we will continue to see great things from our PAC with your incoming Chair, CDR Darnell Thomas, and Vice-chair, CDR Dane McClurg.



**Committed to the Mission of the Commissioned Corps of the USPHS:
Protecting, promoting, and advancing the health and safety of the Nation**

Dental Professional Advisory Committee

Incoming Chair Remarks

CDR Darnell Thomas

I am excited and honored to serve as your DePAC Chair for 2022. Over the last year we were faced with multiple challenges and adversities, and I was proud to witness our leadership rise to the occasion, keeping our officers safe, informed, and involved. Our Chief Professional Officer, RADM Timothy Ricks, did an incredible job of communicating with dental and public health leaders to keep our category updated on the pandemic response and other vital dental and public health issues. Our outgoing Chair, CDR Jason Single, did an outstanding job of leading the PAC during these difficult times and overseeing the accomplishments of our workgroups.



CDR Darnell Thomas

My vision for 2022 is to be transparent, versatile, and adaptable as we navigate uncharted territory. We will be faced with known and unknown challenges as we travel the road to a new normal. The year will demand dental officers do more with less resources and support for our category and its members will be critical for our success. Recruitment and retention are top priorities to ensure a strong and stable category for the future. We will be asked to step out of our comfort zones and take on greater responsibilities and additional duties. Our category will rise to this challenge and show that we are not limited to oral health through our work in administering vaccines, COVID tests, or taking on new roles as practitioners. We will embrace this opportunity to show our colleagues that we are leaders in public health and that our skills are useful outside of the operatory.

I am fortunate to have a dedicated Vice-chair, CDR Dane McClurg, and Executive Secretary, LCDR David Lam. We have experienced and motivated Workgroup/Subcommittee Chairs and Co-chairs that hold high expectations for the year ahead and are ready to continue building on the foundation that our previous leaders have created for us. I am very optimistic about the upcoming year and look forward to serving the Dental Category in this role.

2022 DePAC Voting Members

CDR Darnell Thomas (IHSC) - Chair

CDR Dane McClurg (IHSC) – Vice-Chair

- CDR Stacey Barkauskas (BOP)
- CDR Joseph Collins (BOP)
- CDR Amber Foster (IHS)
- CDR Ryan Gard (IHSC)
- CDR Laura Hain (USCG)
- CDR Melissa Parra (IHSC)
- CDR Brian Talley (IHS)
- CDR Benjamin Warren (IHS)
- LCDR Folasayo Adunola (HRSA)
- LCDR Joseph Grant (USCG)
- LCDR Cam-Van Huynh (IHS)
- LCDR Tara Van Orden (IHS)
- LCDR Diem-Quynh Tran-Nguyen (USCG)
- LCDR G. “Lee” Wright (USCG)

Words from the 2021 John P. Rossetti Dental Mentor of the Year

CAPT Daniel Barcomb

Like many of you, I've served as an informal and formal mentor for several years. While I don't pretend to be an expert on mentoring, I'm happy to pass along what I've learned as both a mentor and as a mentee.

So why is it important to mentor others? Why should we do it? For one, it makes our category stronger. Passing along what you've learned over the years and what your mentors have passed along to you helps ensure that the USPHS dental category remains strong and can face any challenges that may come. Also, being a mentor is one of the Commissioned Corps benchmarks for promotion. Being an official mentor in a formal mentoring program, like the one the Dental Professional Advisory Committee (DePAC) offers, may make the difference in you getting promoted. But, perhaps the most satisfying reason to be a mentor is simply to help someone else; being a positive role model and helping someone navigate the sometimes confusing waters of officership in order for them to build a successful career. There is great satisfaction in seeing officers you've mentored go on to have success in their careers, and in being able to share that success with them. While formal mentoring programs are often only for a year or so, if you can build a successful relationship with your mentee the mentoring process can continue enjoyably for many years.

It's important to note that not all mentor/mentee pairings are successful, and that's ok. If the relationship isn't working out for one or both of the parties, either one can end the relationship to find somebody new to work with. In order to help build a successful mentoring relationship it's important to meet on a regular basis so that you can establish a dialogue and build rapport. The mentee should feel like they can speak freely and express their concerns without repercussion, that whatever they tell the mentor will be held in confidence. So it's a good idea to state this explicitly at the outset to make sure there is no confusion, and so that a free and open dialogue can occur. For successful professional growth to occur it's important that mentees are open to the suggestions of their mentor. That doesn't mean they have to follow everything their mentor says blindly, but it may mean doing things differently than they are used to. And, lastly, it's critical that the mentoring relationship isn't one like that between a boss and an employee. The mentor and mentee should be working together as a team toward a common goal: to build a successful career for the mentee. A successful mentoring relationship relies on good communication, trust, and mutual respect. In closing, here is some general mentoring advice that may help you in your career:

- Do the best job you can for your Rater and your Reviewing Official, they write your evaluations so that makes them your bosses. Work hard to maintain a good relationship with them.
- Always be willing to take on new challenges and do your best at them. Not only does this help build accomplishments for awards and promotions, it also opens up opportunities for you. Opportunities you may not even be aware existed. Capitalize on these opportunities.
- Get involved in DePAC (or other PACs). It's a great way to network with other officers and learn about what it's like working at other agencies. Volunteer at first and then apply to become a Voting Member. As a Voting Member you'll lead one of the workgroups or subcommittees.
- Build your leadership skills and strive towards leadership positions. This will help you when you're up for promotion to O-5 and O-6.
- Take advantage of any postgraduate educational opportunities that you can. Not only will you grow as a dentist and provide a higher level of care to your patients, it may mean higher bonus pays, better chances for promotion, and better career opportunities after the USPHS.



CAPT Daniel Barcomb

*How do you get involved with DePAC or become a mentor or protégé?
Check out the [DePAC website](#).*

ADA SmileCON 2021 (cont.)

Reference Committee D in general deliberated on matters that relate to the following:

1. Community oral health
2. Preventive dentistry
3. Fluoridation
4. Issues pertaining to the relationship of dentistry and medicine
5. Legal and legislative advocacy
6. Public awareness
7. Professional communications
8. Public information and education
9. State public affairs activities
10. State and federal legislation
11. Federal dental services
12. Judicial procedures
13. The ADA Constitution
14. Bylaws and Governance Manual
15. The Principles of Ethics and Code of Professional Conduct
16. Health care policy/reform, and any other matters referred to it.



Reference Committee Legislative, Health, Governance and Related Matters: RADM Ricks provided testimony about Resolution 106, which calls for the establishment of two delegates for each of the Federal Dental Services

A summary of 2021 ADA resolutions which may affect us as USPHS dentists are highlighted below:

Resolution 1. Proposed Policy, Rank and Status of Dentists in the Uniformed Services

The flag ranks of dental officers should be protected and enhanced in all branches of the uniformed services. The ADA supports a 2-star equivalent rank or higher for the Chief Dental Officer for the uniformed services and Veterans Administration and that graduates of a two-year residency or a dental specialty residency recognized by the National Commission on Recognition of Dental Specialties should be awarded special pay. There was considerable testimony given in support of this resolution which passed unanimously.

Resolution 9. Amendment of the Policy, fee for service Medicaid Programs

States should adopt adequately funded fee for service models for Medicaid programs to increase dentist participation and increase access to care for Medicaid participants.

Resolution 10. Amendment of the Policy, Medicaid and Indigent Care Funding

ADA supports adequate funding to provide oral health care to Medicaid and other indigent care populations.

Resolution 11. Amendment of the Policy, Use of Dentist to Population Ratios

The dentist-to-population ratios exclusively should not be used as the exclusive measure for designating dental health professional shortage areas or for evaluating or recommending programs for dental education or dental care.

Resolution 27. Amendment of the Policy, Support for Adult Medicaid Dental Services

Dental services should be included in the federal Medicaid program as an integral part of overall health and that should be provided consistent with all other basic health care services

Resolution 59. Amendment of the Policy, Women's Oral Health: Patient Education

The policy titled "Women's Oral Health: Patient Education" will be amended to read that the ADA will work with federal and state agencies, constituent and component societies, and other appropriate organizations to incorporate oral health education information into health care educational outreach efforts directed at parents, caregivers and their children, and the ADA will work with the prenatal and perinatal professional community to ensure that expectant parents and caregivers are provided relevant oral health care information during the perinatal period.

Resolution 68. Amendment of the Policy, Oral Health Education in Schools

The policy titled Oral Health Education in Schools be amended as follows that the Council on Advocacy for Access and Prevention work with the appropriate ADA agencies and national education organizations to increase the number of school districts requiring oral health education for K-12 students based on the School Health Policies and Practices Study (SHPPS) data, and where applicable, the ADA supports the inclusion of the current National Health Education Standards in the accreditation requirements for all public, private and charter elementary and secondary schools.



Meet your 2021 USPHS Delegation: (left to right) RADM Tim Ricks (delegate), CAPT Michael Johnson (delegate), CDR Carol Wong (alternate delegate) and absent from the picture is CAPT Renée Joskow (alternate delegate)

Resolution 69. Adopted Policy on Diversity and InclusionBackground:

For much of the ADA's history, members have been predominantly white and male. Only in the past few decades have there been significant increases in women and racially/ethnically diverse dentists, and now current dental school students are more than half female and almost 48% racially/ethnically diverse. However, women, diverse dentists, and those in large group practice settings currently lag ADA's overall membership market share.

ADA Statement:

The ADA is committed to a culture of diversity and inclusion to foster a safe and equitable environment for its membership. In this environment, representation matters and every member is provided intentional opportunities to make meaningful contributions. Diverse viewpoints and needs are heard, valued and respected.

The ADA embraces diversity and inclusion to drive innovation and growth, ensure a relevant and sustainable organization and deliver purposeful value to members, prospective members, and stakeholders. The ADA's commitment to diversity and inclusion will further advance the dental profession, improve the oral health of the public, and achieve optimal health for all.

Resolution 76. Increase annual dues by \$9 to \$582.00, effective January 1, 2022**Resolution 86RC (Adopted): Proposed Amendments to the Comprehensive ADA Policy Statement on Teledentistry.****Resolution 106 (Adopted): Restoration of 2 Delegates to each of the Federal Dental Services,**

This includes the USPHS, which will lose 1 delegate at the 2022 HOD. "Resolved, that the appropriate agency revise the delegate allocation methodology found in the Manual of the House of Delegates so that a minimum of two delegates is allocated to each of the Federal Dental Services, and be it further Resolved, that a report on the requested revisions be provided to the 2022 House of Delegates."

KEY TAKE AWAYS:**Unanimous passing of Resolution 1. Proposed Policy, Rank and Status of Dentists in the Uniformed Services**

The flag ranks of dental officers should be protected and enhanced in all branches of the uniformed services.

Adoption of Resolution 106: Restoration of two Delegates to each of the Federal Dental Services

This means we will lose one delegate within the 2022 HOD. Co-authored resolution 106 by RADM Ricks and Dr. Bob Wilson from Maryland, which is the first time in many years the USPHS has co-authored a resolution.

The USPHS Recruitment Booth at the ADA provided an opportunity to increase awareness of the Public Health Service. Special thanks to CDR Thuc Ngo and LCDR Gary L. Wright who successfully coordinated the USPHS Recruitment booth. Volunteers included RADM Timothy Ricks, CAPT Nathan Mork, CDR Carol Wong, CDR Thuc Ngo and LCDR Tara Van Orden.

Dr. Cesar R. Sabates, D.D.S., of Coral Gables, Florida was installed as the 158th president of the ADA at the 2021 House of Delegates becoming the Association's first Cuban-American president. He served as the 17th District trustee for the ADA Board of Trustees from 2016-2020 and a delegate in the ADA House of Delegates from 2000 to 2016. He is past president of the Florida Dental Associations and South Florida District Dental Association. Dr. George R. Shepley from our district was then voted president-elect for 2022-2023. Dr. Shepley of Baltimore, Maryland is the immediate past trustee of the ADA's 4th District. He previously served as president of the Maryland State Dental Association from 2012 to 2014, and chaired the ADA Budget and Finance Committee, Standing Committee on International Accreditation and the ADA Council on Communications. Dr. Shepley is a tremendous supporter of the Uniformed Services.



Presenting his vision for the ADA, Dr. George R. Shepley from the Fourth District voted President-Elect for 2022-2023

Thank you all for giving RADM Tim Ricks, CDR Carol Wong, CAPT Renée Joskow and I an opportunity to represent the U.S. Public Health Service to the ADA. On a personal note, my four-year tenure as delegate has ended. CAPT Renée Joskow will assume the delegate responsibilities. It was a privilege and honor to serve you as ADA delegate. I want to thank RADM Nick Makrides for having faith and trust in me to initially serve as his alternate delegate and to RADM Timothy Ricks for his continued support.

The ADA is a strong advocate for every dentist in the United States and its territories and diligently strives to tackle challenging and complex issues that affect the dental profession such as licensure, standards of care, guidelines, education and access to care. The ADA encourages us to "stay connected, informed and educated, and ensure that we are all facing these challenges together." The Federal Dental Services members are inclusive of active duty, GS, tribal and contract dentists.

The next annual ADA meeting is scheduled for October 13-17, 2022 in Houston, TX.

Are you looking to play a role in organized dentistry?

Do you have ideas or concerns that leaders in the profession should know about?

Do you have stories and experiences to share that can potentially help other new dentists?

Your voice is important, and here are some ways to impact your dental community.

Contact Tera Lavick, ADA New Dentist Committee Director, at 1-800-621-8099 ext. 2386 or newdentist@ada.org

DePAC Workgroup Updates and Bulletins:

Recruitment and Retention WG Update

CDR Thuc Ngo, LCDR Gary “Lee” Wright

The 2021 USPHS Recruitment Booth at the 2021 ADA SmileCon was a great way to increase awareness of the Public Health Service. Special thanks to LCDR Gary “Lee” Wright, the current 2021 Recruitment Workgroup chair, who coordinated the booth at the event. Special thanks also goes out to LCDR Tara Van Orden for her assistance daily at the booth.

Pamphlets were handed out and QR codes were available to scan for those who passed by our booth. LCDR Van Orden and LCDR Wright were able to answer questions about the USPHS’s goals and missions. A few dentists, dental students, as well as dental hygienists visited the booth expressing interest in the PHS and some inquired about the newly formed Ready Reserve and the process of how to join!

In addition, it was an honor to attend the opening ceremony to witness RADM Timothy Ricks receiving the 2021 Distinguished Service Award. This is the highest award presented by the ADA to one recipient annually. Overall, the booth was a great success.

Recruitment Spotlight:

- CAPT Brandy Larson (IHS) conducted a lunch and learn recruitment presentation at the University of Iowa-College of Dentistry on 15OCT21. About 25 people were in attendance and learned about the benefits of a career in the USPHS and in public health.
- LCDR Tara Van Orden (IHS), CDR Thuc Ngo (IHS), CDR Carol Wong (USCG), and CAPT Nathan Mork (IHS) volunteered their time at the USPHS and six individuals have expressed interest in USPHS employment opportunities.



(From Left) ADA Leadership, Dr. Mark Moats from Kentucky and Dr. Dan Klemmedson, 2021 ADA President with RADM Tim Ricks, CDR Nathan Mork and CDR Thuc Ngo at the USPHS Dental Category Recruitment Booth at ADA

2022 USPHS Scientific & Training Symposium

Renaissance Phoenix Glendale Hotel

Phoenix, AZ

May 23-27, 2022

[Click here for more information on registration, agenda, cost and lodging.](#)

“Public Health: Preparing for the Future”

Clinical Perspectives:

A Brief Summary of Resin-bonded Fixed Dental Prostheses CDR Scott Eckhart, DDS, MS, USPHS

Resin-bonded fixed dental prostheses (RBFDPs) are an often forgotten treatment option for single-tooth edentulous sites. Implants provide a great restorative solution for many patients, but in certain patients their use can be contraindicated. These groups include those patients who have not completed skeletal growth, those with a compromised immune status, users of tobacco, patients with an inadequate amount of space or bone for implant placement, and those with financial limitations. Traditional fixed dental prostheses (FDPs) are another good alternative, but have the relative contraindication of significantly more extensive tooth preparation on the abutment teeth, especially for previously unrestored teeth.



CDR Scott Eckhart

The concept of a RBFDPs or a resin-bonded fixed dental prosthesis is not new and has existed in a variety of forms since the 1970s when first described. The basic design of a RBFDP is, as its name suggests, a metal framework with an esthetic pontic that is resin bonded to natural tooth structure. Other terms utilized are the Rochette bridge (perforated metal retainers), the Maryland bridge (solid metal retainers), the Virginia bridge (particle-roughened retainers), the cast mesh FDP (utilizing a nylon mesh on the metal retainers), and several others that reflect their unique metal preparation technique.

Rochette Bridge



(Minami & Tanaka, 2013)

Maryland Bridge



(Minami & Tanaka, 2013)

Initial RBFDPs were conservatively prepared, but were found to have only short term success due to a high debonding rate. These failures led to further recommendations of altered preparation design including rest seats, grooves, struts, pits, guide planes, and occlusal channels of the abutment teeth. These recommendations significantly improved retention at the expense of more aggressive preparations. The adhesive systems that have become available have continued to improve, and with them the retention of these dental prostheses. Originally, polymethyl methacrylate (PMMA), and composite resins were used for adhesion of RBFDPs. Panavia came onto the market in 1983, and with it the fabled 10-MDP monomer. This new chemical was unique as it finally allowed for metal adhesion.

In the 1990s, all-ceramic RBFDPs were employed, especially in the anterior region to improve esthetics. The preparation design for these RBFDPs was changed to allow for the thickness of porcelain while ensuring an adequate amount of enamel was available for adhesive bonding. Unfortunately, this new material showed a relatively high fracture rate. Most of the fractures of these all-ceramic RBFDPs manifested as a unilateral fracture along the connector between the pontic and one of the retainers. It was noted in multiple studies that these fractured restorations remained in function for an extended period of time through their transformation into a single unit and a cantilevered prosthesis. This finding led to further clinical trials leading to altered restorative paradigm from a two-retainer to a one-retainer RBFDP. Shear and tensile forces originating from splinting multiple teeth together with differential movements were removed with the cantilever design, which had the end result of reducing the risk of fracture.



(Barwacz et al., 2014)

Most RBFDPs are prepared for missing anterior teeth, but posterior RBFDPs are also a viable alternative to traditional FDPs. Analogous to anterior prostheses, two-unit posterior cantilevered RBFDPs have better clinical retention than the three-unit RBFDP alternatives. This is due to the elimination of adverse interabutment stresses associated with fixed-to-fixed designs. However, posterior prostheses, particularly those located in the mandibular arch, have a higher failure rate, so if attempted they will require additional design features to be employed. Specifically an axial wraparound of 180 degrees on the retainer tooth is considered required for predictable success.

RBFDPs provide dental providers with another tool to care for their patients. This treatment modality can be overlooked by dentists due to a lack of familiarity and comfort with the operative technique. It is encouraged that providers investigate the abundant accumulation of dental research about this unique treatment approach. The table and headings shown below briefly discuss both advantages/disadvantages and indications/relative contraindications of the RBFDP procedure.

Advantages	Disadvantages
Minimal tooth preparation compared to FDP	Irreversible
Reduced cost	Uncertain longevity/prognosis
No local anesthetic (for minimal preparations)	No alignment correction
Potential for re-bonding of prosthesis	No space correction
Minimize periodontal involvement	Compromised esthetics for posterior teeth
Reduced chair time	Dependent on a good laboratory
Simplified impression	Plaque accumulation
Lack of pulpal involvement	Technique sensitive
Provisional not usually needed	

Indications: congenital partial hypodontia (especially in children and adolescents), caries and restoration free abutment teeth, short span edentulous site, maxillary/mandibular incisor replacement, periodontal splint, long term provisional, single posterior tooth replacement, post-orthodontic retention, patients with financial limitations, treatment for certain medically compromised patients

Relative Contraindications: patients with a deep vertical overbite, long edentulous span, bruxism/parafunction, inadequate posterior support, periodontally compromised abutment teeth, heavily restored abutments, insufficient enamel available for bonding, inadequate occlusal clearance

Special thanks to:

Col Nicholas Duvall, USAF

Lt Col James Renda, USAF

Disclaimer: This is for informational purposes. The USPHS acknowledges that this particular intervention may not always be appropriate in the public health setting.

References

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Category Day Agenda

Keynote Lecture "The Struggle for Oral Health in America"

- Oral Health in America: Advances and Challenges
- Treating the Bisphosphonate and Anticoagulated Patient
- Embracing a Culture of Safety in Dentistry
- Endodontics and Traumatic Injuries
- Current and Future Issues in Oral Health
 - Total CDE: 5.5 hours

Dental Category Social following at 6 p.m. at The Lola

April 11-13, 2022: National Oral Health Conference Fort Worth, TX

The 23rd National Oral Health Conference (NOHC), co-sponsored by the Association of State and Territorial Dental Directors (ASTDD) and the American Association of Public Health Dentistry (AAPHD), will be held in Fort Worth. NOHC offers educational sessions on a diverse array of topics by leaders in the field and is designed for dentists, dental hygienists, health researchers, dental/health educators, legislators, public health officials, Medicaid/CHIP dental program staff or consultants, state/territorial dental directors, county/city/local dental directors, community health center personnel, students, school-based and school-linked health center personnel, federally-employed dental personnel, as well as dental manufacturers/distributors and dental insurance companies – in short, anyone interested in engaging in collaboration to improve the oral health of the public.

April 10, 2022: Federal Dental Services Session at NOHC. As part of the National Oral Health Conference, the Federal Dental Services (FDS) will once again host a weekend workshop prior to the conference, led by the U.S. Public Health Service. Registration to NOHC is required, but this is a great opportunity for anyone – this session is not restricted to just the Federal Dental Services. Up to four hours of CDE credit will be available. Here is the planned lineup for the session from 12:00 p.m. to 4:30 p.m.:

- Lessons Learned: Preparing for the Next Pandemic, Casey Hannan, Director of the CDC Division of Oral Health (Keynote Address)
- Challenges & Opportunities in the Era of COVID by COL Scott Irwin (USAF), COL Paul Colthirst (USA), LTC Peter Drouillard (USA), CAPT Kathleen Buss (USN), and CDR Tequilla McGahee (USPHS)
- Using Data to Drive Antibiotic and Opioid Stewardship in Dentistry, Dr. Gretchen Gibson (VHA)
- Oral Health in America: Advances and Challenges, Key Messages, RADM Tim Ricks (USPHS CDO)

Early bird registration is open until February 21st at a cost of \$645 for members, \$850 for non-members, \$300 for students, and \$390 for one-day attendance.

[Click here to learn more about the conference.](#)

Online Oral Health Resources & Continuing Education Opportunities

[American College of Dentists Dental Ethics Course](#)

[American Dental Association Continuing Education](#)

[Academy of General Dentistry Continuing Education & Events](#)

[Centers for Disease Control and Prevention \(CDC\) Oral Health Resources](#)

[Colgate Continuing Education](#)

[Health Resources and Services Administration \(HRSA\)](#)

[Hu-Friedy Continuing Education](#)

IHS Division of Oral Health

[Early Childhood Caries Initiative](#)

[Online CE opportunities](#)

[Inside Dentistry Continuing Education](#)

National Institute of Dental and Craniofacial Research

[Dental Providers Oncology Pocket Guide](#)

[Practical oral health care for patients w/ developmental disabilities](#)

[National Maternal & Child Oral Health Resource Center](#)

Naval Postgraduate Dental School

[Clinical updates archives](#)

[Correspondence Course Program](#)

Northwest Center for Public Health Practice

[Basic Public Health principles study modules](#)

Ohio Department of Health, the Indian Health Service, and the Association of State and Territorial Dental Directors

[Safety Net Dental Clinic Manual](#)

Oral Cancer Foundation

[Oral cancer photos](#)

[Proctor & Gamble Continuing Education](#)

Do you have any suggestions for future issues of the Dental Category Newsletter?

Please contact the co-editors [CDR Titania Brownlee](#) or [LCDR Grant Abernathey](#)