

Prosthodontic Items of Interest

May 2004

Greetings from San Antonio!

I hope everyone is having a great year. It has been awhile since the last newsletter (Dec 2002) and many changes have occurred since that time. It has been nearly a year since BGen Gary Murray retired after 30 years of distinguished service to our country. By now, I'm sure many of you have met BGen Thomas S. Bailey, who serves as the Assistant Surgeon General for Dental Services. I know all Air Force Prosthodontists join me in wishing BGen Bailey well and stand ready to serve with their full support.

PERSONNEL ISSUES

Manning

We presently have 50 Prosthodontists on active duty. Of these 50, five are serving in non-clinical leadership positions that are not specifically prosthodontist authorizations. We also have a total of 12 residents in training, including three currently enrolled in civilian programs. Currently, there are 61 clinical/education authorizations leaving 16 positions unfilled. However, as Dental Care Optimization (DCO) continues to be implemented, some of our authorizations will go away (predominantly those already vacant). Another issue that will impact us all is the Chief of Staff's Force Development Initiative. Staying current on these vital issues is imperative and I refer you to *SGDetails,2003,Vol4* (https://kx.afms.mil/ctb/groups/dotmil/documents/afms/ctb_011261.pdf) for an excellent introduction and review. Currency on these topics can be maintained by visiting the Dental Knowledge Junction page of the Air Force Medical Service Website ([AFMS KX - Dental](#)) and reviewing the sections on DCO and the Dental Ops Panel.

Assignment Process

It's nearly time for the start of the FY05 assignment cycle. Please keep me informed regarding your assignment preferences. My goal is to take your information, consider the available openings and make the best assignment recommendation possible consistent with your desires and the needs of the Air Force. Captains, Majors and LtCols can call or e-mail me with their preferences. Colonels or Colonel selects should follow instructions sent by Col Baiornos to write or e-mail their preferences to him with a copy to their MAJCOM/SGD, Col Drane and me. Please feel free to call me prior to sending this message if you so desire. Remember, the earlier the better, especially if you are contemplating

retirement or separation. Prosthodontists presently assigned and their Date Arrived Station are listed on the attachments below.



ProsConus1.ppt



ProsOconus1.ppt

Promotions

Congratulations to the following members of the Pros community who have been promoted or selected for promotion since the last newsletter.

CY02 Central Selection Board:

Colonel:	Barbara King	Bolling
	Alan Sutton	Ramstein
Lt Colonel:	Chuck Snyder	Sheppard
Major:	Paul Longo	Langley
	Stephanie Fagen	Lackland

CY03 Central Selection Board:

Colonel:	Rich Batzer	Ramstein
	Will Dinse	Altus
	Bryan Dye	Wright Patterson
	Tom Marshall	Kunsan
	Paul Rogers	Lackland

EXPEDITIONARY NEWS

In the last edition of the newsletter, I attached a recount of Col Al Sutton's experiences while deployed in support of Operation Enduring Freedom. In response to the survey in the last newsletter, there have been a total of 6 deployments by Prosthodontists (which represents approximately 16% of the AF Prosthodontists on active duty) in support of OEF/OIF. Cols Al Sutton and Mark Mathews, Col (s) Bryan Dye, and Lt Cols Paul Schleier and Steve Taylor all deployed in a general dentistry role. Al Sutton stepped up and deployed twice within the span of one year. Thanks to all of these gentlemen for representing themselves and their country in an exemplary manner. Look for a story in an upcoming edition of the ACP Messenger featuring Paul Schleier and his deployment experiences.

The Maxillofacial Prosthetics department at Wilford Hall has been actively engaged in the intra and extra oral rehabilitation of several patients injured in Operation Iraqi Freedom. Maj Guillory and her fellow, Col (s) Miller have collaborated with the departments of Oral and Maxillofacial Surgery and Otolaryngology at Wilford Hall, as well as the Plastic Surgeons from the Burn Unit at Brooks Army Medical Center regarding the treatment of these patients. Many of us have seen the excerpts from the text *Management of War Related*

Injuries to the Jaws and Related Structures, (J.F. Kelly, editor) where it is stated that 10-15 % of war related injuries in Viet Nam involved the head and neck region. This publication goes on to state that the majority of these casualties required dental prostheses to complete their rehabilitation. Furthermore, a representative of the ADA recently stated during testimony before a congressional committee that nearly 50% of the injuries resulting from the conflicts in Iraq and Afghanistan involved head, neck or eye trauma.

RESIDENT NEWS

Congratulations To Our Newest Graduates!

June of 2003 brought four new prosthodontists into the corps. Captain Ryan Wayland completed his residency at Louisville and, after a brief stop at Maxwell AFB, made his way to Kadena AB. We welcome Ryan to the Air Force and look forward to getting to know him in the coming years. Three residents graduated from the Lackland program. Major Ray Rodriguez was awarded his M.S. degree by the University of Texas Health Science Center in May 2003 and has remained on staff at the Lackland residency. Major Andre Henriques was assigned to Yokota AB and Major Paul Longo moved to Langley AFB. Prior to completing their program, the three Lackland residents collaborated on a lecture presented to the Texas Section of the American College of Prosthodontists entitled, ***Prosthodontics Lessons Learned and Applied***. As in previous years, the PowerPoint presentation of this lecture is available through Col Pat Mattie (DSN 554-3717), if you desire a copy.

Congratulations to the most recent Prosthodontics Residency Selects!

Wilford Hall Medical Center/University of Texas HSC-SA

Capt Linda Coates	2004 start
2 nd Lt Jim Piper (HPSP)	2004 start
Maj Randall Griffin	2005 start
Capt Dan Bates	2005 start
Capt Cade Salmon	2005 start

Current Residents:

Wilford Hall Medical Center/University of Texas HSC-SA

Third Year: (2004 grad)

LCDR Francisco Veray, USN

Capt Robert Stover

Second Year: (2005 grad)

MAJ Charles Stock

CPT Mauricio Carota
CPT Geoffrey Gessel

First Year: (2006 grad)

MAJ Stephanie Fagen
MAJ Ryllis Rousseau
Capt Christina Elliott
Capt Judd Langley

Civilian Training - FAP or HPSP Education Deferment

Donald Schmitt (University of Indiana - 2004 grad)
Michael Brooks (Mayo Clinic - 2005 grad)
Jesse Smith (Marquette University – 2006 grad)

Maxillofacial Prosthetics Fellowship/Wilford Hall Medical Center

Col (Sel) Robert Miller, USA (2004 grad)

Resident Recruiting

Recent eligibility changes for application to residency training have complicated this already challenging task. The good news is that interest in prosthodontics training remains on the rise! I have spoken with many of you regarding interested and promising applicants. I really appreciate your efforts and ask you to remain diligent in this area. The complicating factor mentioned above is “timing”. As my friend Al Sutton would say, “Timing is key!” Prospective applicants that are presently enrolled as AEGD-1 or GPR students are eligible to apply, but are not eligible to begin training until the June after they formally graduate their present program. As in the case of one of our recent selectees, he will complete his AEGD-1 program in July of 2004 and begin his Prosthodontics Residency in June of 2005. So please continue to encourage applications from this valuable applicant pool, but advise them that they will have to wait approximately 18 months after selection, to begin training. Another group that has shown a strong interest in training is the dentist entering the Air Force from private practice. These applicants have been enthusiastic about starting training, however, timing of entry to active duty may result in a delayed start to training over the date originally anticipated. Health Professions Scholarship Program (HPSP) students in undergraduate dental school also continue to express interest in training. Please continue to encourage these students if you meet them during their visits to your base or your visits to their dental school. And, as always, if general dentists already practicing in the Air Force have an interest in prosthodontics, please have them contact me. The end result of the timing issue is evident when you observe that we are starting a class of 2 residents in June of 2004 but already have 3 residents selected for June of 2005. Please continue to beat the bushes for qualified applicants. The next selection board will be held 5-7 October of 2004 with the announcement of available

training slots probably occurring in June. Eligibility requirements and general information can be found at <http://afas.afpc.randolph.af.mil/medical/dental/>.

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AMERICAN BOARD OF PROSTHODONTICS NEWS

2003/2004 - Another Big Year for the Air Force!

With the annual release of newly board certified prosthodontists, I think to myself that there is no way to improve on the Air Force record in the future. I am happy to announce that I continue to be mistaken. The list that you see below is a testament to the quality of our residents and the support and dedication of their families in the pursuit of this high achievement. Congratulations! The entire Air Force Dental Corps is proud of you all.

I'd like to offer special congratulations to our three recent Lackland graduates, Majors Henriques, Longo and Rodriguez who accepted the challenge and took advantage of the new ABP requirements that allowed them to successfully complete their board requirements just 8 months following graduation.

Lt Col Jay Graver
Lt Col Allan Parke
Lt Col Martin Yules

Major Andre Henriques
Major Paul Longo
Major Raymond Rodriguez
Major Don Sheets
Major John Walton

New Guidelines!

In what seems to have become an annual event, please be aware that there have been additional changes to the certification requirements for the American Board of Prosthodontics. This year's change can be found on pages 6, 11, 13 and 16 of the attachment below. The changes deal with the option of accomplishing the written and one additional section of the exam during the third year of residency training, the option of completing all patient treatments for presentation while in training, guidelines for use of digital images for patient presentations and the new requirements for the Part 2 Case Presentation. It is no longer required to include a Fixed Partial Denture in this patient treatment.

The new requirement includes 2 crowns that restore natural teeth or implants and a Removable Partial Denture. The ABP proposed this change in order to remove the pressure to treatment plan a fixed partial denture when treatment with an implant would have been more appropriate as well as preferred by the patient.



ABP Certman Feb
04.doc

RESIDENCY NEWS

ADA Recertification

Both the Prosthodontics Residency and the Maxillofacial Prosthetics Fellowship were given rave reviews by the recent American Dental Association recertification inspection in November of 2003. Although the official results of the recertification process will not be announced until July, no discrepancies were noted for either program. Cols Pat Mattie and Rod Knudson as well as the rest of the staff spent countless hours making sure program documentation reflected the high quality of education we know is being delivered by the Air Force programs. I'd like to give a special thanks to Rod for postponing his retirement in order to guide the Fellowship through this challenging process.

Staffing Changes

We've had a large staff turnover since the summer of 2003. Lt Col Doug Ford left his position as Director of 1st Year Resident Education and Research and is now serving as the Director of the Kadena ADL. He has been replaced by Maj Ray Rodriguez, who is a 2003 graduate of the residency. Col Al Sutton has PCS'd from Lackland to Ramstein. Al's most recent position had been as Flight Commander of the Lackland Dental Laboratory Flight. Previously, he served at various times as Director of 1st Year Resident Education and Research as well as Director of Fixed Prosthodontics. His position as Laboratory Flight Commander has been filled by Col Chuck DeFreest. Perhaps the saddest change for me personally occurred with the retirement of Col Rod Knudson, after more than 27 years of active service in the Air Force. Rod was one of my mentors and was the Dean of Air Force Maxillofacial Prosthetics, having served as Program Director for the Fellowship for a total of eight years during two tours at Lackland. I am very pleased that Maj Bel Guillory has taken over as the Program Director for the Fellowship. Bel is the last fellow trained by Rod prior to his retirement. The staff, their areas of responsibility and their DSN phone numbers are listed below. Please don't hesitate to contact them if questions arise in their area of expertise or in any area for that matter.

Col Pat Mattie	Training Officer	554-3717
Col(S) Paul Rogers	Clinical Director	554-5132
Lt Col Bel Guillory	Maxillofacial Prosthetics	554-3838
Maj Ray Rodriguez	1 st Year Residents/Research	554-7058

Resident Research – Major Ray Rodriguez

Captain Rob Stover (Class 2004) is investigating the effect of hydroxyapatite (HA) crystallinity upon the induction of osteoclast formation and activation in vitro. Rob presented his research in Goteborg, Sweden at the International Association of Dental Research in June of 2003 where he was awarded 2nd place from over 30 international entries in the Annual Frechette competition. LCDR Francisco Veray (Class 2004) is investigating the effect of electrolyte concentration on osteoblast responses to anodized titanium.

Major Chuck Stock (Class 2005) is investigating the initial osteoblast response to metallic implants commonly used in dentistry and orthopedics. Chuck was awarded a \$2500 grant for his research efforts from the ACP. Captain Mauricio Carota (Class 2005) is investigating the effect of anodized oxide roughness and crystallinity on osteoblast cell response. Captain Geoffrey Gessel (Class 2005) is investigating the effects of modified poly lactic acid (PLA) films on osteoblast cell attachment. PLA is a polymer used as a scaffold in guided tissue generation. Dental applications include bone regeneration and ridge augmentation.

Major Stephanie Fagan (Class 2006) is conducting research concerning patients with obstructive sleep apnea (OSA). Her research involves using the Thornton Anterior Positioning (TAP) appliance along with a device that measures the level of obstruction and quantifies snoring in patients with OSA. She is evaluating which patients are successful with the TAP appliance, while attempting to correlate success with level of obstruction. Captain Christina Elliot (Class 2006) is researching bone formation on various implant surfaces. More specifically, she is evaluating Cox-1, Cox-2, and Cox-3 (inflammatory mediators) expression in response to arachidonic acid in osteoblasts grown on various titanium and titanium alloy surfaces. By selectively inhibiting each inflammatory pathway it is then possible to determine the influence of inflammation on early bone formation. Major Ryllis Rousseau (Class 2006) is researching a new tissue-engineering scaffold for bone grafting. A biocompatible calcium phosphate tissue scaffold was made from hydroxyapatite and tri-calcium phosphate. The scaffold will be tested for compressive strength and stability as tissues grow around them in a simulated body fluid. Captain Judd Langley's (Class 2006) research is focused on four different phospholipids coatings on titanium surfaces. The in-vitro study will use osteoblast-like cells to evaluate attachment, differentiation, and bone production on titanium surfaces.

AEGD-1 Curriculum Contribution

As in past years, Col Pat Mattie has sent copies of a CD containing 18 lectures and our classic literature review abstracts to all AEGD-1 and AEGD-2 Program Directors as well as all Prosthodontists serving on the teaching staffs for these programs. The lectures cover a wide range of topics on basic Prosthodontics and Obstructive Sleep Apnea. It also contains a copy of the Prosthodontics Residency Brochure and a digital presentation describing the residency program (Hint, Hint!). Please feel free to modify these presentations

with your own clinical cases and use them to supplement, enhance or (for first time educators) serve as a framework for your curriculum. Let us know if you have any suggestions for changes in the lectures or if any additional topics may be of interest.

CLINICAL TOPICS

Scope of Care

I direct your attention to the newly released (Jan 04) interim policy published as the Air Force Active Duty Dental Scope of Care. This policy has been implemented with the anticipation that a uniform DoD policy will eventually be enacted. The purpose of the policy is to attempt to control private sector care expenditures by eliminating variability in DTF referrals for elective care, while maintaining the oral health of the active duty force. The full text of the policy is available at https://kx.afms.mil/ctb/groups/dotmil/documents/afms/ctb_014824.pdf

Implant News

For some of us old timers, it is painfully obvious that implant dentistry has exploded since the days when we were limited to the old standard abutment, single tooth abutment and bar & clip restorative options on a standard diameter fixture. We have countless implant options regarding length, platform width and surface treatment. In addition, we now have numerous restorative options of custom, prefabricated as well as CAD-CAM abutments. And the choice of attachments is endless. But perhaps the most noteworthy change has been the move toward the use of an internal connection (estimated at 67% of the market in 2002) at the implant/abutment interface. Standardization and economy have dictated the previous recommendations of implant systems by the specialty consultants. With those principles in mind, the latest implant policy update (point paper attached below) now recommends the use of implant companies rather than implant systems. The important difference is the policy change now allows the use of internal connection implants within the confines of the recommended systems. By recommending use within these companies, a level of standardization and economy can still be maintained while enabling the providers to choose the appropriate implant/abutment interface for the particular clinical situation. This point paper, together with the current Air Force Clinical Practice Guidelines https://kx.afms.mil/ctb/groups/dotmil/documents/afms/ctb_007258.pdf, should be reviewed in order to fully understand the new implant policy. The implant policy will be reviewed biannually with changes being dictated by the availability of new clinical options, as stated in the point paper.



Point Paper on
Implants_4 Apri...

Dental Implant Complication Kit

LtCol Doug Ford authored the original Complication Kit in the 2000 Prosthodontics Newsletter. Doug was able to provide information and instrument recommendations for bases as minimum armamentaria to troubleshoot and treat complications with implant patients. The information is now offered in an updated version (attached below) courtesy of Col (Sel) Paul Rogers. The information is targeted to smaller bases that don't have an implant program, but it may also be useful to those assigned to larger bases with viable implant programs.



Managing Dental
Implant Compli...

Treatment Planning the Multidisciplinary Patient

One of the greatest challenges faced by the Lackland residency staff is teaching the residents to organize their thoughts and devise a comprehensive, logically sequenced multi-disciplinary treatment plan. Over the years, many forms have been used in an attempt to simplify this process. Many terrific Air Force Prosthodontists have contributed to numerous iterations of these forms; Chuck DeFreest, Chris Minke, Al Sutton, and Doug Ford to name a few. Recently, Col Pat Mattie collected the forms being used here at the residency and blended them into, what I think is a very complete, user-friendly version. The form enables the provider to easily organize diagnostic information and utilize a phased approach to arriving at a comprehensive treatment plan. This form has been well received by our staff and residents. I am passing it along to you to use, modify or discard as you see fit. One of the attachments below contains the form and the other provides an explanation for its intended use. Thanks to those named and unnamed Prosthodontists that contributed along the way.



Patient Evaluation
and Treatme...



Tx Plan Form
Explanation.doc

ACP ANNUAL SESSION - DALLAS 2003

Although it was not as well attended as the last couple of meetings, it was good to see approximately 35 active and retired Air Force Prosthodontists in Dallas. The Air Force was highly visible throughout the meeting. Maj Lars Bauma got the ball rolling by participating in the Board Preparation Course with the presentation of a case he used to challenge the Board in 2002. Col (s) Paul Rogers represented the Air Force Residency at the Educators and Mentors meeting. The incorporation of surgical placement of implants by prosthodontics residents into the residency curriculum was the primary topic of discussion. The revised accreditation standard, while emphasizing involvement in all aspects of implant dentistry, does not require residents to surgically place implants. LCDR Francisco (Kiko) Veray competed well in the Table Clinic competition with his presentation entitled ***Esthetic Removable Partial Dentures: Design***

Considerations. Paul Rogers contributed his expertise as a judge for the competition. The annual luncheon was also noteworthy for Air Force Prosthodontics. Of the 16 newly board certified Prosthodontists, 4 were Air Force members. In addition, Dr. Jesse Smith, an Air Force HPSP-education deferred 1st year Prosthodontics resident at Marquette, was awarded the “Best of the Best Student Prosthodontic Award” by Waterpik Technologies. The award was given to the senior dental student in a nation-wide competition, for excellence in Prosthodontics. Congratulations Jesse! We look forward to seeing you in the blue suit after your graduation in 2006. The Air Force reception was well attended. As always, it was a great opportunity to get together, renew acquaintances, and make new friends. I hope to see everyone in Ottawa in October.

AAMP ANNUAL SESSION – SCOTTSDALE 2003

Four members of the Air Force Maxillofacial Prosthetics community attended the 2003 annual session. Cols Rod Knudson, Alan Newton, Tom Schneid and Maj Bel Guillory were in attendance. Col (s) Robert Miller USA, this year’s Maxillofacial Prosthetics fellow also attended. Rod Knudson represented the Air Force at the Education and Mentors meeting where finishing touches on the revised ADA accreditation standards was primarily emphasized. Col (s) Miller displayed a very interesting poster presentation dealing with the use of obturators for treatment of patients with pharyngeal stenosis caused by complications from Uvulopalatopharyngoplasty (UPPP). The annual scientific session started off with Maj Bel Guillory being presented the Academy’s Joe B. Barron Award. This award is given in honor of one of the founders of the AAMP, Dr. Joe B. Barron, to the resident/fellow or recent graduate who demonstrates excellence and potential in the areas of scholarship, research and compassionate care of the Maxillofacial Prosthetics patient. This was a tremendous honor for Bel and her selection continues to emphasize the quality and dedication of our residents/fellows. Military dentistry was well represented during the main scientific session, with the Air Force, Army and Navy all delivering first-class lecture presentations. The Air Force was represented by Maj Guillory who discussed how new technologies are impacting and improving the treatment of the Maxillofacial Prosthetics patient.

ADA NEWS

Please continue to support the ADA. For those of you who are not members, please seriously consider joining. There are reduced dues options for new and recent graduates. Many of the recent improvements to our pay and benefits would not have been possible without the support of the ADA. Currently, there are multiple dues payment options available and a direct line to ADA Federal Dental Services information on the website at www.ada.org. Thanks, to those of you who continue to support the ADA with your membership.

ORGANIZED DENTISTRY

One of the best ways to help encourage young dentists to consider the Air Force (and hopefully Prosthodontics) as a career, is to have our people take an active role in many of the prominent dental forums available to us today. By stepping forward, we not only show the best the Air Force has to offer to young dentists, but also emphasize the quality of Air Force professionals to civilian educators. When the time comes to advise dental students on a career choice, these educators become more likely to include the Air Force Dental Corps among the options presented. With that in mind, a portion of this newsletter has highlighted national involvement in our societies professional meetings. In addition, a few of us have taken an active role in organized dentistry activities. Col Pat Mattie serves as the Vice President (President elect) of the Texas Section of the American College of Prosthodontists. Col Tom Schneid is a member of the AAMP Federal Services Special Interest Group and serves on the Editorial Review Board for the Journal of Prosthodontics. In addition, he serves as a member of the ACP Graduate Student Recruitment Subcommittee and as Chairman of the ACP Federal Services Special Interest Group. **Regarding the ACP Special Interest Group, please let me know if you have any ideas on how the ACP can offer assistance to the Air Force Prosthodontist on issues unique to our military practice.** I'm sure some of you also have involvement with committee appointments or in other prominent roles involving educational or organized dentistry forums. Please let me know how you have become involved and take the chance, whenever possible, to encourage involvement among your Air Force colleagues.

TRANSITIONS

Members Who Have Moved in FY 2003

	From	To
COL Neal Andren	Spangdahlem	Air Force Academy
COL Gary Braun	Scott	Nellis
COL Steve Curtis	Kadena ADL	Spangdahlem
COL Chuck DeFreest	Ramstein	Lackland Lab
COL Randy Duncan	Ramstein ADL	Peterson ADL
COL Dennis Kelly	Hickam	Travis
COL(S) Barbara King	Little Rock (Dental Flt CC)	Bolling (Air Staff)
COL(S) Tom Marshall	Kadena	Kunsan (Dental Flt CC)
COL Mark Mathews	Wright Patterson	Keesler
COL Alan Newton	Maddill (Med GP CC)	Offutt (Med Gp CC)
COL Al Sutton	Lackland Lab	Ramstein
LTC Earnest Dabreo	Travis	Wright Patterson
LTC Doug Ford	Lackland	Kadena ADL
LTC Jay Graver	Bolling	Sheppard (Lab Training)
LTC Guillermo Oracca	Yokota	Bolling

LTC Paul Schleier	Langley	Barksdale
LTC Steve Taylor	Barksdale	Hickam
LTC Joe Villalobos	Keesler	Ramstein ADL
Maj Bel Guillory	MF Fellowship	Lackland
Maj Andre Henriques	Resident	Yokota
Maj Paul Longo	Resident	Langley
Maj Ray Rodriguez	Resident	Lackland
Capt Ryan Wayland	Univ of Louisville	Kadena

Retirements/Separations.

FY 03

Col Doug Evans
 Col Mike Horsley
 Lt Col Dave McMichael
 Maj Stu Rimes

FY04

Col Rod Knudson
 Lt Col Alan Linehan
 Lt Col Scott Draper

KUDOS

Congratulations are in order for Major Don Sheets who was just named the 2003 USAF Junior Dental Officer of the Year. This is a tremendous honor, and one that I know is well deserved. A list of award winning prosthodontists or prosthodontics residents is found below. Please e-mail me if I've forgotten anyone.

Maj Bel Guillory – 2003 Joe B. Baron Award (AAMP)
 Maj Don Sheets – 2003 USAF Junior Dental Officer of the Year
 Dr. Jesse Smith – Best of the Best Student Prosthodontic Award
 Maj Chuck Stock – Prosthodontics Research Grant (ACP)
 Capt Rob Stover – 2nd Place 2003 Frechette Competition (IADR)

SIGNING OFF

In closing, I'd like to say that I'm extremely proud to be your representative. As a group, you continue to exceed all requirements and expectations. Whether it's deploying in direct support of our war fighters or stepping up to the challenge of a leadership position outside the field of Prosthodontics, you consistently excel. As clinicians, you provide the highest quality prosthodontic care in the world. As educators, you provide mentorship to our young dentists by teaching our AEGD 1 and AEGD 2 residents the skills they need for the dual function of deployment and the effective treatment of Air Force patients. And last but not least, those of you teaching in the Prosthodontics Residency selflessly devote countless hours to keep the Prosthodontist pipeline flowing. Thanks for all you do.

Tom

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Prosthodontists in CONUS - Dec 2003



Additional Prosthodontists Assigned

- Newton Col 03 - Med Gp Commander – Offutt AFB
- King Col (S) 03 – Office of the Surgeon General Bolling AFB
- Dinse Col (S) 02- Dental Flight Commander – Altus AFB

AEGD-2 Residency

- Potter Col 99
- Parke Lt Col 02

Lackland Lab

- DeFrest Col 03

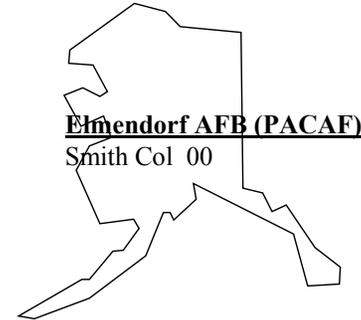
Maxillofacial Fellow

- Fagen Maj-06
- Elliott Cap-06
- Langley Capt-06
- Miller Col (S) USA-04

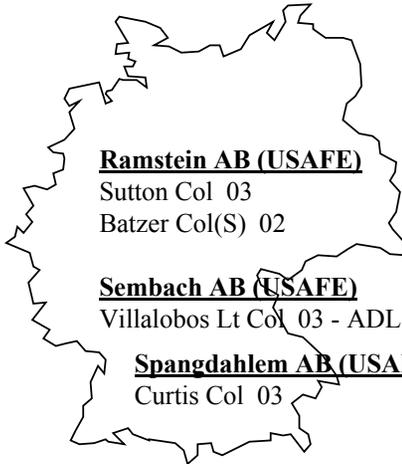
Prosthodontists in OCONUS - Dec 2003



Lakenheath AB (USAFE)
Schreiner Lt Col 02



Elmendorf AFB (PACAF)
Smith Col 00



Ramstein AB (USAFE)
Sutton Col 03
Batzler Col(S) 02

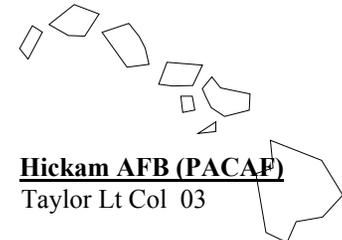
Sembach AB (USAFE)
Villalobos Lt Col 03 - ADL

Spangdahlem AB (USAFE)
Curtis Col 03



Yokota AB (PACAF)
Henriques Maj 03

Kadena AB (PACAF)
Salamander Col 01
Ford Lt Col 03 - ADL
Wayland Capt 03



Hickam AFB (PACAF)
Taylor Lt Col 03

Additional Prosthodontists Assigned

Marshall Col (S)- Dental Flight Commander- Kunsan AB

GUIDELINES

for the

Certification Process

American Board of Prosthodontics

Revised-----February 18, 2004

Effective February 18, 2004

www/prosthodontics.org/abp

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MISSION STATEMENT

The American Board of Prosthodontics

The mission of the American Board of Prosthodontics is to certify individuals who have demonstrated special knowledge and skills in prosthodontics. The Board also seeks to certify those who are committed to life-long learning and a lifetime of ethical practices, who value the doctor/patient relationship, who respect those with philosophical, cultural or physical differences and who are committed to the advancement of prosthodontics.

The American Board of Prosthodontics recognizes its responsibility to the profession and to the public and accepts this responsibility through the administration of an examination designed to identify individuals with the knowledge, skills and attributes deemed important to those who will be called Diplomates of the American Board of Prosthodontics.

GOALS

The American Board of Prosthodontics

1. Assure that Diplomates meet certain knowledge and skill criteria and issue certificates to these individuals indicating they have met the established criteria. Bylaws, Article II, Section 1 and Article VIII, Section 1.
2. Assure that Diplomates maintain continued proficiency in prosthodontics. Bylaws, Article VIII, Section 4.
3. Provide the public and profession with information regarding individuals who are Board Certified. Bylaws, Article I, Section 2; Article XII, Sections 1 and 2.
4. Encourage the specialty to advance itself through Board certification.

History of the American Board of Prosthodontics

The American Board of Prosthodontics was incorporated on February 21, 1947, in the State of Illinois. Following preliminary organizational efforts by the Academy of Denture Prosthetics, the Board, at the request of the American Dental Association, was established as the specialty certifying body for prosthodontics. The following nine founder board members were duly elected from the membership of the Academy of Denture Prosthetics during the annual session at Miami, Florida in October 1946: Drs. C. J. Stansbury, R. H. Kingery, O. M. Dresden, Bert L. Hooper, David McLean, F. C. Elliot, I. R. Hardy, C. O. Boucher, and R. M. Tench. There were 64 members of the Board representing the Academy of Denture Prosthetics, American Denture Society (now the American Prosthodontic Society), and the Pacific Coast Society of Prosthodontics.

The first Board examination was given in 1949 and included written essays and oral and clinical components during a one-week session. To be eligible for the certifying examination prior to January 1, 1964, the applicant had to present evidence either of prosthodontic training or of having spent 10 years in the practice of dentistry with special interest in prosthodontics. Thereafter, formal educational requirements included a Master of Science degree in prosthetic dentistry or the equivalent from an American Dental Association-approved or provisionally approved dental school.

In 1951, Canadian dentists became eligible for certification. After Board approval of several hospital residency and internship programs in prosthodontics during 1952, successful candidates from these programs and others established since were adjudged to have satisfied the requirements for examination. On January 1, 1954, the eligibility requirements were changed to include formal educational experiences such as a Master of Science degree in prosthetic dentistry or its equivalent from a dental school approved or provisionally approved by the American Dental Association. Minor changes in examination procedures were made in the ensuing years, and in 1957, the Board accepted the responsibility for examining candidates in fixed prosthodontics.

The written part of the examination was changed from an essay to an objective form in 1960, and consideration was given to dividing the week-long examination into two separate parts. Additional study of the phased procedure culminated in application of the concept in 1962. Also during 1962, the American Dental Association House of Delegates changed the eligibility requirements for Board candidates by making mandatory two years of formal advanced education in prosthodontics for individuals applying after January 1, 1965. From 1962 to 1987, a Phase I examination consisting of the written, oral and patient presentation parts was given each February, followed in June by Phase II which consisted of clinical and oral parts. In 1987 the Phase I oral examination was lengthened to one hour to include the patient presentation, the broad areas of prosthodontics, and the related basic and applied sciences. The Phase II oral examination was eliminated.

At the request of the Federation of Prosthodontic Organizations and the American Academy of Maxillofacial Prosthetics in 1967, the Board, with American Dental Association sanction, accepted the responsibility for including maxillofacial prosthetics as a component area of prosthodontics for competency certification. In 1974, provision was made for candidates to elect to take the clinical examination in maxillofacial prosthetics.

Recognizing the growing complexity of the prosthodontic specialty and the need for a broader Board membership base, the Academy of Denture Prosthetics (now the Academy of Prosthodontics), in 1972, relinquished sponsorship of the Board in favor of the Federation of Prosthodontic Organizations.

In 1987, the American Dental Association mandated that prosthodontics would be recognized as a single specialty including fixed, removable, and maxillofacial prosthetics and that advanced educational programs in prosthodontics must provide education and training in all of these areas. Recognizing a need for a more comprehensive examination to reflect these changes in the standards for Advanced Education in Prosthodontics, the Board, in 1990, announced significant changes in the examination format to more accurately evaluate candidates' knowledge and clinical proficiency in all aspects of Prosthodontics (fixed prosthodontics, removable partial prosthodontics, complete denture prosthodontics, maxillofacial prosthetics, implant prosthodontics, and occlusion). Following a transition year during 1991, the Phase I examination was expanded from one half day to a full day. The oral and patient presentation parts were expanded and moved to the Phase II examination and the onsite clinical examination was discontinued. An additional written examination covering clinical prosthodontics was also incorporated into the Phase II examination.

In 1988, the Federation of Prosthodontic Organizations designated the American College of Prosthodontists as the sponsoring organization of the Board within the structure of the Federation of Prosthodontic Organizations. In 1992, the Federation of Prosthodontic Organizations designated and the ADA Council on Dental Education recognized the American College of Prosthodontists as the sponsoring organization for the specialty of prosthodontics and the sponsor of the American Board of Prosthodontics.

To simplify describing the examination, the various parts were numbered from 1 to 5 in 1993. The Part 1 examination is a half-day comprehensive written examination. Parts 2, 3 and 4 consist of evaluating 3 patient treatments that include oral examinations of the candidate. The candidate makes a slide presentation of the patient treatment for Parts 3 and 4. The Part 5 examination was a three (3) hour examination which was incorporated into the Part 1 examination in 1996 by increasing the size and scope of the Part 1 examination.

To provide more flexibility for candidates to complete the examination process, recent additional modifications have been made. In 1996 candidates were given the option of taking the Part 1 written examination during the 3rd year of their prosthodontic training program, prior to establishing board eligibility. Additionally, in 2003 candidates were given the option of performing all patient treatments (Parts 2, 3, and 4) during their training program and the possibility of taking one of the patient presentation examinations during the February examination period in their final year of training.

The primary objective of the American Board of Prosthodontics continues to be the determination of the proficiency of eligible candidates who desire certification in prosthodontics.

DEFINITIONS

Prosthodontics is that branch of dentistry pertaining to the restoration and maintenance of oral function, comfort, appearance and health of the patient by the restoration of natural teeth and/or the replacement of missing teeth and contiguous oral and maxillofacial tissues with artificial substitutes.

Removable Prosthodontics is that branch of prosthodontics concerned with the replacement of teeth and contiguous structures for edentulous or partially edentulous patients by artificial substitutes that are removable from the mouth.

Fixed Prosthodontics is that branch of prosthodontics concerned with the replacement and/or restoration of teeth by artificial substitutes that are not removable from the mouth.

Implant Prosthodontics is that branch of prosthodontics concerned with the replacement of teeth and contiguous structures by artificial substitutes partially or completely supported and/or retained by alloplastic implants.

Maxillofacial Prosthetics is that branch of prosthodontics concerned with the restoration and/or replacement of stomatognathic and associated facial structures by artificial substitutes that may or may not be removed.

General Statement of Purpose

The American Board of Prosthodontics was organized by the Academy of Denture Prosthetics at the request of the American Dental Association for the following purposes:

To advance the science and art of prosthodontics by encouraging its study and improving its practice.

To determine the eligibility of candidates within the regulations for qualification for examination.

To conduct examinations to determine the proficiency of applicants for certification as Diplomates.

To grant and issue Diplomate certificates to successful candidates.

To maintain a roster of Diplomates for the general information of the public, the dental and medical professions, dental schools, and health agencies.

Certification for the Specialty of Prosthodontics

By the authority of the American Dental Association and its Council on Dental Education, certificates may be issued by the American Board of Prosthodontics, which will attest to an applicant's knowledge, ability and proficiency in the specialty of prosthodontics.

Any dentist who meets the qualifications as set forth in this booklet may become a candidate for certification by making formal application to the American Board of Prosthodontics. The American Board of Prosthodontics will not discriminate against any person because of race, color, religion, sex, national origin, ancestry, age, marital status or handicaps. Please note that language is not a physical disability for testing purposes.

Diplomates of the American Board of Prosthodontics are expected to announce and limit their practice to prosthodontics.

Limited Practice—Dentists who have successfully completed an advanced prosthodontic education program which is accredited by the Commission on Dental Accreditation may ethically limit their practice to prosthodontics, subject to individual state guidelines.

Educationally Qualified—An individual is considered Educationally Qualified after the successful completion of an advanced educational prosthodontic program which is accredited by the Commission on Dental Accreditation. However, an individual is not Board Eligible unless his/her application has been submitted to and approved by the Board and his/her eligibility has not expired.

Board Eligible—Sometimes there is confusion regarding the use of the phrase board eligible. Individuals are not board eligible upon completion of their advanced education program in prosthodontics. Individuals are educationally qualified upon completion of a program which is accredited by the Commission on Dental Accreditation. They become board eligible only when their application for certification has been submitted to and approved by the Board.

Dentists trained in Canada are eligible for certification by the American Board of Prosthodontics under the same rules governing candidates from the United States, except that Canadian dentists must present to the Board evidence of parallel qualifications in Canada in all categories required for candidates trained in the United States.

Duration Of Eligibility—The period of Board eligibility begins on the date when the individual's application is accepted and approved by the Board and is extended to the candidate for six (6) consecutive years. However, Board eligibility status will be forfeited if the Part I written examination is not taken within two (2) years of eligibility. Although eligibility may be re-established by re-application, all phases of the examination must be successfully completed within six (6) years of initial eligibility. No re-applications are acceptable after this six (6) year period unless, upon consultation with the applicant, the Board determines that unusual extenuating circumstances warrant an extension of the duration of eligibility. Graduate students/residents taking Part I during a prosthodontic training program

will not be considered Board eligible until formal application is made to the Board for examination in parts 2, 3, and 4. Taking the Part I examination as a graduate student/resident will not begin the eligibility status of the candidate. A candidate who passes the Part 1 examination during the final year of their training program must apply for Board eligibility within six years of the examination date. Those who apply for Board eligibility after the six year period will be required to take Part 1 again. Board eligibility of 6 years begins only after formal application to and acceptance by the Board.

Graduate students/residents wishing to take one of the patient presentation examinations (Part 2, 3, or 4) during the final year of training must apply for and receive notice of eligibility prior to taking the examination during February of the final year of training. The 6 year period of eligibility begins on the date eligibility is awarded, during the third year of training.

Diplomate—Any dentist who has successfully met the requirements of the Board for certification and remains in good standing.

Role of the Board and its Examiners in the Evaluation Process

An examiner has been described as one who works in examining records or people and who tests by careful questioning in order to find out the knowledge, skill and qualifications of a candidate. Since its inception, the primary objective of the Board has been, and will continue to be, the protection of the public through determination of the competency of eligible candidates who desire certification as specialists in prosthodontics. The Board is an examining and certifying body. It remains independent from political issues and is not directly responsible for the education of the candidates. It has been, and will continue to be the position of the Board, that candidates be examined by the current standards approved by the Commission on Dental Accreditation for advanced education programs in prosthodontics. The Board is not static or unchanging. These changes occur, however, only after a great deal of study and thought. The Board strives to be fair and objective in all its relationships with candidates. It abides by the rules which are in effect, but seeks to modify the guidelines and examining procedures whenever it appears that such changes could benefit those persons it serves: the public, the profession, the specialty, the certified diplomates, and the candidates seeking diplomate status.

Criterion Based Evaluation Increases the Validity and Reliability of the Examination

Individuals knowledgeable in testing have emphasized that any system of evaluation must be objective if it is to be considered valid and reliable. The Board has always strongly advocated eliminating subjectivity in its certification process. Its dedication to improving the examinations will be ongoing. Criterion-based evaluation has been presented as a method of increasing the validity and reliability of an examination. Therefore, it should come as no great surprise that the Board devoted a great deal of effort during the early 1980's to developing criterion statements for the different phases of its certification process. Finally, in February of 1985, the first criterion-based examination was conducted to evaluate the performance of one candidate in the Part 2 patient presentation. During this initial experience, both the traditional and the criterion-based method were used in the evaluation of the candidate's performance. Using both methods the Board could make a paired comparison of the two

and judge the efficacy of the new system. The criterion statements developed by the Board for the patient presentation included: records, the narrative, fixed prosthodontics, removable partial prosthodontics, maxillofacial prosthetics, and occlusion. Each member of the Board was requested to evaluate the candidate's performance in each of the areas using the criterion statements. The criteria were written as objective descriptions of acceptable, marginal, or unacceptable levels of skill or performance. In selected areas the acceptable and unacceptable levels were further divided into two subsets. To evaluate a candidate's performance at a specific task, the Board member selected the category (acceptable, marginal, or unacceptable) in which the criterion statement best matched the candidate's skill at performing the examined task. The Board member then checked the appropriate numerical value on the candidate's score sheet: (acceptable 1 or 2, marginal 3 or unacceptable 4 or 5).

In the initial evaluation of the criterion-based examination, the Board examiners experienced agreement or near agreement in almost every category. As a result of this early effort, the Board adopted the process of a criterion-based examination for use in all phases of the examination. Since 1985, the Board has expended great energy in developing and field testing the criterion statements for each examination.

The specific criterion statements for Parts 2, 3 and 4 of the certification process appear at the end of this document. An explanation is also provided on how the Board uses the scores received by each candidate to determine pass/fail outcomes. This document represents the Board's efforts to date and is subject to change. The Board reserves this "right to change" as its responsibility to those it serves. The purpose in publishing this material is to better inform any and all persons who are interested in the certification process, and it is hoped that it will assist candidates in preparing for the examinations.

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Required Qualifications for Examination

A candidate for examination by the American Board of Prosthodontics must:

1. Have satisfactory moral and ethical standing in the dental profession.
2. Show evidence of satisfactory completion (or anticipated completion) of advanced education in Prosthodontics as defined in the American Dental Association document entitled Requirements for Advanced Specialty Education Programs in Prosthodontics.

Advanced education in a recognized specialty area of dentistry may be offered on either a graduate or postgraduate basis.

- a. A graduate program is a planned sequence of advanced courses leading to a master's or doctoral degree granted by a recognized and accredited educational institution.
 - b. A postgraduate program is a planned sequence of advanced courses that leads to a certificate of completion in a specialty recognized by the American Dental Association. The level of specialty-area instruction in the graduate and postgraduate programs must be comparable.
3. Meet the requirements to be Board Eligible.

Upon submitting an application, (which must include certified evidence of the successful completion of an accredited program in advanced Prosthodontics) and all other certified documents required by the application and having such applications approved by the Board, a candidate for certification becomes Board eligible.

Application Procedures

Requests for information or application forms should be directed to the Executive Director of the American Board of Prosthodontics.

After having answered all questions and submitted all data requested, (to include either “certified true copies” or university copies certified by the registrar of completion of advanced education in prosthodontics or a letter from the program director stating that the applicant is expected to complete the training program within the expected time frame), the applicant must mail the application form back to the Executive Director. The candidate must include the application fee with the completed form. The fee is not refundable, either in the event of acceptance or rejection by the Board.

NOTE: Incomplete forms will not be considered by the Board. If any item is left blank or is not answered completely, a clearly detailed statement should be made setting forth the reason the information is not available. All transcripts, certificates, or diplomas must be notarized copies.

After the Executive Director has reviewed the completed application, the candidate will be informed of their eligibility status and of the date and place of the next examination.

Fees

There is an application fee plus a fee for each part of the examination. The application fee must accompany the application. The fee schedule is as follows: application fee \$150, each Part of the examination will be \$200 and a re-examination fee for each Part will also be \$200. The appropriate fee must be paid to the Executive Director at the time the candidate, in writing, signifies they intend to take a portion of the examination. All fees must be paid in United States currency.

The Examination

The examination shall include the principles and procedures of fixed prosthodontics, occlusion, removable prosthodontics, implant prosthodontics, maxillofacial prosthetics, and related arts and sciences. It shall consist of a written examination, patient presentations, and oral examinations. The examination is conducted in four parts.

The Part 1 Examination is a written examination given during the month of February each year. The candidate may take the written examination in February of the third year of their prosthodontic training program, prior to establishing Board eligibility. An individual whose prosthodontic education extends beyond 3 years may take Part 1 in their third year. The program director must certify that the candidate is in their 3rd year of the program.

Parts 2-4 are patient presentations that include oral examinations. Board eligible candidates may take any or all of Parts 2-4 in any order, at either the February or June examinations.

Graduate student/resident candidates may take one of the patient presentation examinations (Part 2, 3, or 4) during the February examination period of the third year of training in addition to the written Part 1 examination. All patient treatments presented may have been performed during the training program. At least one of the patient presentations (Parts 2-4) must include implant prosthodontics.

The candidate should be aware that the entire examination must be completed within 6 consecutive years from the date Board eligibility was initially approved.

English is the official language of the American Board of Prosthodontics.

Candidates may utilize digital photographs and radiographs provided no alterations of the images have been performed with the exception of peripheral cropping. Any alteration will result in automatic failure of the candidate. Candidates wishing to present using digital image records for parts 3 and/or 4 must provide both their own computer and digital projector. If the candidate is unable to present due to technical difficulty, their next opportunity to take the examination will be during the next semiannual examination. A signed statement that no alteration has occurred must be included with each patient presentation. A printed copy of all photographs and radiographs used during the presentation must be provided at the time of examination. Digital photographs must be converted to prints for Part 2. They may be converted to slides for Parts 3 and 4.

Description of Part 1

The Part I examination is constructed by a subcommittee of the Board and is reviewed by the full Board. One-hundred seventy-five questions are chosen from a bank of test items catalogued by subject area. Some questions from the bank may have appeared in a previous examination and have been retained for use in subsequent examinations because they are relevant and deal with the knowledge and skills required to practice the specialty of prosthodontics. New questions submitted by mentors of advanced education programs, Board consultants, and Board members are continually added to the question bank.

The test is evaluated by question analysis for difficulty and discrimination. An item discriminates well if candidates who performed well on the total exam responded correctly to that item more often than candidates who performed poorly on the exam. Questions will also be analyzed with accepted testing methodologies to determine their reliability and validity. Only those questions deemed appropriate will be maintained within the test item bank. Those questions not meeting accepted criteria will either be discarded or rewritten.

The content of the examination is based upon the Standards for Advanced Specialty Education Programs in Prosthodontics and is updated to reflect changes in those standards. There are 4 current categories of must statements in the didactic curriculum section of the standards: one at the in-depth knowledge level, two at the understanding level and one at the familiarity level. The distribution of knowledge levels within the standards is reflected in the number of questions, weighted from in-depth to familiarity in each area. The current standards emphasize the following didactic areas:

Instruction must be provided at the in-depth level in each of the following:

Fixed partial prosthodontics

Implant prosthodontics
Occlusion
Removable prosthodontics

Instruction must be provided at the understanding level in each of the following:

Applied Pharmacology
Biomaterials
Craniofacial physiology
Diagnostic radiology
Geriatrics
Growth and aging
Head and neck anatomy
Maxillofacial prosthetics
Medical emergencies
Oral pathology
Preprosthetic surgery including
implant placement
Temporomandibular disorders and
facial pain

Instruction must be provided at the familiarity level in each of the following:

Biostatistics
Endodontics
Orthodontics
Periodontics
Practice management
Research methodology

In addition to these areas, questions from current prosthodontic literature and other related areas will complete the 175 question written examination. Candidates are given 4.5 hours to complete the examination.

Scoring the Written Examination

The examination is computer scored. The Board policy, although subject to approval at each Part I examination, has been that one standard deviation below the mean score achieved by the candidates on the 175 question examination will be used to determine the passing grade for the written examination.

Description of Part 2

Part 2 shall be a patient presentation and an oral examination of approximately one hour in length. The examination is tape recorded and will cover the patient presentation, general prosthodontics and related dental sciences. Successful completion of this part of the examination will require acceptable performance by the candidate in all three categories.

Candidates must submit a patient history and treatment record of a patient for whom the required fabrication of at least one removable partial denture has been completed. The patient treatment must also include at least two crowns. The crowns may restore natural teeth or dental implants and may be in

either arch. If all of the required prostheses are in the same arch, the opposing arch may include an appropriately restored natural or artificial dentition.

Format for Part 2 Presentation

A narrative must accompany each patient presentation. The typed narrative must be legible, double spaced and must not exceed eight (8.5 x 11 inch) pages. To promote readability, 10 point font size or larger is required with no kerning. Font styles such as Geneva or Helvetica should be used.

The aspects of therapy must be described in the following order:

Page 1. History and chief complaint

Page 2. Clinical findings

Page 3. Diagnosis

Page 4. Treatment plan

Page 5. Treatment

Page 6. Treatment

Page 7. Instructions to patient and Post-treatment therapy

Page 8. Prognosis

In addition to the narrative, the candidate must include:

1. Pretreatment Records.
 - a) A complete periapical radiographic series made prior to therapy (original radiographs only).
 - b) Pre-treatment casts. If the patient has removable prostheses prior to treatment, casts should be presented with and without the prostheses in place. The casts without the prosthesis in place should be mounted.
 - c) Pre-treatment color photographs (no transparencies accepted) should be 3.5"x5" or 4"x6". Photographs must clearly show at least:
 - teeth in maximum intercuspation
 - teeth in right and left working and non-working positions (frontal and lateral views)
 - teeth in protrusion (frontal and lateral views) occlusal views of maxillae and mandible.If patient has removable prostheses prior to treatment, photographs should be made with and without the removable prostheses in place.

Photographs shall be properly exposed, printed, and positioned to visually augment the narrative sequence. An appropriate descriptive legend should accompany each photograph.
2. Color photographs clearly showing the occlusal view(s) of tooth preparations.
3. Post-treatment Records.
 - a) A complete periapical radiographic series made after completion of therapy (original radiographs only).
 - b) Mounted casts with the prostheses in place.

- c) Post-treatment color photographs of the same size as the pre-treatment photographs and showing the same views. Photographs should be made with and without removable prostheses in place.
4. Articulated casts with diagnostic wax patterns, if used.
5. Articulated casts and dies used in fabricating the fixed restorations.
6. Duplicate master cast(s) showing the design of the removable partial denture(s).

Indicator tabs must be placed on pages 1-8 to facilitate location of these pages.

Radiographs must be of diagnostic quality and easily removable from the book. Pre-treatment radiographs must follow page one and post-treatment radiographs must follow page eight. Pages containing radiographs must also have indicator tabs.

No unnecessary material such as auxiliary name plates, table drapes, mounting or display stands may be used. Patient presentation books should be direct and unembellished. Engrossing, custom printing, etc. are not appropriate. All material presented must be easily accessible for evaluation and not affixed to any board or backing. To facilitate visualization, loose-leaf page protectors should be of non-glare type. All casts should contain the candidate's name. Casts should not be treated with any material which will alter their accuracy. Sprays, lacquers, etc. are not appropriate. Candidates failing to adhere to these guidelines may be rejected for examination, with fees forfeited. It is the intent of the Board to ensure that all candidates receive fair and equal consideration, based upon the merit of the philosophy and accomplishment of the procedures presented, and not upon extraneous material or elaborate presentation.

Any personal data in conflict with the Privacy Act, i.e., the patient's name, address and social security number will not be used in the presentations; however, the age, sex and race of the patient should be included. Full-face photographs that could identify the patient must have the eyes blocked out or a clearance document presented that includes the patient's written permission to use a full-face photograph.

Candidates are required to perform all clinical prosthodontic and laboratory procedures for the Part 2 patient (regardless of whether the treatment was performed during residency training or after completion of residency training) with one exception: Services of a dental laboratory technician may be employed to fabricate the removable partial denture framework, following a properly executed written work authorization. A copy of the Part 2 work authorization form must be included in the narrative portion of the patient presentation. A form (provided by the Board) attesting to the completion of all procedures by the candidate must be signed by the candidate and must appear in the narrative. Violation of this requirement will lead to disqualification of the candidate from this part of the examination.

During the oral examination, the candidate is expected to answer questions pertaining to the patient presentation, the broad areas of prosthodontics, and the related basic and applied sciences. Evaluation of a candidate's performance in this portion of the certification process involves a thorough review of the patient presentation materials by all members of the Board, with an in depth review by the two Examiners of the Board who will conduct the oral examination.

During the oral examination, the patient presentation initially serves as the focus for in depth discussions of the principles and concepts of prosthodontics. It is not the purpose of the Board to approve or disapprove of the treatment rendered. The Board examines the candidates for their

knowledge and competencies in carrying out the plan of treatment originated by the candidate. Often a question is asked about a specific area or item in the patient presentation only as a means of expanding the discussion into a much broader and in depth review of the literature and/or the science and art of prosthodontics. For example, a question about the selection of a metal ceramic retainer for a maxillary anterior fixed partial denture may well lead to a discussion in the area of biomaterial sciences. As the candidate is questioned, the examiners are ever mindful of those areas in which knowledge is expected at the “in depth,” the “understanding,” and the “familiarity” levels. As the discussion turns to the clinical areas, it is kept in mind that different levels of skill are also expected of specialists for the various clinical and technical procedures.

Description of Parts 3 and 4

These parts consist of two (2) oral and image presentations by the candidate of patients he/she has treated. One of the presentations will consist of a fixed prosthodontic patient treatment (Part 3) and the other will consist of a removable prosthodontic patient treatment (Part 4). Each presentation is scheduled for approximately one hour with the candidate being allowed an uninterrupted 20 minutes to present the patient’s treatment and the remaining time is devoted to questioning by a team of examiners. If possible, a different team of examiners will evaluate each patient presentation. The oral examinations are tape recorded. The Parts 3 and 4 patients cannot receive the same combination of treatment as the patient presented in Part 2.

The patient treatments will serve as the primary focus of the oral examination. However, questioning may include principles and concepts of the broad scope of prosthodontics.

Part 3: Fixed Prosthodontic Treatment (no removable prostheses) consisting of either

- 1) A fixed reconstruction that includes at least twenty (20) fixed units that restore the articulating surfaces of the teeth.
- 2) A fixed reconstruction of both arches that includes one complete arch (the articulating surfaces of all anterior and posterior teeth must be restored in that arch) and a minimum of six (6) fixed restored units in the opposing arch.

Fixed partial dentures may be supported by implants, but a minimum of eight (8) natural teeth must be restored as part of the total treatment for either option.

Part 4: Removable Prosthodontic Treatment consisting of any of the following:

- 1) Complete denture opposing a complete denture
- 2) Complete denture or overdenture opposing an overdenture. Overdentures may be supported and/or retained by natural teeth or implant abutments.
- 3) Complete denture or overdenture opposing a removable partial denture, an implant-supported fixed complete denture, or implant-supported fixed partial denture(s).
- 4) Complete or partial denture obturator prosthesis opposing a complete denture, removable or fixed partial denture(s), or an implant prosthesis.

Format for Parts 3 and 4 Presentations

A verbal and visual presentation shall be given by the candidate. A maximum of 20 minutes will be allowed for the presentation.

Aspects of therapy must be presented in the following order:

1. History and chief complaint
2. Clinical findings
3. Diagnosis
4. Treatment plan
5. Treatment
6. Completed treatment
7. Prognosis

A maximum of 40 color images may be presented for each treatment. Slides will be preloaded in a single Kodak Carousel 80-slide tray for projection. A projector, screen and view box will be provided by the Board. The use of multiple projectors is not permitted. A duplicate set of the slides already placed in plastic slide holders suitable for storage in a three ring binder must be ready to be handed in upon completion of the oral examination. Each slide should be labeled with the candidate's name, year and numbered part of the examination (Part 3 and Part 4). A set of original post-treatment periapical radiographs must also be handed in upon completion of Part 3. The slides and radiographs become the property of the Board. Candidates utilizing digital images for their presentations must provide the Board with hard copy prints of the images and a read only CD with the required images labeled as above.

Slides for the fixed treatment must clearly show at least:

Pre-treatment:

- Teeth in maximum intercuspation (frontal and lateral views)
- Lateral views in working and non-working positions
- Teeth in protrusion (frontal and lateral views)
- Occlusal views of maxilla and mandible
- Complete mouth periapical radiographs

Treatment:

- Tooth preparations (occlusal view)
- Provisional restorations (frontal and lateral views)

Post-Treatment:

- Same as pre-treatment

Slides for the removable treatment must clearly show at least:

• *Pre-Treatment:*

- Occlusal views of maxillary and mandibular edentulous or partially edentulous ridges.
- Anterior view of maxillary and mandibular ridges at approximate occlusal vertical dimension
- Complete mouth periapical or panoramic radiographic series

Treatment:

- Impressions (tissue surface)
- The technique and materials used to record maxillomandibular relationships (frontal and lateral views)
- Wax trial denture on articulator (5 slides)
frontal view

lateral views
occlusal views

Post-Treatment:

- Occlusal views of maxillary and mandibular arches without the prosthesis, if implants or natural teeth are present
- Tissue surfaces of completed prostheses
- Prostheses in place, teeth in maximum intercuspation (frontal and lateral views)
- Lateral views in working and non-working positions
- Teeth in protrusion (frontal and lateral views)
- Full face frontal and full face profile views with both the existing and new prostheses in occlusion. The Patients eyes must be blocked out.
 - Frontal view of full face smile. The patient's eyes must be blocked out.

The following casts/dies will be presented.

Fixed Treatment:

- Pre- and post-treatment mounted casts
- Articulated casts with diagnostic wax patterns.
- Working casts/dies

Removable Treatment:

- Pre-treatment mounted casts of edentulous or partially edentulous ridges at occlusal vertical dimension
- Post-treatment mounted casts of completed prostheses
- Duplicate master casts
- Working casts/dies for any fixed restorations used in conjunction with the removable treatment

For the removable treatment, a copy of the medical history and examination form will be presented.

Mounted periapical pre- and post-treatment radiographs of the complete mouth will be presented for the Fixed Treatment. The post-treatment radiographs will become property of and will be retained by the Board. Mounted periapical and/or panoramic pre-treatment radiographs of the complete mouth will be presented for the removable treatment. Post treatment radiographs of all implants associated with the Removable Treatment will be presented by the candidate and will become property of and will be retained by the Board.

Laboratory technicians may be used to aid in fabrication of prostheses for these patients, but candidates must have a thorough understanding of laboratory procedures and are responsible for the outcome of laboratory procedures in the completed treatment. Laboratory work authorization forms will be presented for both the fixed and removable treatments.

Grading of Parts 2, 3 and 4

After all the candidates have been examined, the Board meets in executive session to evaluate each candidate. The candidate's names are read by the Executive Director and each Team of examiners have the opportunity to request that a particular candidate's evaluation be deferred until later in the session for grading. Following this initial process, a written vote is taken for each candidate, except

those that have been deferred. The votes are collected, tabulated and recorded for each candidate. The candidates for whom evaluation was deferred are then considered by the Board. A brief report is presented by the two Examiners of the Board who conducted the oral examination. Patient presentation materials are reviewed by each Examiner of the Board. The tape recording of the oral examination may be played. After completing this review process, each Board Examiner judges the performance of the candidate against the criterion statements and a written vote is taken for the candidate.

It is a matter of Board policy that the successful completion of Parts 2, 3 and 4 requires acceptable performance by the candidate in all three categories: (1) patient presentation, (2) general prosthodontics, and (3) related dental sciences. After counting of the written ballots, the majority rule is applied and a candidate is judged to have passed or failed on that basis. All patient treatment presentations are graded according to the written criteria of the appropriate evaluation form. The evaluation forms have both major and minor categories. The major categories are those that can be graded on a numerical scale of 1 to 5 whereas the minor categories are those that can only receive grades between 2 and 4. A failure in the patient presentation occurs when the candidate receives any of the following grades: one (1) number 5 grade in any major category; two (2) number 4 grades in any major category; or four (4) number 4 grades in any of the categories. No candidate can be judged to have failed the examination by only one Examiner of the Board.

Application Renewal

Board eligibility commences with the acceptance of a completed application by the Board. A graduate student or resident taking only the Part I written examination while a student/resident is not considered Board eligible until s/he has completed formal training in an accredited prosthodontic program and formally applies to the American Board for eligibility. Successful completion of Part I of the Examination as a student/resident does not by itself signify eligibility. Formal application to the Board is still required.

Graduate student /resident candidates who elect to take one of the patient presentation examinations (Part 2, 3, or 4) along with the Part 1 written examination during February of the third year of training must have been granted eligibility prior to the examination and will continue to be eligible for a period of six years from the date of initial award of eligibility

Approved applications are valid for two (2) years and the new applicant is Board Eligible only during this time. Any part of the examination must be taken during this two year period or Board eligibility is forfeited. Passing the Part 1 examination automatically extends Board eligibility for the remainder of the total six (6) year period. For those who successfully complete Part I during their training program, eligibility commences with formal application to the Board for the remaining parts (6 years). However, a candidate who passes the Part 1 examination during the final year of their training program must apply for Board eligibility within six (6) years of the examination date. Those who apply for Board eligibility after the six year period will be required to take Part 1 again. Candidates may request consideration for an extension in writing from the Board when there are extenuating circumstances.

Re-examination

Should a candidate fail all or any part(s) of the examination, s/he may apply at any time for re-examination and pay the appropriate fee for each part. If the candidate is unsuccessful in one or two parts, they can be reexamined in that part(s) only at a subsequent Board examination. Relative to the examination, Part 2 candidates that present an acceptable patient presentation but perform an unacceptable oral examination will be required to successfully complete a one hour repeat oral examination on general prosthodontics and related dental sciences. This examination will be given at a subsequent Board examination. A failure on any patient presentation will require that the candidate present a new patient treatment or retreatment of the same patient at a subsequent examination.

If the candidate fails any part three (3) times, Board eligibility is permanently forfeited and may not be re-established except under unusual extenuating circumstances which the Board may determine.

Appeals Process

The American Board of Prosthodontics has a formal appeals process. Details are available upon request from the Executive Director of the Board.

Annual Fee

Holders of certificates from the American Board of Prosthodontics are required to pay an annual fee as determined by the Board.

The American Board of Prosthodontics issues time-limited certificates. Annual fees are payable to the Executive Director of the Board on or before January 1 of each year.

Certification will be revoked if the annual fee is six (6) months delinquent. Payment is the responsibility of the Diplomate. If a Diplomate is dropped from the list of Diplomates for lack of dues payment the Executive Director will notify the member of the action of the Board by Registered mail. The individual will further be given the option of reinstatement by paying a penalty fee and all past dues. If the penalty and dues are not paid by September 1 following the original notice, the certification will be revoked. Those delinquent at that time will not be listed in the roster for that year, as published in the Journal of Prosthetic Dentistry and the Journal of Prosthodontics.

The issuance of the original certificate shall not preclude periodic re-examination should the Board decide such procedure to be necessary to maintain desirable standards for the specialty of prosthodontics.

Revocation of Certificate

The American Board of Prosthodontics shall have the power, jurisdiction, and right to decide or determine whether evidence or information placed before it is sufficient to constitute grounds for suspension or revocation of any certification issued by the Board.

Continued Proficiency (Recertification)

All *active* diplomates will be required to undergo a process of continued proficiency (recertification). The following is an outline for the continued proficiency process.

I. Certificates of diplomate status will be issued for eight (8) year periods beginning in 1996.

II. Continued Proficiency Mechanism

A. Continuing education

Attainment of at least forty (40) points in an eight (8) year period will be required by all diplomates except those in a Life Diplomate status. A maximum of 10 (10) points per year will be allowed toward the total of forty (40) points. Points may be accumulated in the following ways:

1. Attendance at a scientific session sponsored by a major prosthodontic organization (one point per day).
2. Other courses, conferences and meetings applicable to prosthodontics preferably "CERP" approved (one point per day).
3. Publications in peer reviewed journals (not to include abstracts), (two points per publication).*
4. Prosthodontic book chapters - (one point per chapter).*
5. Professional lectures given and study club activities related to prosthodontics (one point per day).*

* A maximum of sixteen (16) points in an eight (8) year period may be credited from publications, lectures and study group activities. Activities of a 1/2 day will earn 1/2 point (three hours equals 1/2 point).

Continuing education activity will be reported yearly on the registration form. All diplomates will be responsible for maintaining updated documentation of their continuing education activity. A percentage of randomly chosen diplomates will be requested to furnish documentation to the Board relating to their continuing education activities.

B. Self Assessment

A self assessment on recent prosthodontic advances will be prepared by the American Board of Prosthodontics. The self assessment can be requested on the annual registration form beginning in 1998. A package of questions with score card will be mailed to the diplomates requesting the self assessment. The completed score card will be mailed back to the executive director of the Board, logged and scored. The results, with correct answers and references, will be sent back to the diplomate.

C. At least one (1) documented self assessment is required in the eight (8) year certification period.

Summary

To become recertified following the eight (8) year period of certification a diplomate must:

1. Complete 40 points of continuing education.
2. Complete at least one (1) self-assessment.
3. Monitor their progress toward continued proficiency on a yearly basis.

General Information

Inquiries concerning the activities of the American Board of Prosthodontics as well as information regarding applications and examinations for certification should be addressed to the Executive Director.

CRITERION STATEMENTS FOR PATIENT PRESENTATION PART 2

RECORDS

Preoperative Radiographs, Casts, Dies and Photographs

- **Acceptable**
Preoperative radiographs are originals, properly processed and mounted with no evidence of cone cuts, distortions, improper film placement and apical areas “cut off.” Casts are clean, securely mounted and accurately reproduce oral structures. Casts are free of any elements which would introduce error. Photographs conform to size requirements and have been properly exposed and printed. All required views are present.
- **Marginal**
Radiographs are adequate but demonstrate slight variations in contrast. Casts are adequate but lack optimal quality. Photographs meet basic requirements though with less than ideal contrast and sharpness.
- **Unacceptable (any one of the following constitutes unacceptability)**
Radiographs are improperly processed and mounted. Cone cuts, distortions, improper film placement or apical “cut off” severely compromise diagnostic quality. Casts are incomplete, lack essential elements for proper articulation or are insecurely mounted. Casts are porous, dirty. The mounting is not smooth and neat. Articulation instrument is inadequately programmed or inappropriately used. Photographs exhibit poor contrast and sharpness. One or more required views are missing.

Postoperative Radiographs, Casts, Dies and Photographs

- **Acceptable**
Postoperative radiographs are originals properly processed and mounted with no evidence of cone cuts, distortions, improper film placement and apical areas “cut off.” Casts are clean,

securely mounted and accurately reproduce oral structures. Casts are free of any elements which would introduce error. Photographs conform to size requirements and have been properly exposed and printed. All required views are present.

- **Marginal**
Postoperative radiographs are adequate but demonstrate slight variations in contrast. Casts are adequate but lack optimal quality. Photographs meet basic requirements with less than ideal contrast and sharpness.
- **Unacceptable (any one of following constitutes unacceptability)**
Postoperative radiographs are improperly processed and mounted. Cone cuts, distortions, improper film placement or apical “cut off” seriously compromise diagnostic quality. Casts are incomplete, lack essential elements for proper articulation or are insecurely mounted. Casts are porous, dirty. The mounting is not smooth and neat. Photographs exhibit poor contrast and sharpness. One or more required views are missing.

NARRATIVE

History and Clinical Examination

- **Acceptable**
History records chief complaint, an account of current problems, past history of dental and general health, family history, personal history and a review of systems. Clinical examination includes a general survey of patient condition, examination of the head and neck, examination of soft tissues of the mouth, and detailed information gained from a comprehensive dental examination.
- **Marginal**
History is adequate though in depth coverage of some elements is marginal. Clinical examination is adequate though some aspects of the examination are marginally covered.
- **Unacceptable (any one of the following constitutes unacceptability)**
History is poorly organized and fails to elicit pertinent information. Omissions compromise the formulation of an accurate diagnosis. Clinical examination is deficient resulting in a lack of needed diagnostic information.

Diagnosis/Treatment Plan

- **Acceptable**
Diagnosis is appropriate and supported by a thorough systemic method of identifying oral disease. Treatment plan is well organized and chronologically sequenced to prevent and correct oral disease.
- **Acceptable**
Diagnosis is appropriate and supported by a systematic method of identifying oral disease. Treatment plan is organized and chronologically sequenced to prevent and correct oral disease.
- **Marginal**
Diagnosis is adequate though method used to formulate it is questionable. Treatment plan is marginally adequate but not well organized.
- **Unacceptable (any one of the following constitutes unacceptability)**

Diagnosis is incomplete or inappropriate and is not supported by clinical findings. Treatment plan is inappropriate. Treatment plan is poorly organized and improperly sequenced.

- Unacceptable (any one of the following constitutes unacceptability)
Diagnosis is clearly incomplete or inappropriate and is not supported by clinical findings. Treatment plan is grossly inappropriate or inadequate with errors in content and sequencing. Teeth have been inappropriately extracted and/or restored.

FIXED PROSTHODONTICS/ NATURAL TEETH

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered and optimally applied.
- Acceptable
All basic components of accepted design concepts have been addressed but some aspect of the design may be considered controversial.
- Marginal
Most basic components of accepted design concepts have been addressed and those not addressed have been justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some of the basic components of accepted design concepts have not been addressed.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed. Those components not addressed cannot be justified in the light of current knowledge.

Abutment Preparation

- Acceptable
Reduction is optimal for restorative material. The retention form is optimal. The resistance form has been incorporated. Finish line design and location are optimal for the preparation. Finish of the preparation displays finesse.
- Acceptable
Reduction is generally adequate but not optimal. The retention form is generally adequate but not optimal. The resistance form is generally adequate but not optimal. Finish line design and location are generally adequate but not optimal. Finish of the preparations generally is adequate but not optimal.
- Marginal
Reduction is marginally acceptable. The retention and resistance forms are marginally acceptable. Finish line design or location is questionable. Finish of the preparations is marginally adequate.
- Unacceptable (any one of the following constitutes unacceptability)
Preparation is over or under reduced. Retention and resistance form is lacking or ill-defined. Finish line design or location is inappropriate. Undercut(s) present, not recognized. Preparation finish is inadequate, adjacent teeth damaged. Existing restorations that have deficiencies were not removed/replaced prior to or in conjunction with tooth preparation.
- Unacceptable (any one of the following constitutes unacceptability)

Reduction, retention, resistance form, finish line design, and the finish of the preparations are grossly inadequate. Gross undercuts present. Teeth have been prepared that did not need restoration. Existing restorations that have obvious deficiencies were not removed/replaced prior to or in conjunction with tooth preparation.

Pontic(s)

- **Acceptable**
Pontic form, tissue relationship, and axial contour are well designed.
- **Marginal**
Form, contour and tissue relationship are marginally acceptable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Gross inadequacies in pontic form, tissue relationships and contours.

Other Restorative Procedures

- **Acceptable**
Restorative material is appropriate to situation in which employed; margins as well adapted; physiologic contours achieved; and post(s) appropriate in length and design.
- **Marginal**
Restorative materials, margin adaptation, contours or post length and design are marginally acceptable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Restorative material is inappropriate to the situation in which employed; margins are poorly placed or adapted; contours are poor and may be pathogenic; post length and design are inappropriate to situation.

Esthetics

- **Acceptable**
Restoration blends with adjacent natural teeth. Form and color are well developed. Natural appearance is achieved.
- **Marginal**
Esthetic result is acceptable but definite differences exist between natural teeth and restoration. Esthetic result is less than desirable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Restoration is grossly different from natural teeth. Result is unnatural with undesirable appearance.

Completed Restorations

- **Acceptable**
Restoration is physiologically compatible and well integrated with other elements of care.
- **Acceptable**
Restoration is generally physiologically compatible and integrates with other elements of care but exhibits some compromising aspects.
- **Marginal**
Restoration is marginally acceptable. Some aspects exhibit less than desired physiologic compatibility. Other elements of care considered but desired integration is lacking.

- Unacceptable (any one of the following constitutes unacceptability)
Future damage to surrounding tissues is likely to occur. Integration with other elements of care is lacking.
- Unacceptable (any one of the following constitutes unacceptability)
Damage has occurred to surrounding tissues. Gross neglect of integration with other elements of care is evident.

FIXED PROSTHODONTICS/IMPLANTS

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered and optimally applied.
- Acceptable
All basic components of accepted design concepts have been addressed but some aspect of the design may be considered controversial.
- Marginal
Most basic components of accepted design concepts have been addressed and those not addressed have been justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some of the basic components of accepted design concepts have not been addressed.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed. Those components not addressed cannot be justified in the light of current knowledge.

Abutments

- Acceptable
An appropriate number of implants of proper length have been well placed in the edentulous area and appear to be physiologically compatible.
- Acceptable
An appropriate number of implants with generally adequate length have been placed in the edentulous area and appear to be physiologically compatible.
- Marginal
The number, length, placement of the implants is marginal but they appear to be physiologically compatible.
- Unacceptable (any one of the following constitutes unacceptability)
The number, length, placement of the implants is unacceptable and that may affect their physiologic compatibility.
- Unacceptable (any one of the following constitutes unacceptability)
The number, length, distribution of the implants is unacceptable and/or the implants appear to not be physiologically compatible.

Pontics

- Acceptable
Pontic form, tissue relationship, and axial contours are well designed. Presentation accurately shows these areas.
- Marginal
Form, contour, tissue relationship, presentation are marginally acceptable.

- Unacceptable
Gross inadequacies in pontic form, tissue relationships, contours, and presentations.

Esthetics

- Acceptable
Restoration blends with adjacent natural teeth. Form and color are well developed. Natural appearance is achieved. Presentation clearly shows the required details.
- Marginal
Esthetic result is acceptable but definite differences exist between natural teeth and restoration. Esthetic result is less than desirable. Presentation marginal.
- Unacceptable (any one of the following constitutes unacceptability)
Restoration is grossly different from the natural teeth. Result is unnatural with undesirable appearance. Presentation unacceptable.

Completed Restoration(s)

- Acceptable
Prosthesis is properly contoured and finished and well integrated with other elements of care.
- Acceptable
Prosthesis is generally properly contoured, finished and integrated with other elements of care.
- Marginal
Prosthesis contour, finish or integration with other elements of care is marginal.
- Unacceptable (any one of the following constitutes unacceptability)
Prosthesis contour, finish, integration with other elements of care is unacceptable.
- Unacceptable (any one of the following constitutes unacceptability)
Prosthesis contour, finish, integration with other elements of care is grossly unacceptable.

REMOVABLE PARTIAL PROSTHODONTICS

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered for both the edentulous and dentate areas.
- Acceptable
All basic components of accepted design concepts have been addressed for both the edentulous and the dentate areas. The method in which one or more of these components have been used may be controversial.
- Marginal
Most basic components of accepted design concepts have been addressed for both the edentulous and dentate areas. Those components not addressed might be justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some basic components of accepted design concepts have not been addressed for both the edentulous and the dentate areas.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed for both the edentulous and the dentate areas. Those components not addressed cannot be justified in the light of current knowledge.

Direct Retainer Assembly Selection

- **Acceptable**
An acceptable number of direct retainer assemblies have been selected and placed according to accepted philosophies of prosthesis retention, reciprocation and support.
- **Marginal**
The type, number, and placement of most direct retainer assemblies are adequate, but at least one direct retainer is inappropriate in type and/or placement.
- **Unacceptable (any one of the following constitutes unacceptability)**
The type, number, size, placement of direct retainer assemblies are unacceptable.

Rest(s)

- **Acceptable**
Occlusal, cingulum, or incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.
- **Marginal**
Most of the occlusal, cingulum, or incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.
- **Unacceptable (any one of the following constitutes unacceptability)**
Most of the occlusal, cingulum, or incisal rests have been improperly prepared or improperly placed to provide optimal support for the prosthesis.

Retention/Reciprocation

- **Acceptable**
Reciprocating and retentive components of all direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are proper for the type of prosthesis.
- **Marginal**
Reciprocating and retentive components of some direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are marginal for the type of prosthesis.
- **Unacceptable (any one of the following constitutes unacceptability)**
Reciprocating and retentive components of most direct retainers have been unacceptably placed to provide tooth stability. The size, contour, location or material used for the reciprocating and retentive components is/are unacceptable for the type of prosthesis.

Indirect Retainer(s)

- **Acceptable**
An indirect retainer(s) has been optimally placed to resist rotation of the prosthesis around the fulcrum line.
- **Marginal**
An indirect retainer(s) has been placed but its location does not provide the optimal resistance to rotation around the fulcrum line or is less than optimal from a rest seat position/preparation standpoint.
- **Unacceptable (any one of the following constitutes unacceptability)**

An indirect retainer(s) has not been placed to resist rotation of the prosthesis around the fulcrum line. The size of the indirect retainer is inadequate or is less than optimal from a rest seat position/preparation standpoint.

Major Connector Selection/Placement/Size

- **Acceptable**
The major connector selection is appropriate, it is appropriately placed and appears to be rigid. It is of the type that would provide maximum stabilization and support to the prosthesis and remaining oral structures.
- **Acceptable**
The major connector selection is appropriate, it is placed within the scope of acceptable principles and it appears to be rigid. It is of the type that will provide adequate stabilization and support to the prosthesis and remaining oral structures.
- **Marginal**
The major connector is acceptable, it appears to be rigid, but the placement and selection are questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Aspects of major connector selection, placement and/or rigidity are inadequate.
- **Unacceptable (any one of the following constitutes unacceptability)**
Aspects of major connector selection, placement and/or rigidity are grossly inadequate.

Base(s) Coverage/Contour

- **Acceptable**
The denture bases are extended and contoured properly within physiologic limits in order to give maximum stability and support to the prosthesis.
- **Marginal**
The extent of the bases is marginally acceptable and the contour is questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
The bases are grossly over or under extended and the contour is inadequate.

Esthetics

- **Acceptable**
The selection, color and position of the teeth complement the total occlusal scheme and provide orofacial support and esthetics. The occlusal scheme developed includes the correct vertical and horizontal placement of the teeth.
- **Marginal**
The selection, color and position of the anterior teeth could be improved. The orofacial support is minimal or slightly excessive. The esthetics developed would benefit from some changes. The occlusal scheme may or may not include discrepancies in the vertical and horizontal placement of the teeth.
- **Unacceptable (any one of the following constitutes unacceptability)**
- The selection, color and position of the teeth are not correct. There is poor orofacial support (in insufficient or excessive), and the esthetics are poor. The vertical and/or horizontal placement of the teeth is incorrect and may encourage denture instability.

Denture Finish and Contour

- **Acceptable**
Resin exhibits no porosity. Polished surfaces are free of scratches, plaster inclusions, and are properly contoured and highly polished. Stippling, if present, is smooth and appropriately positioned. Denture base color is appropriate for the patient. Modified occlusal surfaces of denture teeth have been restored to a high polish.
- **Marginal**
Resin exhibits minor areas of porosity. Polished surfaces of dentures contain minor scratches and blemishes. A few plaster inclusions are apparent. Denture polished surface is over or under contoured. Denture base color is reasonably acceptable for the patient. Occlusal surfaces of modified denture teeth are not polished.
- **Unacceptable (any one of the following constitutes unacceptability)**
Resin is porous throughout. Polished surfaces of denture have numerous scratches and blemishes. There are retained plaster or stone inclusions. Denture facial contours are grossly over contoured or severely flattened. Color of denture base is inappropriate for the patient. Denture teeth occlusal surfaces modified by grinding are rough. Denture or denture teeth have been fractured and not repaired or inadequately repaired.

Abutment Restoration(s)

- **Acceptable**
The abutment restorations have good margin integrity and are of the proper material and contour to permit ideal placement of the retainer assemblies.
- **Acceptable**
The abutment restorations have good margin integrity and are of the proper material, but the contours might be less than ideal for the chosen retainer assemblies.
- **Marginal**
The abutment restorations lack some margin integrity and the material used and/or contours are less than ideal for proper placement of the retainer assemblies.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations lack some areas of margin integrity and the material used and/or contours are inadequate for the retainer assemblies selected.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations show major areas lacking margin integrity and the material used and/or the contours are totally inadequate for the retainer assemblies chosen.

COMPLETE DENTURE/ OVERDENTURE PROSTHODONTICS

Overdenture/Natural Teeth Abutment Preparations (without copings)

- **Acceptable**
Reduction is optimal. Contours are smooth with no undercuts. Occlusal or incisal restorations sealing the root canal and tooth surfaces are smooth and polished. Margins are supragingival with no ledging.
- **Acceptable**
Reduction is generally adequate though not optimal. Occlusal or incisal restoration sealing the root canal are generally smooth and polished. Margins are supragingival with areas slightly roughened.
- **Marginal**

Reduction is marginally acceptable with abutment(s) being over or under reduced. Occlusal or incisal restorations sealing the root canal and abutment surface are not smooth. Margins are mostly supragingival though some are subgingival.

- Unacceptable (any one of the following constitutes unacceptability)
Abutments have been over or under prepared to an extent that will compromise treatment outcome. Occlusal or incisal restorations and abutment surfaces are rough and poorly contoured. Significant portions of the margins are subgingival leaving marginal gingiva unsupported.
- Unacceptable (any one of the following constitutes unacceptability)
Abutments are grossly over or under reduced decidedly compromising treatment outcome. Abutment restorations and surfaces are very rough and poorly contoured. Most margins are subgingival resulting in unsupported marginal gingiva.

Overdenture/Natural Teeth Abutment Preparations (for copings)

- Acceptable
Reduction is optimal for restorative material. The retention form is optimal. The resistance form has been incorporated. Margin design is optimal for the preparation. Finish of the preparation displays finesse.
- Acceptable
Reduction is generally adequate but not optimal. The retention form is generally adequate but not optimal. The resistance form is generally adequate but not optimal. Margin design is generally adequate but not optimal. Finish of the preparations generally is adequate but not optimal.
- Marginal
Reduction is marginally acceptable. The retention and resistance forms are marginally acceptable. Margin design is questionable. Finish of the preparations is marginally adequate.
- Unacceptable (any one of the following constitutes unacceptability)
Preparation is over or under reduced. Retention and resistance form is lacking or ill-defined. Margin design is inappropriate. Preparation finish is inadequate.
- Unacceptable (any one of the following constitutes unacceptability)
Reduction, retention, resistance form, margin design, finish of the preparations.

Completed Overdenture Abutment Restorations

- Acceptable
Restoration is physiologically compatible and well integrated with other elements of care.
- Acceptable
Restoration is generally physiologically compatible and integrates with other elements of care but exhibits some compromising aspects.
- Marginal
Restoration is marginally acceptable. Some aspects exhibit less than desired physiologic compatibility. Other elements of care considered but desired integration is lacking.
- Unacceptable (any one of the following constitutes unacceptability)
Integration with other elements of care is lacking. Future damage to surrounding tissues may occur.
- Unacceptable (any one of the following constitutes unacceptability)
Gross neglect of integration with other elements of care is evident. Future damage to surrounding tissues is very likely to occur or damage has occurred.

Occlusal Scheme

- **Acceptable**
The occlusal scheme developed conforms to and demonstrates an acceptable technique.
- **Marginal**
The occlusal scheme developed follows an acceptable technique. The candidate's understanding of the principles and concepts of the technique is marginal.
- **Unacceptable (any one of the following constitutes unacceptability)**
The occlusal scheme developed does not follow an acceptable technique.

Centric Relation/Maximum Intercuspatation

- **Acceptable**
Centric occlusion position and maximum intercuspation are coincidental. The occlusal contacts of the posterior teeth are bilateral and simultaneous when closed in centric occlusion.
- **Acceptable**
Centric occlusion contacts demonstrate minor variations which could be improved with minor occlusal adjustment.
- **Marginal**
Centric occlusion contacts show minor variations which are within the range of occlusal adjustment but will require a remount to correct.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation are not coincidental. Occlusal variations are present that cannot be corrected by conservative means.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation are not coincidental. Gross occlusal variations exist. Discrepancies cannot be corrected by conservative means.

Esthetics

- **Acceptable**
The selection, color and position of the anterior teeth complement the total occlusal scheme and provide orofacial support and esthetics. The occlusal scheme developed includes the correct vertical and horizontal placement of the teeth.
- **Acceptable**
The selection, color and position of the anterior teeth could be improved esthetically. The occlusal scheme developed includes the correct vertical and horizontal placement of the teeth.
- **Marginal**
The selection, color and position of the anterior teeth could be improved. The orofacial support is minimal or slightly excessive. The esthetics developed would benefit from some changes. The occlusal scheme may or may not include discrepancies in the vertical and horizontal placement of the teeth.
- **Unacceptable (any one of the following constitutes unacceptability)**
The selection, color and position of the anterior teeth are not correct. There is poor orofacial support (insufficient or excessive), and the esthetics are poor. The vertical and/or horizontal placement of the teeth is incorrect and may encourage denture instability.
- **Unacceptable (any one of the following constitutes unacceptability)**

The selection, color, and position of the anterior teeth are not correct. There is poor orofacial support (insufficient or excessive), and the esthetics created are poor.

Denture Finish and Contour

- **Acceptable**
Dentures exhibit no porosity. Tissue surfaces are free of sharp edges, nodules, and voids. Polished surfaces are free of scratches, plaster inclusions, and are properly contoured and highly polished. Stippling, if present, is smooth and appropriately positioned. Denture base color is appropriate for the patient. Modified occlusal surfaces of denture teeth have been restored to a high polish. Thickness of the palate of the maxillary denture is uniform and approximately 2.5 mm.
- **Marginal**
Dentures demonstrate minor areas of porosity. Tissue surfaces are mostly free of sharp edges but some nodules are apparent. Polished surfaces of dentures contain minor scratches and blemishes. A few plaster inclusions are apparent. Denture polished surface is over or under contoured. Denture base color is reasonably acceptable for the patient. Occlusal surfaces of modified denture teeth are not polished. Thickness of maxillary denture palate is not uniform and is too thick or too thin.
- **Unacceptable (any one of the following constitutes unacceptability)**
Dentures contain porosity throughout. Tissue surfaces contain many resin nodules or sharp resin fins. Polished surfaces of denture have numerous scratches and blemishes. There are retained plaster or stone inclusions. Denture facial contours are grossly over contoured or severely flattened. Color of denture base is inappropriate for the patient. Denture teeth occlusal surfaces modified by grinding are rough. Maxillary denture palate is grossly too thick or too thin or palate is irregular with thin and thick areas. Denture or denture teeth have been fractured and not repaired or inadequately repaired.

OCCLUSION

- **Acceptable**
Centric relation and maximum intercuspation are coincident. Occlusal contacts are harmonious in centric relation and eccentric positions. The occlusal plane and type of teeth selected (material and cusp form) enhance the stability of the prosthesis.
- **Acceptable**
Occlusal contacts are generally harmonious in centric relation and eccentric positions, but minor discrepancies exist.
- **Marginal**
Occlusal contacts are compromised in either centric relation or eccentric positions. The choice of teeth and position of the occlusal plane is questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric relation and maximum intercuspation may not coincide. Occlusion has major discrepancies. Occlusal contacts may be lacking in centric relation. Undesirable eccentric contacts may be present. Occlusion is likely to be a pathogenic factor or create instability.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric relation and maximum intercuspation do not coincide. Occlusion has gross discrepancies. Numerous occlusal errors in centric relation/eccentric positions would likely create major instability.

PROGNOSIS

- Acceptable
Prognosis is realistic, based on an appropriate diagnosis, a well organized treatment plan and appropriate treatment.
- Marginal
Prognosis is reasonable though slightly optimistic.
- Unacceptable
Prognosis is not realistic.

WORK AUTHORIZATION FORM(S)

- Acceptable
All pertinent information is present and clearly described.
- Marginal
Information is generally adequate but some aspects are marginally covered.
- Unacceptable (any one of the following constitutes unacceptability)
Pertinent information has not been written, information is confusing, incomplete or no form was used.

CRITERION STATEMENTS FOR ORAL EXAMINATION PART 2 EXAMINATION

- Acceptable
The candidate responded well to questioning associated with the patient treatment. The candidate fully understands the rationale for treatment and the technical aspects of care associated with the patient treatment. The candidate demonstrates a superior understanding of the broad scope of Prosthodontics and related dental fields.
- Acceptable
The candidate responded well to questioning associated with the patient treatment. The candidate fully understands the rationale for treatment and the technical aspects for care associated with the patient treatment. The candidate demonstrates an adequate understanding of the broad scope of Prosthodontics and related dental fields.
- Marginal
The candidate responded adequately to questioning associated with the patient treatment. The candidate understands the rationale for treatment and the technical aspects of care associated with the patient treatment. The candidate's understanding of the broad scope of Prosthodontics and related dental fields is marginal.
- Unacceptable (any one of the following constitutes unacceptability)
The candidate's response to questioning associated with the patient presentation is not adequate. Although the candidate presents a technically acceptable patient treatment, he/she cannot justify the rationale for the specific treatment provided. The candidate's understanding of the broad scope of Prosthodontics and related dental fields is not adequate.
- Unacceptable (any one of the following constitutes unacceptability)

The candidate's response to questioning associated with the patient presentation is not adequate. The candidate's patient treatment is technically poor and he/she cannot justify the rationale for the specific treatment provided. The candidate's understanding of the broad scope of Prosthodontics and related dental fields is not adequate.

CRITERION STATEMENTS FOR PATIENT PRESENTATION PARTS 3 AND 4

RECORDS

Preoperative Radiographs, Casts, Dies, Slides

- **Acceptable**
Preoperative radiographs are originals, properly processed and mounted with no evidence of cone cuts, distortions, improper film placement and apical "cut off." Casts are clean, securely mounted and accurately reproduce the oral structures. Casts are free of any elements which would introduce error. Slides are properly exposed and exhibit the required information. All required views are present.
- **Marginal**
Radiographs are adequate but demonstrate slight variations in contrast. Casts are adequate but lack optimal quality. Slides are adequate but exposure and portrayal of required information could be improved. All required views are present.
- **Unacceptable (any one of the following constitutes unacceptability)**
Radiographs are improperly processed and mounted. Cone cuts, distortions, improper film placement and apical "cut off" severely compromise diagnostic quality. Casts are incomplete, lack essential elements for proper articulation or are insecurely mounted. Casts are porous, dirty. The mounting is not smooth and neat. Articulation instrument inadequately programmed or inappropriately used. Slides are improperly exposed or fail to exhibit the required information. Required views are missing.

Postoperative Radiographs, Casts, Dies, Slides

- **Acceptable**
Postoperative radiographs are originals properly mounted with no evidence of cone cuts, distortions, improper film placement and apical areas "cut off." Casts are clean, securely mounted, and accurately reproduce oral structures. Casts are free of any elements which would introduce error. Slides are properly exposed and exhibit the required information. All required views are present.
- **Marginal**

Postoperative radiographs are adequate but demonstrate slight variations in contrast. Casts are adequate but lack optimal quality. Slides are adequate but exposure and portrayal of required information could be improved. All required views are present.

- Unacceptable (any one of the following constitutes unacceptability)
Postoperative radiographs are improperly processed and mounted. Cone cuts, distortions, improper film placement and apical “cut off” seriously compromise diagnostic quality. Casts are incomplete, lack essential elements for proper articulation or are insecurely mounted. Casts are porous, dirty. The mounting is not smooth and neat. Slides are improperly exposed or fail to exhibit the required information. Required views are missing.

MEDICAL HISTORY/EXAMINATION FORM USED FOR REMOVABLE PROSTHODONTIC TREATMENT

- Acceptable
All pertinent information has been collected and recorded accurately.
- Marginal
Information is generally adequate but some aspects are marginally covered.
- Unacceptable (any one of the following constitutes unacceptability)
Pertinent information has not been collected, not recorded accurately or no form was used.

PATIENT PRESENTATION

History and Clinical Examination

- Acceptable
History records chief complaint, and account of current problems, past history of dental and general health, family history, personal history, and a review of systems. Clinical examination includes a general survey of patient condition, examination of the head and neck, examination of the soft tissues of the mouth, and detailed information gained from a comprehensive dental examination.
- Marginal
History is adequate though in depth coverage of some elements is marginal. Clinical examination is adequate though some aspects of the examination are marginally covered.
- Unacceptable (any one of the following constitutes unacceptability)
History is poorly organized and fails to elicit pertinent information. Omissions compromise the formulation of an accurate diagnosis. Clinical examination is deficient resulting in a lack of needed diagnostic information.

Diagnosis and Treatment Planning

- Acceptable
Diagnosis is appropriate and supported by a thorough, systematic method of identifying oral disease. Treatment Plan is well organized and chronologically sequenced to prevent and correct oral disease.
- Acceptable
Diagnosis is appropriate and supported by a systematic method of identifying oral disease. Treatment Plan is organized and chronologically sequenced to prevent and correct oral disease.
- Marginal

Diagnosis is adequate though method used for formulating it is questionable. Treatment Plan is marginally adequate but not well organized.

- Unacceptable (any one of the following constitutes unacceptability)
Diagnosis is inappropriate and is not supported by clinical findings. Treatment Plan is poorly organized and improperly sequenced. Patient could benefit by referral to another specialist.
- Unacceptable (any one of the following constitutes unacceptability)
Diagnosis is clearly inappropriate and is not supported by clinical findings. Treatment Plan is grossly inadequate with errors in content and/or sequencing. Teeth have been inappropriately prepared, restored and/or extracted. Teeth that should have been treated were not. Patient should have been referred to another specialist.

FIXED PROSTHODONTICS

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered and optimally applied.
- Acceptable
All basic components of accepted design concepts have been addressed but some aspect of the design may be considered controversial.
- Marginal
Most basic components of accepted design concepts have been addressed and those not addressed have been justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some of the basic components of accepted design concepts have not been addressed.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed. Those components not addressed cannot be justified in the light of current knowledge.

Abutment Preparation

- Acceptable
Reduction is optimal for restorative material. The retention form is optimal. The resistance form has been incorporated. Finish line design and location are optimal for the preparation. Finish of the preparation displays finesse.
- Acceptable
Reduction is generally adequate but not optimal. The retention form is generally adequate but not optimal. The resistance form is generally adequate but not optimal. Finish line design and location are generally adequate but not optimal. Finish of the preparations generally is adequate but not optimal.
- Marginal
Reduction is marginally acceptable. The retention and resistance forms are marginally acceptable. Finish line design or location is questionable. Finish of the preparations is marginally adequate.
- Unacceptable (any one of the following constitutes unacceptability)
Preparation is over or under reduced. Retention and resistance form is lacking or ill-defined. Finish line design or location is inappropriate. Undercut(s) present, not recognized. Preparation finish is inadequate, adjacent teeth damaged. Existing restorations that have deficiencies were not removed/replaced prior to or in conjunction with tooth preparation.

- Unacceptable (any one of the following constitutes unacceptability)
Reduction, retention, resistance form, finish line design, and the finish of the preparations are grossly inadequate. Gross undercuts present. Teeth have been prepared that did not need restoration. Existing restorations that have obvious deficiencies were not removed/replaced prior to or in conjunction with tooth preparation.

Other Restorative Procedures

- Acceptable
Restorative material is appropriate to situation in which employed; margins are well adapted; physiologic contours achieved; and post appropriate in length and design (if employed).
- Marginal
Restorative materials, marginal adaptation, contours, post length and design, are marginally acceptable.
- Unacceptable (any one of the following constitutes unacceptability)
Restorative material is inappropriate to the situation in which employed; margins are poorly placed or adapted; contours are poor and may be pathogenic; post length and design are inappropriate to the situation.

Provisional Restorations

- Acceptable
The provisional restorations are esthetic, well contoured, show proper fit, show proper occlusion, and are not irritating to the tissues.
- Marginal
The provisional restorations are generally acceptable but differences exist in esthetics, occlusion, contour, and tissue reaction.
- Unacceptable (any one of the following constitutes unacceptability)
The provisional restorations are poorly contoured, unesthetic, lack proper fit, are irritating to the tissues, and lack adequate occlusion.

Pontics

- Acceptable
Pontic form, tissue relationship, and axial contours are well designed.
- Marginal
Form, contour, tissue relationship, are marginally acceptable.
- Unacceptable
Gross inadequacies in pontic form, tissue relationships, contours.

Esthetics

- Acceptable
Restoration blends with adjacent natural teeth. Form and color are well developed. Natural appearance is achieved.
- Marginal
Esthetic result is acceptable but definite differences exist between natural teeth and restoration. Esthetic result is less than desirable.
- Unacceptable (any one of the following constitutes unacceptability)

Restoration is grossly different from the natural teeth. Result is unnatural with undesirable appearance.

Completed Restorations

- Acceptable
Restoration is physiologically compatible and well integrated with other elements of care.
- Acceptable
Restoration is generally physiologically compatible and integrates with other elements of care but exhibits some compromising aspects.
- Marginal
Restoration is marginally acceptable. Some aspects exhibit less than desired physiologic compatibility. Other elements of care considered but desired integration is lacking.
- Unacceptable (any one of the following constitutes unacceptability)
Integration with other elements of care is lacking. Future damage to surrounding tissues may occur.
- Unacceptable (any one of the following constitutes unacceptability)
Gross neglect of integration with other elements of care is evident. Future damage to surrounding tissues is very likely to occur or damage has occurred.

REMOVABLE PARTIAL PROSTHODONTICS

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered for both the edentulous and dentate areas.
- Acceptable
All basic components of accepted design concepts have been addressed for both the edentulous and dentate areas. The method in which one or more of these components have been used may be controversial.
- Marginal
Most basic components of accepted design concepts have been addressed for both the edentulous and dentate areas. Those components not addressed have been justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some basic components of accepted design concepts have been addressed for both the edentulous and dentate areas. Those components not addressed cannot be justified in the light of current knowledge.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed for both the edentulous and dentate areas.

Direct Retainer Assembly Selection

- Acceptable
An acceptable number of direct retainer assemblies have been selected and placed according to accepted philosophies of prosthesis retention, reciprocation and support.
- Marginal

The type, number, and placement of most direct retainer assemblies are acceptable, but at least one direct retainer is unacceptable in type and/or placement.

- Unacceptable (any one of the following constitutes unacceptability)
The type, number, and placement of most direct retainer assemblies are unacceptable.

Rest(s)

- Acceptable
Occlusal, cingulum, or incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.
- Marginal
Most of the occlusal, cingulum, and incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.
- Unacceptable (any one of the following constitutes unacceptability)
Most of the occlusal, cingulum, or incisal rests have been improperly placed to provide optimal support for the prosthesis.

Retention/Reciprocation

- Acceptable
Reciprocating and retentive components of all direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are proper for the type of prosthesis.
- Marginal
Reciprocating and retentive components of some direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are marginal for the type of prosthesis.
- Unacceptable (any one of the following constitutes unacceptability)
Reciprocating and retentive components of most direct retainers have been unacceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components is unacceptable for the type of prosthesis.

Indirect Retainer(s)

- Acceptable
An indirect retainer(s) has been optimally placed to resist rotation of the prosthesis around the fulcrum line.
- Marginal
An indirect retainer(s) has been placed but its location does not provide the optimal resistance to rotation.
- Unacceptable (any one of the following constitutes unacceptability)
An indirect retainer(s) has not been placed to resist rotation of the prosthesis around the fulcrum line.

Major Connector Selection/Placement/Size

- Acceptable
The major connector selection is appropriate, it is appropriately placed and appears to be rigid. It is of the type that would provide maximum stabilization and support to the prosthesis and remaining oral structures.

- **Acceptable**
The major connector selection is appropriate, it is placed within the scope of acceptable principles and it appears to be rigid. It is of the type that will provide adequate stabilization and support to the prosthesis and remaining oral structures.
- **Marginal**
The major connector selection is appropriate, it appears to be rigid, but the placement and selection are questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Aspects of major connector selection, placement and/or rigidity are not adequate.
- **Unacceptable (any one of the following constitutes unacceptability)**
Aspects of major connector selection, placement and/or rigidity are grossly inadequate.

Base(s) Coverage/Contour

- **Acceptable**
The denture bases are extended and contoured properly within physiologic limits in order to give maximum stability and support to the prosthesis.
- **Marginal**
The extent of the bases is marginally acceptable and the contour is questionable.
- **Unacceptable**
The bases are grossly over or under extended and the contour is inadequate.

Abutment Restoration(s)

- **Acceptable**
The abutment restorations have good marginal integrity and of the proper material and contour to permit ideal placement of the retainer assemblies.
- **Acceptable**
The abutment restorations have good marginal integrity and are of proper material, but the contours might be less than ideal for the chosen retainer assemblies.
- **Marginal**
The abutment restorations lack some marginal integrity and the material used and/or contours are less than ideal for proper placement of the retainer assemblies.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations lack some areas of marginal integrity and the material used and/or contours are inadequate for the retainer assemblies selected.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations show major areas lacking in marginal integrity and the material used and/or the contours are totally inadequate for the retainer assemblies chosen.

IMPLANT PROSTHODONTICS

Abutments

- **Acceptable**
An adequate number of implants of proper length have been well distributed in the edentulous area and they appear to be physiologically compatible.
- **Acceptable**
An adequate number of implants with generally adequate length have been distributed in the edentulous area and they appear to be physiologically compatible.

- Marginal
The number, length, distribution of the implants is marginal but they appear to be physiologically compatible.
- Unacceptable (any one of the following constitutes unacceptability)
The number, length, distribution of the implants is unacceptable and that may affect their physiologic compatibility.
- Unacceptable (any one of the following constitutes unacceptability)
The number, length, distribution of the implants is unacceptable and the implants appear to not be physiologically compatible.

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered and optimally applied.
- Acceptable
All basic components of accepted design concepts have been addressed but some aspect of the design may be considered controversial.
- Marginal
Most basic components of accepted design concepts have been addressed and those not addressed have been justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some of the basic components of accepted design concepts have been addressed. Those components not addressed cannot be justified in the light of current knowledge.
- Unacceptable (any one of the following constitutes unacceptability)
Most basic components of accepted design concepts have not been addressed.

Complete Prosthesis

- Acceptable
Prosthesis is properly contoured and finished and well integrated with other elements of care.
- Acceptable
Prosthesis is generally properly contoured, finished and integrated with other elements of care.
- Marginal
Prosthesis contour, finish or integration with other elements of care is marginal.
- Unacceptable (any one of the following constitutes unacceptability)
Prosthesis contour, finish, integration with other elements of care is unacceptable.
- Unacceptable (any one of the following constitutes unacceptability)
Prosthesis contour, finish, integration with other elements of care is grossly unacceptable.

COMPLETE DENTURES/OVERDENTURES

Overdenture/Natural Teeth Abutment Preparations (without copings)

- Acceptable
Reduction is optimal. Contours are smooth with no undercuts. Occlusal or incisal restorations sealing the root canal and tooth surfaces are smooth and polished. Margins are supragingival with no ledging. Casts clearly document all of these requirements.
- Acceptable

Reduction is generally adequate though not optimal. Occlusal or incisal restoration sealing the root canal are generally smooth and polished. Margins are supragingival with areas slightly roughened. Casts clearly document these requirements.

- Marginal
Reduction is marginally acceptable with abutment(s) being over or under reduced. Occlusal or incisal restorations sealing the root canal and abutment surface are not smooth. Margins are mostly supragingival though some are subgingival. Casts marginally document requirements.
- Unacceptable (any one of the following constitutes unacceptability)
Abutments have been over or under prepared to an extent that will compromise treatment outcome. Occlusal or incisal restorations and abutment surfaces are rough and poorly contoured. Significant portions of the margins are subgingival leaving marginal gingiva unsupported. Casts do not document requirements.
- Unacceptable (any one of the following constitutes unacceptability)
Abutments are grossly over or under reduced decidedly compromising treatment outcome. Abutment restorations and surfaces are very rough and poorly contoured. Most margins are subgingival resulting in unsupported marginal gingiva.

Overdenture/Natural Teeth Abutment Preparations (for copings)

- Acceptable
Reduction is optimal for restorative material. The retention form is optimal. The resistance form has been incorporated. Margin design is optimal for the preparation. Finish of the preparation displays finesse.
- Acceptable
Reduction is generally adequate but not optimal. The retention form is generally adequate but not optimal. The resistance form is generally adequate but not optimal. Margin design is generally adequate but not optimal. Finish of the preparations generally is adequate but not optimal.
- Marginal
Reduction is marginally acceptable. The retention and resistance forms are marginally acceptable. Margin design is questionable. Finish of the preparations is marginally adequate.
- Unacceptable (any one of the following constitutes unacceptability)
Preparation is over or under reduced. Retention and resistance form is lacking or ill-defined. Margin design is inappropriate. Preparation finish is inadequate.
- Unacceptable (any one of the following constitutes unacceptability)
Reduction, retention, resistance form, margin design, and/or finish of the preparations are grossly inadequate.

Completed Overdenture Abutment Restorations

- Acceptable
Restoration is physiologically compatible and well integrated with other elements of care.
- Acceptable
Restoration is generally physiologically compatible and integrates with other elements of care but exhibits some compromising aspects.
- Marginal

Restoration is marginally acceptable. Some aspects exhibit less than desired physiologic compatibility. Other elements of care considered but desired integration is lacking.

- Unacceptable (any one of the following constitutes unacceptability)
Integration with other elements of care is lacking. Future damage to surrounding tissues may occur.
- Unacceptable (any one of the following constitutes unacceptability)
Gross neglect of integration with other elements of care is evident. Future damage to surrounding tissues is very likely to occur or damage has occurred.

Maxillary Impression

- Acceptable
The flanges extend into the sulci without impinging on movable tissue. The surface of the impression accurately reproduces the anatomy of the supporting tissues. The posterior extension of the impression includes the hamular notches and the posterior junction of the hard and soft palate.
- Acceptable
The border extensions are generally acceptable. There are some localized areas of over extension that can be corrected. The impression records the anatomy of the supporting tissues. The posterior extension includes the anatomic guides.
- Marginal
Some of the border extensions are generally acceptable with local areas of over- or under extension. The impression records the anatomy of the tissues. The posterior extension of the impression includes the anatomic guides. Some voids present in impression. The border extensions are generally acceptable, with localized areas of over- or under extension. The impression records the anatomy of the tissues. There are some voids.
- Unacceptable (any one of the following constitutes unacceptability)
The border extensions are generally over- or under extended with the potential for loss of stability and/or retention. The impression lacks detail, and there are several voids.
- Unacceptable (any one of the following constitutes unacceptability)
The border extensions are grossly under- or overextended. The tissue registered by the impression lacks detail. There are voids and/or distortions evident.

Mandibular Impression

- Acceptable
The flanges extend into the sulci without impinging on movable tissue. The tray covers, but does not extend beyond the retromolar pads. The surface of the impression contacting the supporting oral mucosa accurately reproduces the anatomy of these tissues. The impression material is evenly distributed in the impression tray.
- Acceptable
The border extensions are generally acceptable. There are also some localized areas that are overextended, but the conditions are correctable with minor alterations. The impression records the anatomy of the tissues. The impression material is evenly distributed in the impression tray.
- Marginal
The border extensions are generally acceptable, with local areas of over or under extension. The retromolar pads are only partially covered. The impression records the anatomy of the tissues.

The impression material is evenly distributed in the impression tray; however, there are a few small voids.

- Unacceptable (any one of the following constitutes unacceptability)
The border extensions are generally over or under extended, with the potential for loss of stability and/or retention. The tray does not contact the retromolar pads. The impression lacks tissue detail, and there are several voids. The impression material is unevenly distributed in the impression tray.
- Unacceptable (any one of the following constitutes unacceptability)
The border extensions are grossly under or overextended. The tissues registered lack detail. The impression material is unevenly distributed in the impression tray, and there are several areas where the tray has distorted tissue.

Maxillomandibular Relationship Records

- Acceptable
The methods used to establish centric relation records follow acceptable techniques. Casts are properly poured, trimmed, and mounted. Record bases properly contoured. Mounted casts clearly show these requirements.
- Marginal
The methods used to establish centric relation records follow acceptable techniques. Casts show minor discrepancies which would be correctable with minor adjustments on the finished denture.
- Unacceptable (any one of the following constitutes unacceptability)
The methods used to establish centric relation records do not follow acceptable technique. Casts show major discrepancies. Record bases are unacceptable.

Wax Trial Dentures

- Acceptable
The prosthetic teeth have been optimally arranged for function and esthetics and the wax is nicely contoured and very smooth.
- Acceptable
The prosthetic teeth are arranged for good function and esthetics and the wax is properly contoured and smooth.
- Marginal
The tooth arrangement is marginal and/or the wax contours and smoothness lack finesse.
- Unacceptable (any one of the following constitutes unacceptability)
The teeth are not acceptably arranged for function, esthetics. The wax contours, smoothness are unacceptable.
- Unacceptable (any one of the following constitutes unacceptability)
There are gross discrepancies in tooth arrangement, waxing.

Cuspless Tooth Arrangements

Centric Occlusion/Maximum Intercuspatation

- Acceptable
Centric occlusion and maximum intercuspation are coincidental. Occlusal contacts of the posterior teeth are bilateral and simultaneous when closing the articulator in the centric occlusion position. Similar relationships are demonstrated in the mouth.

Marginal

Centric occlusion and maximum intercuspation are quite close to being coincidental. The occlusal contacts observed in centric occlusion demonstrate minor deflections which are within the correctable range. Similar relationships are shown in the mouth.

- Unacceptable (any one of the following constitutes unacceptability)
Centric occlusion and maximum intercuspation are not coincidental. The occlusal contacts are grossly deflective. Correction will require resetting the teeth.

Bilateral Cross-Tooth, Cross-Arch

Balanced Articulation

Centric Occlusion/Maximum Intercuspation

- Acceptable
Centric occlusion and maximum intercuspation are coincidental. The occlusal contacts of the posterior teeth are bilateral and simultaneous when closed on the articulator in centric occlusion. A similar relationship is also shown in the mouth.
- Marginal
Centric occlusion and maximum intercuspation are coincidental. The occlusal contacts demonstrate minor deflections which are within the correctable range. A similar relationship is shown in the mouth.
- Unacceptable (any one of the following constitutes unacceptability)
Centric occlusion and maximum intercuspation are not coincidental. The occlusal contacts are grossly deflective. Correction will require resetting the teeth.

Occlusal Vertical Dimension

- Acceptable
The patient demonstrates an acceptable interocclusal distance in a closed position and a normal physiologic rest position.
- Acceptable
The patient demonstrates an interocclusal distance that is less than ideal (slightly open with interocclusal space remaining or slightly closed).
- Marginal
The patient demonstrates an interocclusal space that is considered to be closed 2 to 3 millimeters anteriorly.
- Unacceptable (any one of the following constitutes unacceptability)
No interocclusal space or open occluding vertical dimension.
- Unacceptable (any one of the following constitutes unacceptability)
Patient is excessively open or excessively closed.

Centric Relation/Maximum Intercuspation

- Acceptable
Centric occlusion position and maximum intercuspation are coincidental. The occlusal contacts of the posterior teeth are bilateral and simultaneous when closed in centric occlusion.
- Acceptable
Centric occlusion contacts demonstrate minor variations which could be improved with minor occlusal adjustment.

- **Marginal**
Centric occlusion contacts show minor variations which are within the range of occlusal adjustment but will require a remount to correct.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation are not coincidental. Occlusal variations are present that cannot be corrected by conventional means.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation are not coincidental. Gross occlusal variations exist. Discrepancies cannot be corrected by conventional means.

Esthetics

- **Acceptable**
The selection, color and position of the anterior teeth complement the total occlusal scheme and provide orofacial support and esthetics. The occlusal scheme developed includes the correct vertical and horizontal placement of the teeth.
- **Acceptable**
The selection, color and position of the anterior teeth could be improved esthetically. The occlusal scheme developed includes the correct vertical and horizontal placement of the teeth.
- **Marginal**
The selection, color and position of the anterior teeth could be improved. The orofacial support is minimal or slightly excessive. The esthetics developed would benefit from some changes. The occlusal scheme may or may not include discrepancies in the vertical and horizontal placement of the teeth.
- **Unacceptable (any one of the following constitutes unacceptability)**
The selection, color and position of the anterior teeth are not correct. There is poor orofacial support (insufficient or excessive), and the esthetics are poor. The vertical and/or horizontal placement of the teeth is incorrect and may encourage denture instability.
- **Unacceptable (any one of the following constitutes unacceptability)**
The selection, color, and position of the anterior teeth are not correct. There is poor orofacial support (insufficient or excessive), and the esthetics created are poor.

Denture Finish and Contour

- **Acceptable**
Dentures exhibit no porosity. Tissue surfaces are free of sharp edges, nodules, and voids. Polished surfaces are free of scratches, plaster inclusions, and are properly contoured and highly polished. Stippling, if present, is smooth and appropriately positioned. Denture base color is appropriate for the patient. Modified occlusal surfaces of denture teeth have been restored to a high polish. Thickness of the palate of the maxillary denture is uniform and approximately 2.5 mm.
- **Marginal**
Dentures demonstrate minor areas of porosity. Tissue surfaces are mostly free of sharp edges but some nodules are apparent. Polished surfaces of dentures contain minor scratches and blemishes. A few plaster inclusions are apparent. Denture polished surface is over or under contoured. Denture base color is reasonable acceptable for the patient. Occlusal surfaces of modified denture teeth are not polished. Thickness of maxillary denture palate is not uniform and is too thick or too thin.

- Unacceptable (any one of the following constitutes unacceptability)
Dentures contain porosity throughout. Tissue surfaces contain many resin nodules or sharp resin fins. Polished surfaces of denture have numerous scratches and blemishes. There are retained plaster or stone inclusions. Denture facial contours are grossly over contoured or severely flattened. Color of denture base is inappropriate for the patient. Denture teeth occlusal surfaces modified by grinding are rough. Maxillary denture palate is grossly too thick or too thin or palate is irregular with thin and thick areas. Denture or denture teeth have been fractured and not repaired or inadequately repaired.

MAXILLOFACIAL PROSTHETICS

Overall Design Concept

- Acceptable
All basic components of accepted design concepts have been considered for both the defect and the non-defect areas.
- Acceptable
All basic components of accepted design concepts have been addressed for both the defect and the non-defect areas. The method in which one or more of these components have been used may be controversial.
- Marginal
Most basic components of accepted design concepts have been addressed for both the defect and the non-defect area. Those components not addressed might be justified upon oral examination.
- Unacceptable (any one of the following constitutes unacceptability)
Some basic components of accepted design concepts have been addressed for both the defect and the non-defect areas. Those components not addressed cannot be justified in the light of current knowledge.
- Unacceptable (any one of the following constitutes unacceptability)
All basic components of accepted design concepts have not been addressed for both the defect and the non-defect areas.

Direct Retainer Assembly Section

- Acceptable
An acceptable number of direct retainer assemblies have been selected and placed according to accepted philosophies of prosthesis retention, reciprocation and support.
- Marginal
The type, number, and placement of most direct retainer assemblies are acceptable, but at least one direct retainer is unacceptable in type and/or placement.
- Unacceptable (any one of the following constitutes unacceptability)
The type, number, and placement of most direct retainer assemblies is unacceptable.

Rest(s)

- Acceptable
Occlusal, cingulum, or incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.
- Marginal
Most of the occlusal, cingulum, and incisal rests have been properly prepared and placed to provide optimal support for the prosthesis.

- Unacceptable (any one of the following constitutes unacceptability)
Most of the occlusal, cingulum, or incisal rests have been improperly placed to provide optimal support for the prosthesis.

Retention/Reciprocation

- **Acceptable**
Reciprocating and retentive components of all direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are proper for the type of prosthesis.
- **Marginal**
Reciprocating and retentive components of some direct retainers have been acceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components are marginal for the type of prosthesis.
- **Unacceptable (any one of the following constitutes unacceptability)**
Reciprocating and retentive components of most direct retainers have been unacceptably placed to provide tooth stability while the prosthesis is placed and removed. The material used and the contour of the reciprocating and retentive components is unacceptable for the type of prosthesis.

Indirect Retainer(s)

- **Acceptable**
An indirect retainer(s) has been optimally placed to resist rotation of the prosthesis around the fulcrum line.
- **Marginal**
An indirect retainer(s) has been placed but its location does not provide the optimal resistance to rotation around the fulcrum line.
- **Unacceptable (any one of the following constitutes unacceptability)**
An indirect retainer(s) has not been placed to resist rotation around the fulcrum line.

Major Connector Selection/Placement

- **Acceptable**
The major connector appears to be rigid and appropriately placed. It is of the type that would give maximum stabilization and support to the prosthesis and remaining oral structures.
- **Marginal**
The major connector is marginally acceptable. It appears to be rigid, but the placement and selection are questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
The major connector appears not to be rigid and its placement and selection are questionable.

Base(s) Coverage/Contour (Non-defect area, if present)

- **Acceptable**
The bases in the non-defect area/areas are extended and contoured properly within physiological limits in order to give maximum stability and support to the prosthesis.
- **Marginal**
The extent of the bases in the non-defect area or areas is marginally acceptable and the contour is questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
The bases are grossly over or under extended and the contour is inadequate.

Obturator Extension/Contour

- **Acceptable**
The extent and contour of the bases in the defect areas are appropriate.
- **Marginal**
The extent of the bases in the non-defect area or areas is marginally acceptable and the contour is questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
The extent and contour of the bases are inadequate.

Design

- **Acceptable**
The design and materials used are appropriate for the type of defect to be obturated.
- **Acceptable**
The design and materials used are generally adequate but not optimal for the type of defect to be obturated.
- **Marginal**
The design and materials used are marginally acceptable for the type of defect to be obturated.
- **Unacceptable (any one of the following constitutes unacceptability)**
The design is overly or under simplified and the materials used are inappropriate for the type of defect to be obturated.
- **Unacceptable (any one of the following constitutes unacceptability)**
The design and materials used are grossly inadequate for the type of defect to be obturated.

Abutment Restoration(s)

- **Acceptable**
The abutment restorations have good marginal integrity and are of the proper material and contour to permit ideal placement of the retainer assemblies.
- **Acceptable**
The abutment restorations have good marginal integrity and are of proper material, but the contours might be less than ideal for the chosen retainer assemblies.
- **Marginal**
The abutment restorations lack some marginal integrity and the material used and/or contours are less than ideal for proper placement of the retainer assemblies.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations lack some areas of marginal integrity and the material used and/or the contours are inadequate for the retainer assemblies selected.
- **Unacceptable (any one of the following constitutes unacceptability)**
The abutment restorations show major areas lacking in marginal integrity and the material used and/or the contours are totally inadequate for the retainer assemblies chosen.

OCCLUSION

- **Acceptable**
Centric occlusion and maximum intercuspation are coincident. Occlusal contacts are harmonious in centric occlusion and eccentric positions. The occlusal plane and type of teeth selected (material and cusp form) enhance the stability of the prosthesis.
- **Acceptable**
Occlusal contacts are generally harmonious in centric occlusion and eccentric positions, but minor discrepancies exist.
- **Marginal**
Occlusal contacts are compromised in either centric occlusion or eccentric positions. The choice of teeth and position of the occlusal plane is questionable.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation may not coincide. Occlusion has major discrepancies. Occlusal contacts may be lacking in centric occlusion. Undesirable eccentric contacts may be present. Occlusion may create instability for the prosthesis.
- **Unacceptable (any one of the following constitutes unacceptability)**
Centric occlusion and maximum intercuspation do not coincide. Occlusion has gross discrepancies. Numerous occlusal errors in centric occlusion and eccentric positions would likely create major instability for the prosthesis(es).

PROGNOSIS

- **Acceptable**
Prognosis is realistic, based on an appropriate diagnosis, a well organized treatment plan and appropriate treatment.
- **Marginal**
Prognosis is reasonable though optimistic.
- **Unacceptable**
Prognosis is not realistic.

WORK AUTHORIZATION FORM(S)

- **Acceptable**
All pertinent information is present and clearly described.
- **Marginal**
Information is generally adequate but some aspects are marginally covered.
- **Unacceptable (any one of the following constitutes unacceptability)**
Pertinent information has not been written, information is confusing, incomplete or no form was used.

CRITERION STATEMENTS FOR
ORAL EXAMINATION
PARTS 3 AND 4

- **Acceptable**
The candidate responds well to questioning associated with the patient presentation. The candidate fully understands the rationale for treatment and the technical aspects of care associated with the patient treatment. The candidate demonstrates a superior understanding of the broad scope of Prosthodontics.
- **Acceptable**
The candidate responds well to questioning associated with the patient presentation. The candidate fully understands the rationale for treatment and the technical aspects of care associated with the patient treatment. The candidate demonstrates an adequate understanding of the broad scope of Prosthodontics.
- **Marginal**
The candidate responds adequately to questioning associated with the patient presentation. The candidate understands the rationale for treatment and the technical aspects of care associated with the patient treatment. The candidate's understanding of the broad scope of Prosthodontics is marginal.
- **Unacceptable (any one of the following constitutes unacceptability)**
The candidate's response to questioning associated with the patient presentation is not adequate. Although the candidate presents a technically acceptable patient presentation, he/she cannot justify the rationale for the specific treatment provided. The candidate's understanding of the broad scope of Prosthodontics is not adequate.
- **Unacceptable (any one of the following constitutes unacceptability)**
The candidate's response to questioning associated with the patient presentation is not adequate. The candidate's patient presentation is technically poor and he/she cannot justify the rationale for the specific treatment provided. The candidate's understanding of the broad scope of Prosthodontics is not adequate.

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1982-1983	Dr. Roland W. Dykema
1983-1984	Dr. Thomas A. Curtis
1984-1985	Dr. Jack D. Preston
1985-1986	Dr. Douglas C. Wendt
1986-1987	Dr. Arthur O. Rahn
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1988-1989	Dr. Brien R. Lang
1989-1990	Dr. William D. Culpepper
1990-1991	Dr. Ronald P. Desjardins
1991-1992	Dr. Kenneth A. Turner

1992-1993
1993-1994
1994-1995
1995-1996
1996-1997
1997-1998
1998-1999
1999-2000
2000-2001
2001-2002
2002-2003

* Deceased

Dr. Robert M. Morrow
Dr. James W. Schweiger
Dr. Ronald D. Woody
Dr. Howard M. Landesman
Dr. Robert Staffanou
Dr. Richard J. Grisius
Dr. Charles J. Goodacre
Dr. Edward J. Plekavich
Dr. Thomas D. Taylor
Dr. David W. Eggleston
Dr. Robert J. Cronin

Point Paper: Dental Implants

- ❖ Dental implants are no longer considered experimental
 - No need for restriction of implant activity to “implant centers”
 - Local logistical support and provider(s) credentialed in both surgical placement and implant restoration are required.
 - MAJCOM is approving authority

- ❖ Some standardization is desirable
 - Facilitate maintenance and follow-up as patients change assignments
 - Contain cost of instruments required for maintenance
 - Minimize confusion in the field by limiting the treatment protocols and knowledge of system requirements that would be encountered with total non-standardization

- ❖ Implant systems from recommended companies should:
 - Exhibit excellent quality control
 - Provide sufficient options to satisfy a broad range of clinical conditions
 - Multiple lengths
 - Multiple widths
 - Straight and tapered designs
 - Multiple surface options
 - Abutment connections (internal and external)
 - Have a track record of business success in order to ensure that maintenance supplies and equipment will be available for the foreseeable future

- ❖ Recommend that bases interested in procuring implant system(s) purchase from one of the following companies:
 1. Nobel BioCare
 2. 3I (Implant Innovations Inc.)

- ❖ These recommendations will be re-evaluated biannually to reflect implant system innovations and the evolving nature of dental implantology.



Colonel Thomas R. Schneid
59 DS/MRDP/554-7222
15 April 2003

Concur: Col Gureckis ✓ (KMG)
Col Mealey ✓ (BLM)
Col Medley ✓ (CCM)

Update to Managing Dental Implant Complications

Paul M. Rogers, Lt Col, USAF, DC

Nobel Biocare has changed the prosthetic instrumentation for all of its current implant lines. Replace Select and Replace Select Tapered are designed as internal attachment fixtures. However, all of these internal attachment fixtures, as well as the more common external-hex fixtures are now using the same instrumentation and require the "UniGrip" style screwdrivers. Along with this simplification change, the recommended tightening torque values have also changed. The new UniGrip "abutment screws" are to be torqued to 35 Ncm. The "prosthetic screw" and angled abutment screws are torqued to 15Ncm.

However, there will remain many patients with previously placed implants who may present for treatment of complications. Therefore, it will be necessary to continue to have available the various screwdrivers previously itemized in the attached list.

Catalog part numbers have been changed. Where possible the order numbers have been updated. Nobel Biocare is expected to continue to have older instrumentation available, but it will be necessary to contact them to obtain order numbers and price information.

The following article was previously printed in the Prosthodontic Newsletter

Managing Dental Implant Complications

By: Douglas E. Ford, Major, USAF, DC

Osseous integrated dental implants were introduced in North America for the treatment of edentulism nearly twenty years ago. Current dental implant applications include: fixed complete dentures, overdentures, and treatment of partial edentulism to include the restoration of single teeth. The United States Food and Drug Administration lists over fifty companies involved in the manufacture, marketing, and distribution of dental implants'. Dentists are now faced with more than 90 root-form implants of various diameters, lengths, surfaces, platforms, interfaces, and designs². The total value of the US dental implant market for the year 2000 -is estimated at \$243.3 million, and it is predicted that 910,000 implant procedures will be performed this year in the US. This represents a 16.4% increase in the growth of the implant market during 2000. In addition, compound annual growth rate of the US dental implant market is forecast to be 15.8% between the years 1998-2005³.

These statistics indicate that dental implantology is a rapidly growing treatment modality. Moreover, the extensive variety of implant components presents a significant challenge to dentists who accomplish the prosthodontic phase of dental implant treatment, and those who will be confronted with prosthetic complications. To reduce the complexity of providing dental implant treatment within the Air Force, only implant systems approved by HQ USAF/SGD, approved clones or compatible systems may be used when initiating implant therapy⁴. Dental implant team members must be credentialed in implantology. Credentials in dental implantology may be obtained by graduating from a residency-training program of at least 2-years length, participation in formal courses sanctioned by HQ USAF/SGD, or completion of a MAJCOM/SGD approved local program⁴. However, Air Force dentists at all bases will encounter patients who have been treated with dental implants and must be able to provide at least initial management of prosthetic complications.

Initial management of implant prosthetic complications should be accomplished with the goal of preventing damage to implants and prosthetic components until definitive treatment

can be accomplished by a credentialed dentist. Initial management of implant prosthetic complications by non-credentialed dentists should be limited to screw and abutment tightening, or prosthesis removal and placement of healing abutments. Non-credentialed dentists faced with initial management of implant prosthetic complications should consult an implant credentialed dentist for guidance.

The extensive variety of implant systems and components makes management of implant prosthetic complications challenging. However, recommendations for a field dental implant complication kit consisting of a minimal inventory of implant instruments/components are listed below. This kit should allow dentists at all US Air Force dental clinics to manage most implant prosthodontic complications under the supervision of a credentialed dentist with minimal expense. While some of the most common healing abutments are included in the recommended field dental implant complication kit, Air Force dentists will encounter prosthetic complications involving systems not approved by HQ USAF/SGD. In such instances, when removal of a prosthesis is indicated, a healing abutment may not be available. Removal of a prosthesis when no healing abutment is available may necessitate a future soft tissue procedure (due to gingival overgrowth) to expose the implants, but is preferred to the potential damage to implants or prosthetic components that might occur by leaving a loose prosthesis in place.

References:

1. Brunski JB, Puleo DA, Nanci A. Biomaterials and biomechanics of oral and maxillofacial Implants: Current status and future developments. Int J Oral and Maxillofac Implants 15(1):15-46, 2000.
2. Binon PB. Implants and components: entering the new millennium. Int J Oral and Maxillofac Implants 15(1):15-46, 2000.
3. Millennium Research Group Executive Summary. Annual industry report. implant Dentistry 9(3):192-4, 2000.
4. AFI 147-101, 6.25.4: 40, 2000.

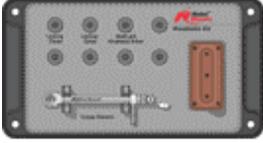
**Dental Implant Complication Kit,
UPDATE**

Item	Source	Order/Stock No.	Price/Unit
Screwdrivers (Machine):			
Cera One, CerAdapt	Nobel Biocare	DIA 467-0	\$19.20
Cera One, CerAdapt (required for WP)	Nobel Biocare	DIA 531-0	\$18.00
Standard, EsthetiCone, MirusCone RP abutments	Nobel Biocare	DIB 038-0	\$35.40
Hexagonal, Long (0.048")	Nobel Biocare	DIA 187-0	\$19.20
Hex Driver, DDS, 12mm, (.050")	Attachments Int'l	11-000007	\$12.00
Slot, 37mm	Nobel Biocare	DIA 189-0	\$19.20
* Handle for UniGrip	Nobel Biocare	29161	\$35.40
* Unigrip Long Driver	Nobel Biocare	29154	\$23.40
0 2.25 Ball Attachment	Nobel Biocare	29026	\$35.40
Abutment Driver, Hex for standard, EsthetiCone, and MirusCone (RP)	Nobel Biocare	DIA 272-0	\$19.20
Abutment Driver, Hex for MirusCone, WP Abutment Screw	Nobel Biocare	DIA 519-0	\$18.00
Handle for Machine Instruments	Nobel Biocare	29122	\$41.40
Screws (2 each):			
UniGrip Abutment Screw NP	Nobel Biocare	29282	\$23.40
Internal Hexagon Gold Screw RP	Nobel Biocare	29285	\$13.80
UniGrip Abutment Screw RP	Nobel Biocare	29283	\$23.40
Prosthetic Screw WP	Nobel Biocare	29286	\$13.80
Unigrip Abutment Screw WP	Nobel Biocare	29284	\$23.40

HEALING ABUTMENTS (RECOMMENDED NUMBER)

NP 3mm (one)	Nobel Biocare	28990	\$25.20
RP 3m (three)	Nobel Biocare	29137	\$25.20
WP 3mm (one)	Nobel Biocare	29141	\$25.20
Total:			\$617.40

*** Recommend purchase of Prosthetic Kit below. Kit includes items marked with ***

<p>Prosthetic Kit</p> <p>Includes:</p> <ol style="list-style-type: none"> 1. Manual Torque Wrench 2. UniGrip 20mm screwdriver 3. UniGrip 30mm screwdriver 4. Multi-unit 21mm screwdriver 5. Prosthetic Kit Box 	 <p>29522</p>	<p>\$390.00</p>
		<p>TOTAL \$948.60</p>

Name/Grade:	Today's Date:	Time remaining on station: Supervisor Approval indicated: yes / no
Chief Complaint:	Significant Medical History?:	

Preliminary Treatment Needs

Medical Consult: n/a _____ date sent _____ date completed _____	Perio Evaluation: consult request date: _____ Reason for consult: _____ Date completed: _____
Radiographs: Pano _____ FMX _____ Periapicals teeth #: _____ Vert BW's _____ TOMO _____ CT _____ TMD: n/a _____ referral indicated/date sent: _____ Date completed: _____	Endo Evaluation: consult request date: _____ Reason for consult: _____ Date completed: _____ OMFS Evaluation: consult request date: _____ Reason for consult: _____ Date completed: _____
Caries Control teeth #: _____ Defective restorations teeth #: _____ Other needs:	Ortho Evaluation: consult request date: _____ Reason for consult: _____ Date completed: _____ General Dent: consult request date: _____ Reason for consult: _____ Date completed: _____
Preliminary Treatment Needs (✓ all that apply): multiple crowns _____ FPD's _____ single CD _____ CD/CD _____ RPD _____ Full mouth Rehab _____ Anterior Rehab _____ Post Rehab _____ Wear _____ Single Implant(s) _____ Impl FPD _____ Impl OCD _____ Impl ORPD _____ ABP Part (?) _____ Proficiency/Mock Board _____ Perio _____ Endo _____ Ortho _____	

General Prosthodontics Treatment Plan (staff initial all required procedures)

Phase 1 Diagnostic Steps Required	Date Completed Staff Initials	Phase 2 Diagnostic Steps Required	Date Completed Staff initials	Phase 3 Treatment Needs
Pre-op Photos		Esthetic Analysis		Cast Posts Teeth #:
Diagnostic mounting		Ortho/Orthognathic Eval		
3-piece cast analysis		Occlusal Device		Crowns Teeth #
Diagnostic Waxing/Setup		Stable CR position		Survey Crowns Teeth# :
Occlusal Device		Equilibration		
RPD Design		Hinge Axis		FPD's Teeth #:
Med/Dental Consults (see above)		Mandibular Recording		
Implant Tomo or CT		Select Articulator		Fixed Implant Restorations Teeth #:
Implant Conference		New Dx Mounting & New Dx Waxing & RPD Design (Diagnose Pre-pros Surgery, Endo and Prosthodontics needs)		
Plan & Sequence Phase 1 Treatment		Plan & Sequence Phase 2 & Phase 3 Treatment (next page)		RPD Max _____ Man _____ ORPD _____ Impl ORPD _____
Phase 1 Treatment Needs		Phase 2 Treatment Needs		
Caries Control		Endodontics teeth #:		CD Max _____ Max OD _____ Max Impl OD _____ Man _____ Man OD _____ Man Impl OD _____
Defective Restorations Removed/provisionalized:		Perio surgery teeth #:		
Endo dontics		Other pre-pros surgery:		Other:
Extractions		Orthodontics:		
Isolated Perio Surgery		Final Dx Mounting and Sequential Waxing/Provisional Matrices/RPD Design		
Other:		Implant Placement sites #:		

Prosthodontics Treatment Plan

Phase 1 Treatment Sequence (Initial Diagnosis/Treatment)

1.	_____	11.	_____
2.	_____	12.	_____
3.	_____	13.	_____
4.	_____	14.	_____
5.	_____	15.	_____
6.	_____	16.	_____
7.	_____	17.	_____
8.	_____	18.	_____
9.	_____	19.	_____
10.	_____	date: _____	resident: _____ staff: _____

Phase 2 Treatment Sequence (Pre-Pros Diagnosis and Support Procedures)

1.	_____	11.	_____
2.	_____	12.	_____
3.	_____	13.	_____
4.	_____	14.	_____
5.	_____	15.	_____
6.	_____	16.	_____
7.	_____	17.	_____
8.	_____	18.	_____
9.	_____	19.	_____
10.	_____	date: _____	resident: _____ staff: _____

Phase 3 Treatment Sequence (Definitive Prosthodontics)

1.	_____	16.	_____
2.	_____	17.	_____
3.	_____	18.	_____
4.	_____	19.	_____
5.	_____	20.	_____
6.	_____	21.	_____
7.	_____	22.	_____
8.	_____	23.	_____
9.	_____	24.	_____
10.	_____	25.	_____
11.	_____	26.	_____
12.	_____	27.	_____
13.	_____	28.	_____
14.	_____	29.	_____
15.	_____	date: _____	resident: _____ staff: _____

Prosthodontics Treatment Planning Form

This form was developed for use in the Prosthodontics Residency Program but may, with some minor changes, be useful to anyone providing prosthodontic treatment, especially involving complex or multi-disciplinary treatment.

It is designed to be placed on the right side of the Air Force dental record, directly beneath the most recent medical history (AF Form 696)--as directed by Air Force policy. It is printed 8 x 11.5 inches so that the document label ("Prosthodontics Treatment Plan") is clearly visible---making the treatment plan easily located in the dental record.

The form is intended to be used over time. The top portion of page 1 is completed at the initial visit and will indicate any necessary preliminary diagnostic steps, radiographs and consultations. It will also indicate a preliminary list of treatment needs as determined at the initial visit. As the diagnostic and treatment planning process progresses, the remainder of the form will be completed.

The lower half of page 1 is intended to flow in a logical sequence from the initial exam through completion of treatment, with treatment planning developed in 3 general phases. Phase 1 and 2 are diagnostic and pre-prosthodontic in nature; Phase 3 is the definitive prosthodontics treatment.

Page 2 lists detailed, sequential treatment plans for the 3 phases of treatment.

Phase 1 Diagnostic Steps Required: Initial diagnostic procedures that will lead to that portion of the treatment plan that is generally considered *Phase 1* dentistry (caries control, replacing defective restorations, endo, extractions)

Phase 1 Treatment Needs: a list of Phase 1 treatment needs. The sequential treatment plan for Phase 1 is developed on page 2.

Phase 2 Diagnostic Steps: Depending on the complexity of the case, Phase 2 may not be necessary. Phase 2 treatment is generally required for complex cases involving advanced occlusal wear, orthognathics, changes in vertical dimension, centric relation treatment, and extensive rehabilitations. These steps will lead to Phase 2 treatment that is considered pre-prosthodontics diagnosis (final diagnostic mountings and wax-ups) or pre-prosthodontic support procedures from other dental disciplines.

Phase 2 Treatment Needs: a general list of Phase 2 treatment needs. The sequential treatment plan for Phase 2 is developed on page 2.

Phase 3 Treatment Needs: a general list of Phase 3 treatment needs---the planned restorations. The sequential treatment plan for Phase 3 is also developed on page 2.

Even if only a portion of the form is used for a particular case, it can serve as a tool to logically develop a restorative treatment plan and a readily available reference for the patient's treatment needs and treatment plan sequence.

Printing Instructions:

Print 2-sided (flip on short edge) on 8.5 x 14 inch legal size paper (or card stock for durability). This will allow you to easily flip from page 1 to page 2.

If you maintain the margins in the attached Word Document, you'll have room to 2-hole punch at the top and page 2 will be correctly positioned.

Trim paper to 11.5 inches in height.