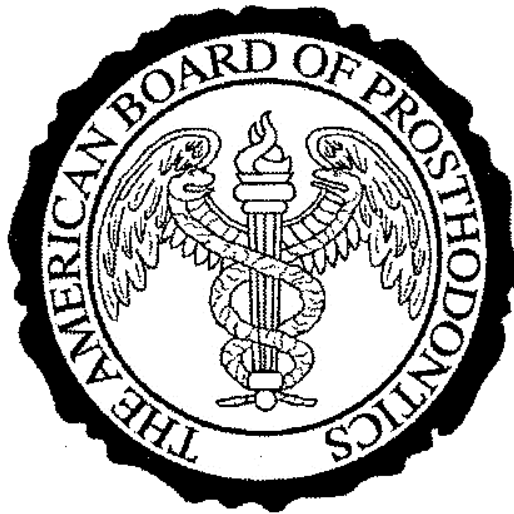


GUIDELINES

for the

Certification Process



SECTION D EXAMINATION

American Board of Prosthodontics

Developed ----- May 09, 2016
Effective ----- May 20, 2016

www.prosthodontics.org/abp

This document represents guidelines for the Section D examination as of the above listed dates, but is subject to change at the discretion of the American Board of Prosthodontics. The most current guidelines for all examinations are publically available on the American Board of Prosthodontics website (www.abpros.org).

Interested parties are strong encouraged to visit this online resource.

Contents of this document remains the property of the American Board of Prosthodontics.

SECTION D: IMPLANT-BASED PATIENT PRESENTATION AND ORAL EXAMINATION

SECTION D GENERAL INFORMATION

With the evolution in scope of prosthodontics, to include dental implant placement as specified by the American Dental Association Commission on Dental Accreditation, examination of candidate knowledge, skill, and experience in providing such care is the focus of Section D. Candidates will present and defend dental implant therapy with emphasis on biologic interfaces between implantable biomaterials, osseous structures, and associated soft tissues. Design of the Section D examination permits ABP Examiners the latitude to explore a candidate's understanding of implant diagnosis and treatment planning, the biology of implant placement, adjunctive/incidental hard and soft tissue procedures, definitive prosthodontic restoration, and prognosis, outcomes and maintenance planning for implant therapy.

This 60-minute examination involves three 20-minute segments that include:

1. Candidate-generated patient treatment presentation consisting of surgical and fixed prosthodontic management of a tooth-bounded (receiving one or more implants) space and an unbounded (receiving one or more implants) edentulous space. The unbounded edentulous space may be an edentulous arch restored with a fixed prosthesis(es).
2. Oral examination based on standardized questions.
3. Oral examination based on open questioning that may relate to the patient treatment presentation.

The broad scope of implant dentistry will serve as the focus of the oral examination during both standardized and open questioning.

Candidates must be prepared to defend diagnosis, prognosis, treatment planning, treatment, and maintenance planning using available evidence. Dental laboratory work authorizations must be provided for any laboratory work not completed by the candidate.

The candidate must perform all surgical and prosthodontic procedures of the treatment being examined. Additionally, the candidate will be evaluated on the quality of, and justification for, ***all*** care provided, to include care provide by other clinicians. The candidate is also responsible to defend the quality of pre-existing restorations and conditions.

Failure to abide by the instructions and examination policies provided here may lead to **disqualification** from the current exam. Disqualification means that the examination session is terminated and the examination fee is forfeited. A disqualification is ***not*** recorded as a failed examination. The same patient treatment presentation, with full and proper documentation, can be presented at a future examination date with payment of a new examination fee.

REQUIREMENTS AND FORMAT OF SECTION D PRESENTATION

The candidate will provide a PowerPoint or Keynote presentation depicting two implant-supported fixed prosthodontic treatments (may or may not involve the same patient) that must demonstrate:

1. *a tooth-bounded edentulous space receiving one or more implants placed by the candidate;* and
2. *an unbounded edentulous space, which may include an edentulous arch, receiving one or more implants placed by the candidate.*

The candidate must surgically place all implants for the treatment being examined. A signed document attesting to this will be supplied by the ABP, and must be signed by the candidate, at the time of the examination.

For the implant treatments being examined, the following well-composed, high quality, color images are **required**:

Pretreatment photographic documentation of maxilla, mandible, and of anticipated surgical site:

- Teeth in maximal intercuspal position (front, left lateral and right lateral views)
- Occlusal view of surgical site.

Pre-treatment radiographic imaging, to include anticipated implant site(s):

- Dental radiographic images appropriate for comprehensive analysis
- Forms of documentation of the anticipated surgical site:
 - 2 dimensional imaging with associated documentation of underlying bone volume; and/or
 - 3 dimensional imaging of anticipated implant site(s) (cross sectional images extending to adjacent structures – within approximately 6 mm mesial and distal of the site).

Treatment documentation:

- Demonstration of surgical site(s) with osteotomy(s) after implant placement showing implant position and trajectory consistent with prosthetic treatment plan. At least one of the following methods of documentation must be provided:
 - Surgical guide used during implant placement AND the master cast (or a duplicate) used during prosthesis fabrication; the cast **MUST** contain an implant analogue and a removable guide pin for each site;
 - Post-treatment sagittal and coronal views developed from 3 dimensional imaging;
 - Photographic images immediately following implant placement with guide pin or transfer component in place (facial and occlusal views).
- If a soft tissue flap is elevated, photographic images of occlusal and lateral view of implant position and surgical closure are required.
- For all treatments presented, lateral and occlusal photographs demonstrating developed soft tissue contours with and without fixed provisional prostheses.

Post-treatment intraoral photographic images:

- Front, left lateral and right lateral views of teeth in maximal intercuspal position; and

- Occlusal view of definitive prostheses.

Post-treatment demonstration of care consistent with comprehensive planning and treatment:

- Must have photographic images (front, left lateral and right lateral views);
- Must have mounted dental casts that include all dental prostheses;
- Must have 2- and/or 3-dimensional dental radiographic images appropriate for demonstration of comprehensive care; and
- When cement-retained prostheses are part of the treatment, clear photographic documentation of all involved abutments, prior to cementation, must be included in the presentation.

Additional photographic/radiographic documentation may be provided at the candidate's discretion. Only high quality digital images are acceptable. All images presented by candidates must be original with no alterations except peripheral cropping. Presentation of images with unauthorized alterations (including but not limited to "instant alpha" or similar, background elimination, or like manipulations) will result in automatic disqualification of the candidate. ***The presentation should include one photographic image per screen.*** Periapical and bite-wing radiographic images may be grouped to include more than one image per screen. However, each panoramic or CBCT image incorporated in the presentation must be displayed on separate screens and not grouped.

For both implant treatments, additional documentation may be presented. Although there is no limit to the number of images included, the presentation segment of the examination must be completed in 20 minutes or less.

Articulated diagnostic and post-treatment casts for both patient treatments are required and must be available for review during the examination. Magnetic mounting plates are the preferred method for cast mountings.

A checklist of required items is available at the end of this document.

PRESENTATION LOGISTICS

Each candidate will submit his/her PowerPoint or Keynote presentation to the ABP on a USB drive 5 to 10 minutes prior to the scheduled start of the examination. The USB drive must function on an Apple computer. The candidate is responsible for confirming compatibility on an Apple computer. This USB drive should contain only the PowerPoint or Keynote document and will be scanned for virus or extraneous material. Failure to submit the presentation in proper format will result in candidate disqualification. Specific instructions for USB drive submission will be provided to candidates prior to the examination date. Radiographs, as required here, may be either film or digital, but must be of high resolution and quality. Once submitted, the USB drive, its contents, and radiographs become the property of the Board and may be used as future ABP examination material.

During an examination, the PowerPoint or Keynote presentation is made using an ABP laptop computer connected to an ABP monitor provided in an examination room. If the candidate's presentation fails to load or run on the ABP computer, the candidate will be disqualified from participating in that examination during that examination cycle.

DENTAL LABORATORY WORK

Dental laboratory technicians may be used to aid in the fabrication of prostheses for patient treatments presented. *Laboratory work completed by the candidate in Section D may not be used to fulfill the laboratory work requirements specified in Section B.* Candidates must be able to demonstrate a thorough understanding of dental laboratory procedures. Candidates are responsible for the outcome of all dental laboratory procedures associated with the patients and patient treatments presented. All dental laboratory work not completed by the candidate must be accompanied by properly documented dental laboratory work authorizations.

THE 60-MINUTE EXAMINATION TIMELINE

- 20 Minutes - The candidate will provide a PowerPoint or Keynote presentation of treatment rendered (20 minutes maximum time allotted).
 - 20 Minutes - Examiners will ask standardized questions related to the broad scope of implant dentistry.
 - 20 Minutes - Examiners will ask general questions related to the candidate's treatment presentation and/or the broad scope of implant dentistry.
-
- 60 Minutes

SECTION D GRADING

After all candidates have been examined, the Board will meet in executive session to consider each candidate. Candidate anonymity is maintained throughout the process. Each examination team provides a "pass" or "defer" performance evaluation for each of the candidates examined based on published criteria. All ABP Examiners thoroughly review patient documentation, presentations, and oral examinations for deferred candidates.

Successful completion of Section D requires acceptable performance in three categories: (1) patient presentation, (2) implant surgery and prosthodontics, and (3) related dental sciences. All candidates are scored according to the published criteria that include both major and minor categories. Major categories are scored on numerical performance levels of 1 to 5. Minor categories are scored on performance levels from 2 to 4. Examination failure occurs when the candidate receives any of the following:

- a single (1) performance level score of 5 in a major category;
- two (2) performance level scores of 4 in major categories; or
- four (4) performance level scores of 4 in any categories.

Following thorough discussion of a deferred candidate, each member of the Board registers an anonymous vote of "pass" or "fail." No candidate can fail the examination based exclusively on the opinion of one examination team or one ABP Examiner. A majority of ABP Examiners must reach

consensus before a candidate is determined to have failed the Section D examination. In the event of a tie vote, the candidate passes the examination.

SECTION D EVALUATION CATEGORIES AND CRITERIA

MINOR CATEGORY: Preoperative Radiographs/Images, Casts, and Photographs (missing elements will result in candidate disqualification)

Level 2

Preoperative radiographs/images are originals of acceptable diagnostic quality 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 that would introduce error. Photographs conform to size requirements and have been properly exposed. All required views and components as identified in checklist are present.

Level 3

Radiographs/images 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. All required views and components as identified in checklist are present.

Level 4 (any one of the following items constitutes Level 4 performance)

Radiographs/images are inadequate. 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 and components are missing.

MINOR CATEGORY: Postoperative Radiographs/Images, Casts, and Photographs (missing elements will result in candidate disqualification)

Level 2

Postoperative radiographs/images are originals of acceptable diagnostic quality 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 that would introduce error. Photographs conform to size requirements and have been properly exposed. All required views and components as identified in checklist are present.

Level 3

Radiographs/images 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.

Level 4 (any one of the following items constitutes Level 4 performance)

Radiographs/images are inadequate. 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 and components are missing.

MAJOR CATEGORY: Diagnosis and Treatment Plan

Level 1

Diagnosis is thorough and appropriate and supported by a systematic method of identifying oral disease and restorative needs. Treatment plan is evidence-based, accounts for patient risk factors, is organized, and is chronologically sequenced to prevent and correct oral disease.

Level 2

Diagnosis is appropriate and supported by a reasonable method of identifying oral disease and restorative needs. Treatment plan accounts for patient risk factors and is chronologically sequenced to manage oral disease.

Level 3

Diagnosis is adequate though the method used to formulate it is questionable. Treatment plan is marginally adequate, but does not ideally account for patient risk factors and is not well organized.

Level 4 (any one of the following items constitutes Level 4 performance)

Diagnosis is incomplete or inappropriate and is not supported by clinical findings. Treatment plan is inappropriate. Treatment plan does not account for patient risk factors, is poorly organized, and is improperly sequenced.

Level 5 (multiple items from the following constitute Level 5 performance)

Diagnosis is clearly incomplete or inappropriate and is not supported by clinical findings. Treatment plan does not account for patient risk factors, is inappropriate or inadequate, and contains errors in content and sequencing. Teeth have been inappropriately managed.

MAJOR CATEGORY: Implant Placement Surgery

Level 1

Implant position is consistent with the prosthetic plan. Soft tissue management, flap design, implant trajectory and depth, implant dimensions, implant site development, and osteotomy demonstrate ideal treatment.

Level 2

Implant position is consistent with the prosthetic plan. Soft tissue management, flap design, implant trajectory and depth, implant dimensions, implant site development, and osteotomy demonstrate acceptable treatment.

Level 3

Implant position and angulation requires prosthodontic modification to achieve prosthetic plan.

Level 4 (any one of the following items constitutes Level 4 performance)

Compromised implant position results in prosthetic modifications that lead to potential adverse outcomes. Soft tissue management, flap design, implant trajectory and depth, implant dimensions, implant site development, osteotomy or other considerations demonstrate unacceptable treatment.

Level 5 (multiple items from the following constitute Level 5 performance)

Compromised implant position results in prosthetic modifications that lead to potential adverse outcome. Soft tissue management, flap design, implant trajectory and depth, implant dimensions, implant site development, osteotomy or other considerations demonstrate unacceptable treatment that can produce adverse outcomes.

MAJOR CATEGORY: Implants and Implant Abutments

Level 1

An appropriate number of implants (and associated abutments) of proper length, diameter and location have been well placed in the edentulous area, demonstrating excellent adaptation (implant to abutment or restoration) and physiologic compatibility.

Level 2

An appropriate number of implants (and associated abutments) with generally adequate length, diameter, and location have been placed in the edentulous area, demonstrating adequate adaptation (implant to abutment or restoration) and physiologic compatibility.

Level 3

The number, length, diameter, and/or location of implants (and associated abutments) is marginally appropriate, but appear to be physiologically compatible.

Level 4 (any one of the following items constitutes Level 4 performance)

The number, length, diameter, and/or location of implants (and associated abutments) is unacceptable, potentially affecting their physiologic compatibility. There is soft tissue inflammation (peri-implant mucositis) that may be the result of retained cement, inadequate abutment contour, or other factors.

Level 5 (multiple items from the following constitute Level 5 performance)

The number, length, diameter, and/or location of implants (and associated abutments) is unacceptable, which is affecting their physiologically compatibility. There is soft tissue inflammation and bone loss (peri-implantitis) that may be the result of retained cement, inadequate abutment contour, or other factors.

MINOR CATEGORY: Pontics

Level 2

Pontic form, tissue relationship, and axial contours are well designed. Presentation accurately shows these areas.

Level 3

Form, contour, tissue relationship, or presentation is marginally acceptable.

Level 4 (any one of the following items constitutes Level 4 performance)

Inadequacies are evident in pontic form, tissue relationships, contours, or presentations.

MAJOR CATEGORY: Occlusion

Level 1

The definitive occlusion is appropriate. Occlusal contacts are harmonious in maximal intercuspatal and eccentric positions. The occlusal plane and occluding surfaces (material and morphology) enhance the stability of the prosthesis.

Level 2

The definitive occlusion is generally acceptable. Occlusal contacts are generally harmonious in maximal intercuspatal and eccentric positions, but minor discrepancies exist.

Level 3

The definitive occlusion may be compromised. Occlusal contacts are compromised in either maximal intercuspatal or eccentric positions. Clinical management of occlusal plane, tooth

position(s), and occluding surfaces (material and morphology) is questionable.

Level 4 (any one of the following items constitutes Level 4 performance)

The definitive occlusion displays discrepancies. Occlusal contacts may be lacking in maximal intercuspal position. Undesirable occlusal contacts are present and may result in potential adverse outcomes. There is a lack of uniform occlusal contacts in maximal intercuspal position or inappropriate eccentric tooth contacts exist. Clinical management of occlusal plane, tooth position(s), and occluding surfaces (material and morphology) is inappropriate.

Level 5 (multiple items from the following constitute Level 5 performance)

The definitive occlusion displays major discrepancies. Occlusal contacts may be lacking in maximal intercuspal position. Undesirable occlusal contacts are present and may result in potential adverse outcomes. There is a lack of uniform occlusal contacts in maximal intercuspal position or inappropriate eccentric tooth contacts exist. Clinical management of occlusal plane, tooth position(s), and occluding surfaces (material and morphology) is inappropriate.

MAJOR CATEGORY: Completed Restorations

Level 1

Restoration is physiologically or esthetically compatible and well integrated with other elements of care.

Level 2

Restoration is generally physiologically or esthetically compatible and integrates with other elements of care but exhibits some compromising aspects.

Level 3

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

Level 4 (any one of the following items constitutes Level 4 performance)

Adverse outcomes may potentially occur. Physiologic or esthetic integration with other elements of care is lacking.

Level 5 (multiple items from the following constitute Level 5 performance)

Adverse outcomes have occurred. Physiologic or esthetic integration with other elements of care is lacking.

MINOR CATEGORY: Prognosis, Outcomes and Maintenance Plan

Level 2

Prognosis is realistic, based on an appropriate diagnosis, a well-organized treatment plan and appropriate treatment and planned maintenance.

Level 3

Prognosis and planned maintenance is acceptable.

Level 4 (any one of the following items constitutes Level 4 performance)

Prognosis is unrealistic. Planned maintenance is not compatible with the patient's needs or risk factors for disease.

MAJOR CATEGORY: Oral Examination

Level 1

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 implant placement and prosthodontics.

Level 2

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 implant placement and prosthodontics.

Level 3

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 implant placement and prosthodontics is marginal.

Level 4 (any one of the following items constitutes Level 4 performance)

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 implant placement and prosthodontics is not adequate.

Level 5 (multiple items from the following constitute Level 5 performance)

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 implant placement and prosthodontics is not adequate.

SECTION D EXAMINATION – CHECKLIST

- The candidate will provide a PowerPoint or Keynote presentation (not PDF) depicting two implant-supported fixed prosthodontic treatments (may or may not be on the same patient) that must involve:
1. a tooth-bounded edentulous space receiving one or more implants placed by the candidate; and
 2. an unbounded edentulous space, which may include an edentulous arch, receiving one or more implants placed by the candidate.

- The candidate must have surgically placed the implants for the treatments being examined. A document will be available for candidate signature on the day of the examination.

- For the implant treatments being examined, the following well-composed, high quality, color images are **required** (missing elements will result in candidate disqualification):

Pretreatment photographic documentation of maxilla, mandible, and of anticipated surgical site:

- Teeth in maximal intercuspal position (front, left lateral and right lateral views)
- Occlusal view of surgical site.

Pre-treatment radiographic imaging, to include anticipated implant site(s):

- Dental radiographic images appropriate for comprehensive analysis
- Forms of documentation of the anticipated surgical site:
- 2 dimensional imaging with associated documentation of underlying bone volume; and/or
 - 3 dimensional imaging of anticipated implant site(s) (cross sectional images extending to adjacent structures – within approximately 6 mm mesial and distal of the site)

Treatment Documentation:

- Demonstration of surgical site(s) with osteotomy(s) after implant placement showing implant position and trajectory consistent with prosthetic treatment plan. At least one of the following methods of documentation must be provided:
- Surgical guide used during implant placement AND the master cast (or a duplicate) used during prosthesis fabrication; the cast MUST contain an implant analogue and a removable guide pin
 - Post-treatment sagittal and coronal views developed from 3 dimensional imaging
 - Photographic images immediately following implant placement with guide pin or transfer component in place (facial and occlusal views)
- If a soft tissue flap is elevated, photographic images of occlusal and lateral view of implant position and surgical closure are required.
- For all treatments presented, lateral and occlusal photographs demonstrating developed soft tissue contours with and without fixed provisional prostheses.

Post-treatment Intraoral Photographic Images:

- Front, left lateral and right lateral views of teeth in maximal intercuspal position
- Occlusal view of definitive prostheses

Post-treatment demonstration of care consistent with comprehensive planning and treatment:

- Must have photographic images (front, left lateral and right lateral views)
- Must have mounted dental casts that include all dental prostheses
- Must have 2 and/or 3 dimensional dental radiographic images appropriate for demonstration of comprehensive care
- When cement-retained prostheses are part of the treatment, clear photographic documentation of all abutments (stock or custom), prior to cementation, must be included in the presentation.

Additional photographic/radiographic documentation may be provided at the candidate's discretion.

- Only high quality digital images are acceptable. All images presented by candidates must be original with no alterations except peripheral cropping. Presentation of images with unauthorized alterations will result in disqualification of the candidate.
- For both implant treatments, additional documentation may be presented. Although there is no limit to the number of images included, the presentation segment of the examination must be completed in 20 minutes or less.
- Articulated diagnostic and post treatment casts for both patient treatments are **required** and must be available for review during the examination. Magnetic mounting plates are the preferred method for cast mountings.

PLEASE NOTE: The presentation should include one photographic image per screen. Periapical and bite-wing radiographic images may be grouped to include more than one image per screen. However, each panoramic or CBCT image incorporated in the presentation must be displayed on separate screens and not grouped.

PLEASE NOTE: Failure to abide by the instructions and examination policies provided here may lead to disqualification from the current exam. Disqualification means that the examination session is terminated and the examination fee is forfeited. A disqualification is not recorded as a failed examination. The same patient treatment presentation, with full and proper documentation, can be presented at a future examination date with payment of a new examination fee.