



# **Philippine Board of Orthodontics**

## **Guidelines for Phase IV Examination**

# **THE PHASE IV CLINICAL EXAMINATION**

The Phase IV Clinical Examination is composed of two parts: the Oral Examination, and the Candidate Case Report Examination.

## **The Oral Examination (OE)**

The OE is an assessment of the candidate's diagnosis and treatment planning ability and knowledge of the aspects of treatment related to the Board and Candidate Case Reports. It is divided into two sections:

- A. The Board Case Record Oral examination (BCROE)
- B. The Candidate Case Report Oral Examination (CCROE)

The candidate must satisfactorily complete both sections to pass the oral examination.

## **Board Case Record Oral Examination (BCROE)**

On the day of the examination, candidates must be available in the BCROE study room one hour prior to their examination time to review two (2) case records furnished by the Board. The candidate will provide protractors, rulers and pencils for the BCROE. Following the review period, the candidate will be examined by the examiners on the patient records furnished by the Board.

A candidate who performs unsatisfactorily on the BCROE will be requested to repeat this part of the oral examination.

## **The Candidate Case Report Oral Examination (CCROE)**

This part of the oral examination (OE) is an assessment of the candidate's knowledge of aspects of treatment related to the case reports presented by the candidate.

## **The Candidate Case Report Examination (CCRE)**

The CCRE is a comprehensive evaluation of the case reports of patients that have been treated by the candidates.

## A. Requirements of the CCRE:

1. The categories of the malocclusions presented must comply with the case record category as specified on the next section.
2. The candidate must have made the diagnosis , formulated the treatment plan, constructed the appliance, monitored the progress and regular appliance adjustment, and completed the treatment.
3. The chosen clinical cases included in the CCRE must be representative of the most challenging patient care rendered in the candidate's practice and must demonstrate the candidate's diagnostic ability, treatment skills, and clinical judgment, as well as reflect excellence in finishing.
4. Treatment records of patients treated at an educational institution may not be used to satisfy the Phase IV clinical examination requirements.
5. Treatment records of one patient treated with clear aligner system may be used to satisfy the Phase IV clinical requirements, provided that the candidate complies with all the diagnostic and assessment records required for cases treated with fixed appliance.
6. Candidates with academic appointments may not use clinical case reports from their department as part of their exhibit.
7. All registrants, including those in partnerships, associateship, and multiple office practices or group practices must submit an affidavit to the PBO affirming that all of the professional judgment and treatment was provided by the candidate for each of the patient records displayed. Such affidavit must be attested by the patient.

## B. Recommended Treatment Objectives

Presented treatment outcomes in the CCRE Exhibit will be based on the attainment of the following orthodontic treatment objectives:

1. Treatment complementary to facial growth
2. Facial Harmony – symmetry, balance, and proper proportion of the soft tissues and facial structures
3. Maximum esthetics of the teeth and face
4. Dental Health - maximum well-being of the teeth, the supporting tissues and the adjacent structures, and absence of disease
5. Optimal function, free of interferences and trauma
6. Excellent occlusion
7. Favorable intercuspation of the teeth
8. Alignment of permanent second molars
9. Proper management of third molars

10. Favorable overjet and overbite relationship
11. Favorable correction of rotations of all teeth
12. Favorable axial inclination of all teeth
13. Complete space closure
14. Coordinated ideal arch form with all the teeth aligned within their supporting structures
15. Good vertical control
16. Good stability

## **C. Results**

The result of the Phase IV examination will either be **pass, incomplete or fail**.

**PASS:** Upon successful completion of the Phase IV examination, a fellow will be awarded the title **DPBO** (Diplomate of the Philippine Board of Orthodontics). However, when the successful candidate is an associate, affiliate or active member of the APO, conferment of the title DPBO will be deferred until he is elevated to Fellow.

**INCOMPLETE:** Those who fail in one or two of the six cases will be requested to return with the same number of cases within a period of 2 years to avail of the 50% reduced examination fee. Inability to complete within the time limit will merit a failing grade.

**FAIL:** A candidate who performs unsatisfactorily with three (3) out of the six (6) cases of the CCROE will be required to retake Phase IV. Unsuccessful candidates must follow the Board's specific instructions for reexamination. They are given three (3) chances to complete Phase IV. Otherwise, he/she will have to reapply for Phase II or III examination, whichever preceded the Phase IV Examination.

# CASE REQUIREMENTS FOR PHASE IV EXAMINATION

The Case Report Examination requires the presentation of six (6) different types of cases:

- A. three (3) cases with an ABO Discrepancy Index of at least 20 points and
- B. three (3) cases with a DI of at least 15-19 points.

The presentation must contain any of the following:

- One case treated with four (4) quadrant extractions that demonstrates effective space closure (identified as “*Extraction Case*”)
- One case with bilateral end-to-end or greater Class II molar relationship present at the time of appliance placement. A unilateral full-step Class II molar relationship is also acceptable. This case may have been treated with or without extractions. The final treatment result should exhibit a Class I or full step Class II molar and Class I canine relationship (identified as “*Class II Case*”).
- One case with bilateral or unilateral Class III molar relationship (at least 2 mm Class III) treated with or without extractions. The final treatment result should exhibit a Class I molar and canine relationship (identified as “*Class III Case*”)
- One case involving both Phase I and Phase II, with growth modification or early treatment. Case must include records from Pre-phase I with complete progress records and complete Phase II records (identified as “*Early Treatment Case*”)
- One case with moderate to severe crowding (at least 6mm per arch) treated without bicuspid or molar (except 3rd) extractions. Must be finished with ideal overjet and overbite, and Class I molar and canine relationships (identified as “*Non-extraction Case*”)
- One case with an anterior or posterior open bite of 2 mm or greater treated either with or without extractions (identified as an “*Open Bite Case*”)
- One case with complete anterior crossbite with at least 2 mm negative overjet or greater or with unilateral or bilateral complete posterior crossbite (identified as “*Crossbite Case*”)
- One complicated case involving multidisciplinary work such as: (identified as a “*Complicated Case*”)
  - Orthognathic Surgery case
  - Molar uprighting with prosthodontic work
  - Use of TAD (temporary anchorage device) or MIA (mini implant anchorage); evidence of use must be shown
  - Missing teeth restored with implant placement or prosthodontic work
  - Multiple missing teeth requiring prosthodontic rehabilitation
  - Impacted tooth (except third molar) with surgical exposure
  - Transposed teeth

- Periodontally involved teeth treated in conjunction with periodontal treatment

**NOTE: Repetition of each case type is not allowed.**

For more information on the ABO Discrepancy Index, you may go to the link below:

[http://pbo.ph/wp-content/uploads/2014/09/The\\_ABO\\_Discrepancy-Index.pdf](http://pbo.ph/wp-content/uploads/2014/09/The_ABO_Discrepancy-Index.pdf)

## CASE REPORT DISPLAY FOR PHASE IV EXAMINATION

### Synopsis of Case Reports

It is mandatory that a copy of a synopsis of the candidate's case reports be provided with the case report display. The synopsis must include the patient's name, category of malocclusion, treatment summary, plus patient's ages and dates when all records were taken. Adhere to the example that follows:

#### Synopsis of Case Reports

Name and Category	Treatment Summary	Age and Date* of Pre-treatment Records	Age and Date* of Progress Records**	Age and Date* of Post-Treatment Records
<u>Norma Lopez</u> Early Treatment Mixed Dentition	Crossbite Non-ext. CI II Div 1	10.9 yo 09-22-71	11.3 yo 03-22-72	13.6 yo 09-07-74
<u>Juan Santos</u> Class with a deep overbite	Non-ext	13.11 yo 12-16-72		16.2 yo 05-08-74
<u>Raul Reyes</u> Class II Div 2	Non-ext	11.1 yo 09-06-73		13.6 yo 02-10-76
<u>Andrea Santos</u> Class II Div 2 High Angle	Ext. max 4's and mand 5's	9.2 yo 09-07-73		13.8 yo 03-02-73
<u>Jose Estrada</u> Severe skeletal Class II	Non-ext Maxillo- mandibular orthognathic surgery	23.9 yo 04-22-72	24.9 yo 05-22-72	25.7 yo 02-15-74

\*Format of age is (Years.Neareast month), ie. if patient is 10 years and 9 months old = 10.9 yo

\*\*Progress records are only required for 2 stage treatment or orthognathic surgical cases. However, the candidate is welcome to present additional progress records for certain cases if he/she deems them fit.

## The Case Report

The recommended case report format is provided by PBO upon application for Phase III and IV examinations. Candidates must limit their written summaries to the space provided:

1. Title Page
2. Resume
3. Cephalometric Summary
4. History and Etiology
5. Diagnosis *(Include a brief description of the nature and extent of the anomalies, use a specific problem list. Divide into anteroposterior, Vertical and Transverse)*
6. Specific Objectives of Treatment for:
  - a. Maxilla
  - b. Mandible
  - c. Maxillary Dentition
  - d. Mandibular Dentition
  - e. Soft Tissue (face, gingiva)
7. Treatment Plan and Mechanotherapy
  - a. Treatment Plan *(Include your diagnostic analysis and your reason for choosing a particular treatment plan, extraction or non-extraction, appliances used, anchorage considerations, type of retention, supplemental therapy, and prognosis.)*
  - b. Mechanotherapy *(Include a step by step detailed plan of the actual treatment. If pertinent, you may describe response to treatment, and any complications. Do not record what was done at each appointment from your treatment chart.)*
8. Results Achieved *(Refer to the objectives stated for the maxilla, mandible, maxillary dentition, etc., and confirm that the objectives were reached or explain why an objective was not realized.)*
9. Retention *(Describe appliances and supplementary procedures.)*
10. Final Evaluation *(Include all pertinent observations and prognosis for stability. Describe post-treatment changes and possible problems in the future. State what you learned about your specific diagnosis and treatment and what you would do differently if given the chance to do so.)*

## Complete Orthodontic Records

The objective of making quality records for the purpose of establishing a sound diagnosis is very important. The following records are required to be presented in the CCRE.

1. Orthodontic Study Models
2. Panoramic Radiograph
3. Lateral Cephalometric radiograph
4. Cephalometric tracings
5. Facial / Extraoral photographs
6. Intraoral color photographs

All pre-treatment, progress and post-treatment records must be complete and must have all six items mentioned above. Detailed case report instructions regarding these records will be itemized in the next section.

### Pre-treatment Records

Pre-treatment records must be made within 6 months prior to appliance placement or start of treatment.

### Progress Records

Progress Records are mandatory for two stage malocclusion correction eg. early treatment and orthognathic surgery cases.

### Post-treatment Records

Post-treatment records must be made at the time of appliance removal or within one year of that date. Second molars must be in occlusion. Radiographs taken within three months of completion of treatment may be submitted as the final radiographs.

<b>NOTE: The candidate is reminded that all records are legal documents and must not be altered.</b>
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# Case Report Instructions

## 1. Orthodontic Study Models

- All models should be prepared using white orthodontic dental stone.
- Impressions should extend far enough into the sulcus to allow accurate reproduction of all soft tissue anatomy in the dental casts.
- The casts should be trimmed in maximum intercuspation or in the intercuspatal position; bite registration is recommended.
- Trimming or carving on the anatomical portion of the dental casts should be limited to the removal of bubbles and defects. Alteration of tooth anatomy is considered as records falsification.
- A lower lingual retainer, either bonded or banded, may be in place when post-treatment casts are made. After the casts are prepared, they should be smoothed and polished in such a manner that tooth and soft tissue detail is not destroyed.
- Refer to appendix I for a diagram of casts.

## 2. Panoramic Radiographs

- Panoramic radiographs must be of diagnostic quality, correctly oriented with right and left sides clearly marked.
- Digital radiographs must show a clear image printed on 8" x 11" paper.
- Radiographic films must be placed in a transparent protective cover.
- The patient's name and date should be visible.

## 3. Lateral Cephalometric Radiographs

- Cephalograms must show as much anatomy as possible, especially in vital landmark areas.
- Digital radiographs must be printed on 8" x 11" paper.
- They should be properly standardized, oriented, and processed.
- The soft tissue profile must be visible.
- The patient's name and date should be visible.
- Radiographic films must be placed in a transparent protective cover .
- Tracings must follow the following color scheme:
  - Pre-treatment tracings must be in green
  - Progress tracings must be in blue
  - Post-treatment tracings must be in red

- Cephalograms must be manually and accurately traced by the candidate with a small diameter tracing pencil or pen. Computer-generated tracings are not acceptable.
- Templates may be used to trace the teeth outlines. Anatomical structures should be identified accurately in preparation for the marking of landmarks and the drawing reference lines.
- All measurements must be recorded on the cephalometric summary sheet. The soft tissue outline of the facial profile is required for each tracing.
- Tracings should be enclosed in transparent plastic protectors, without backing, for superimposition by the examiners.
- Candidates may use whatever landmarks, lines and measurements they wish, provided they follow the given PBO cephalometric standards attached.
- The areas of study listed on the cephalometric summary sheet (to be provided) must be evident on the cephalometric tracing and must be recorded.
- The candidate must be thoroughly familiar with all aspects of the cephalometric radiographs, tracings, and measurements, including the meanings as applicable to each specific case.

#### Pre-treatment and Post-treatment Analysis

- A minimum of three (3) composite tracings are required: craniofacial, maxillary, and mandibular.
- The three composites should be manually traced by the candidate with a small diameter pencil or pen.
- Separate composites of (a) pre-treatment and post-treatment; (b) pre-treatment and progress, and (c) progress and post-treatment tracings are required in the case reports with progress records.
- Candidates must use the same colors for the composite tracings that are used for the cephalometric tracings.
- Tracings must be enclosed in transparent plastic protectors provided in the examination kit. (Please refer to appendix II for a sample of the composite tracing).

**NOTE: The Frankfort Horizontal (FH) line that is drawn on the original pretreatment tracing should be transferred to the progress and post-treatment tracings. By not drawing the porion and orbitale on the progress and post-treatment tracings, one will be reminded to superimpose on the cranial base and transfer the original Frankfort Horizontal. This will help to reduce tracing and measurement error.**

The following procedure for the composite tracings is required:

### Craniofacial Composite

Register on the sella with the best fit on the anterior cranial base bony structures (Planum Sphenoidum, cribriform plate, and the greater wing of the sphenoid) to assess overall growth and treatment changes.

### Maxillary Composite

Register on the lingual curvature of the palate and the best fit on the maxillary bony structures to assess maxillary tooth movement.

### Mandibular Composite

Register on the internal cortical outline of the symphysis with the best fit on the mandibular canal to assess mandibular tooth movement and incremental growth of the mandible.

## 4. Photographs

- Both extraoral and intraoral photographs must be mounted on an 8" x 11" cardboard and inserted into a plastic sheet protector.

### Extra-oral / Facial Photographs

The photographic method used in the pre-treatment records should be repeated in the progress, and post-treatment records.

Requirements:

- Approximately one-quarter life size.
- Quality standardized facial photographic prints in color.
- Patient's head oriented accurately in all three planes of space and on Frankfort Horizontal.
- Right and left profile photographs with lips at rest or lightly touching are recommended. (Minimum requirement is either left or right profile photograph)
- Two anterior views: one with lips relaxed and one smiling.
- Soft tissue areas of concern and of diagnostic value should be recorded in these facial photographs.
- Background free of distractions.
- Quality lighting revealing facial contours, with no shadows in the background.
- Ears exposed for purpose of orientation
- Eyes open and looking straight ahead. Eye glasses removed.

## Intraoral Photographs

If mirror images are used, print the flipped image and mount them as if you are looking at the patient.

Requirements:

- Photographs should be as close to a 1:1 relationship as possible.
- Quality, standardized intraoral prints in color.
- Patient's occlusal plane parallel with the top and bottom of the mount.
- One frontal view in maximum intercuspation
- Two lateral views (right and left) in maximum intercuspation including the first molars at the very least (up to 2nd molars if possible)
- Two occlusal views (maxillary and mandibular)
- Free of distractions (cheek retractors, labels and fingers)
- Lighting should reveal anatomical contours with minimal shadows.
- Use of two cheek retractors.
- Free of saliva and/or bubbles
- Clean dentition

## Identification of Records

Each item in the case report must be clearly marked with ALL of the following:

- Candidate's Name
- Case Report Number
- Date of Record
- Patient's age to the nearest month (example: 12.3 yo for 12 yrs. 3 months)
- Identifying Stickers

Stage of treatment identified by to signify the different stages of treatment (Use round colored stickers consistent for all cases)

- Pre-treatment: green
- Progress (for Phase I & II or surgical treatment): blue
- Post-treatment: red

Placement of stickers:

- Casts: placed on center of the top and bottom of the base
- Radiographs: placed on the upper right hand corner
- Photographs: placed on the upper right hand corner of the mount

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