

American Board of Orthodontics Scenario Based Clinical Examination (Rev.3.1.21)



The highest commitment to excellence.

Purpose of Presentation

- Introduction to the ABO
- Encourage and motivate to pursue board certification
- Describe the scenario-based clinical examination design and process
- Address questions/concerns
- Provide available resources

Course Outline

- ABO Mission
- Overview of the Scenario Based Clinical Exam
- Review of ABO Sample Cases and format
- Mock Board Exam
- Case Radiographic Evaluation (CRE)
- Case Management Form (CMF)
- Closing Points

Dr. Albert Ketcham, Founder

“...to elevate the standards of orthodontia...to protect the public against irresponsible and unqualified practitioners.”

The Mission

The mission of The American Board of Orthodontics is to elevate the quality of orthodontic care for the public by promoting excellence through certification, education and professional collaboration.

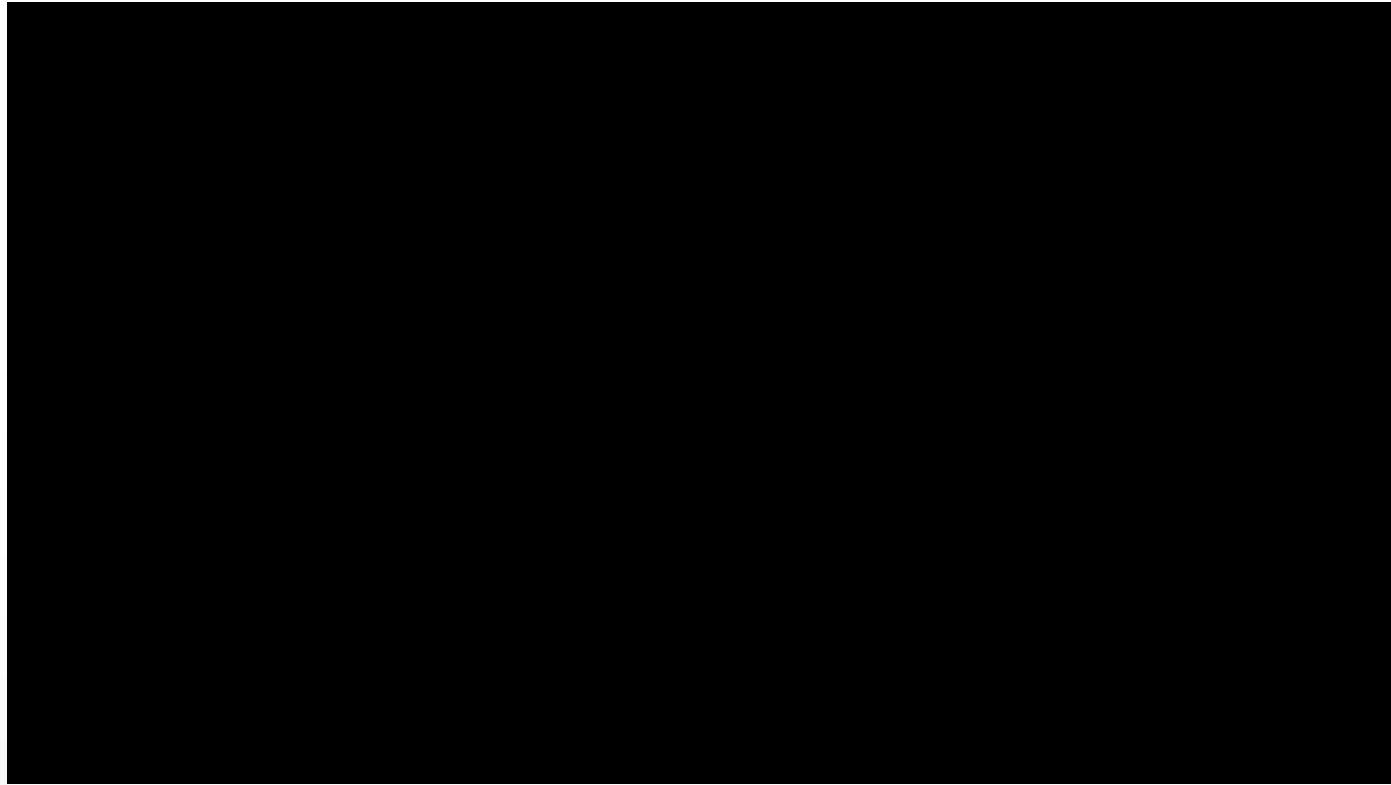
ABO Certified Orthodontists

- There are approximately 4190 ABO certified orthodontists.
- This represents approximately 49.5% of the AAO active membership.

Our Specialty

We have an opportunity to collectively strengthen our specialty by distinguishing ourselves from other unqualified practitioners providing orthodontic care.

It Takes A Specialist Video



Foundation for Change

Martin Dewey:

“We should not make our requirements for examination so high that the average orthodontist may not perfect himself so that he may pass the board’s examination.”

Why Change the Clinical Exam?

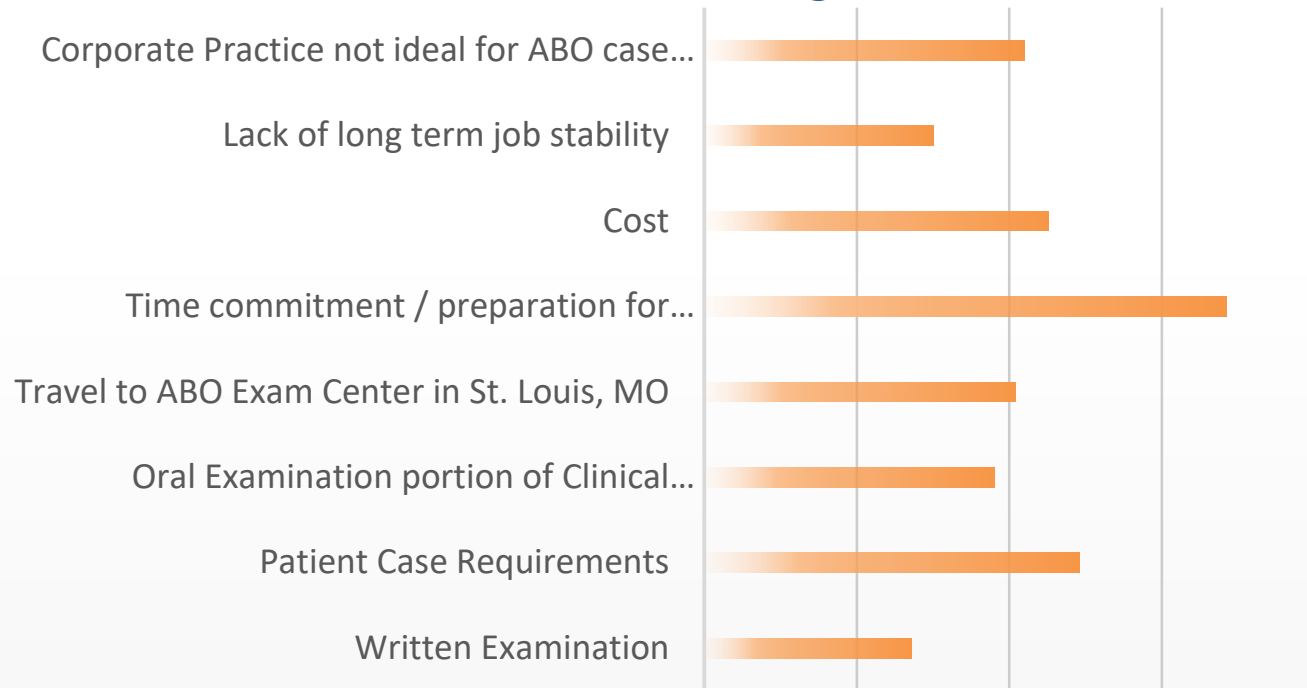
How The Decision Was Made

The Research Process



ABO Certification Survey

Please rank the following ABO requirements that commonly prevent orthodontists from becoming board certified:



Conditions for Change

Barriers



- Educational Barriers
 - Leadership/Faculty Commitment
 - Length of Program
 - Patient Population Changes
 - Types of Patients
 - Total Number of Patients
- Practice Models

Conditions for Change

Environment

- Student debt continues to increase, potentially limiting practice options
- Practice models have significantly changed, making the board requirements difficult or impossible for some to meet

Why Cases Are Eliminated

- Eliminates unnecessary barriers
 - All orthodontists have ability to go through certification process, regardless of their practice environment or where they are within their career
- More objectively tests for proficiency
- Accurately examines critical thinking in all areas of the four domains



Purpose of the Case Based Scenario Clinical Examination

- Objectively evaluate an orthodontist's knowledge, abilities, and critical thinking skills.
- Format allows for testing a large amount of material in a relatively short period of time.
- Questions are graded objectively based on pre-determined desired responses.



Examination Administration

- Scenario-based Clinical Examination presented as an Objective Clinical Examination
- For detailed examination preparation materials, please refer to:
 - [Examinee Orientation PowerPoint Presentation](#)
 - [Study Guide](#)



In the Past

The ABO Scenario-based Oral Clinical Exam was given only at the ABO Testing Center in St. Louis, Missouri



ABO Office



Today, the ABO is proud to announce the first ABO Scenario-based Clinical Examination at Testing Centers Worldwide




ABO Scenario-based Clinical Examination

- The ABO proactively identified a solution to modify the exam to comply with CDC safety requirements and social distancing, while protecting the health and safety of examinees, examiners and all involved.
- The change in the exam was made to maintain the integrity of the examination.
- This change enables the ABO to uphold its mission, while administering a certification exam in the most valid, reliable and now, safer, method possible.
- By reducing barriers, more orthodontists have the opportunity to go through the certification process.



Examination Administration

- Patient records and pertinent documentation are provided for each question.
- Questions measure proficiency related to the tasks and skills required by the domains that the scenario is intended to test.
- Examinee responses will all be in a written, numbered format.
- Examinees should respond with evidence-based answers and cite references to support answers as appropriate.



Benefits of the New ABO Scenario-based Clinical Examination

Fair, reliable and **valid** testing methodology using high standard psychometric procedures and concepts

- Fair, standardized for all examinees
- Reliable, consistently good in quality and performance
- Valid, psychometrics are applied to all aspects of the examination.
- Demonstrates clinical proficiency in an objective manner



Examination Components

Domain	Weighted % of Exam
1. Data Gathering and Diagnosis	25%
2. Treatment Objectives and Planning	25%
3. Treatment Implementation and Management	25%
4. Critical Analysis and Outcomes Assessment	25%



Domain 1: Data Gathering and Diagnosis

Tasks:

- Perform a screening examination using established guidelines to determine if and when treatment is indicated.
- Gather pertinent records to properly diagnose the nature of orthodontic and dentofacial problems and their etiologies.
- Develop a comprehensive diagnosis based on the patient's chief concerns, medical and dental history, dentofacial condition, growth and neuromuscular status, and psychosocial concerns for proper treatment planning.

Domain 1: Data Gathering and Diagnosis

Sample Questions:

- What are your skeletal, dental and facial diagnosis?
- What are the skeletal and dental factors associated with this malocclusion?



Domain 2: Treatment Objectives and Planning

- Develop evidence-based facial, skeletal, and dental treatment objectives based on the diagnosis.
- Develop evidence-based treatment plan(s) to address the identified concerns and achieve specific objectives.
- Obtain informed consent in accordance with established documentation procedures in order to enhance the patient and guardian's understanding of treatment options, recommendations, benefits, limitations, and risks.

Domain 2: Treatment Objectives and Planning

Sample Questions:

- What would be the ideal treatment plan for this patient?
- Which of your treatment objectives is the most difficult to achieve and why?



Domain 3: Treatment Implementation/Management

Tasks:

- Manage dentofacial problems in accordance with the treatment plan using appropriate mechanotherapy.
- Evaluate the treatment progress and its relationship to the objectives and timeline.
- Collaborate in providing interdisciplinary treatment using effective communication and documentation procedures to enhance treatment outcomes.

Domain 3: Treatment Implementation/Management

Sample Questions:

- If you could start this case again, what would you do differently and why?
- What would be the necessary adjustments in your mechanotherapy to complete this treatment?



Domain 4: Critical Analysis/Outcomes Assessment

Tasks:

- Assess post-treatment facial esthetics using appropriate guidelines.
- Assess dental, periodontal, and neuromuscular health using appropriate guidelines.
- Evaluate post-treatment occlusion using accepted standards assess the overall efficacy of treatment.
- Evaluate treatment outcomes comparing pre-treatment and post-treatment records to assess dental and skeletal changes.

Domain 4: Critical Analysis/Outcomes Assessment

Sample Questions

- Electronically, score the C-R Evaluation on the final models and panoramic x-ray.
- Interpret provided superimpositions.
- Assess changes that occurred due to growth and treatment



How to Prepare

- Review ABO Study Guide and Sample Cases
- Critical thinking exercises
- Presenting an examinee's own clinical cases to fellow residents, colleagues, educators and/or mentors
- Opportunity for self-evaluation and reflection on case outcomes



How To Prepare

- ABO case outcomes assessment tools:
 - Cast Radiograph Evaluation (CR-E)
 - Case Management Form (CMF)
- Cephalometric Superimposition Technique and Interpretation



Rating Scales and Examiner Training

- Responses independently scored
- Anchored rating scale
- Examiner training calibration program



Exam Results

- Weighting system
- Psychometric assessment
 - *Reliability, validity and objectivity*
- Results presented in a pass/fail format

Case-based Clinical Examination Statistics

Past Five Traditional Exams (2017-2019):

- Average Pass Rate – 71.3%
 - Passed all components during first attempt
 - Remaining 28.7% entered banking process
- Range – 67-76%

Scenario-based Clinical Examination Statistics

	Feb 2019	Nov 2019	Feb 2020
Exam Type	Oral	Oral	Oral
Pass Rate	68%	84%	86%
Interrater Reliability	79%	92%	93%

Scenario-based Clinical Examination Statistics

Nov 2020

Feb 2021

Exam Type

Scantron

Scantron

Pass Rate

75%

Interrater Reliability

88%