Orthopaedic In-training Examination Resident Guide 2020

Administration Dates: November 13th-16th
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Message from the Chair of the Examinations and Assessment Committee

Dear Residents and Colleagues,

On behalf of the Assessments and Examinations Committee, I would like to thank you for participating in this year’s examination.

Being the first such examination among all the medical specialties, this year marks the 57th administration of the Orthopaedic In-training Examination®. Every year, the OITE is created by a group of orthopaedic surgeons who are deeply committed to education through a rigorous peer-review process. While many topics in orthopaedic surgery lack conclusive evidence, many of our practices are based on sound medical principles and a consensus of experts. Sometimes, there may appear several correct answers to a test item, but each question has been vetted through this peer-review process to select the one best preferred response.

With this and each subsequent administration, we strive to make the OITE better. Thank you for being part of this year’s examination, and I hope that you find this to be an enriching educational experience.

Sincerely,

Norman Otsuka, MD, FAAOS
Chair, Assessments and Examinations Committee
Examination Overview and Purpose
The American Academy of Orthopaedic Surgeons (AAOS) develops the Orthopaedic In-Training Examination (OITE)® to assess resident knowledge in eleven primary content domains as defined by the OITE blueprint. The OITE is a comprehensive examination designed to help you assess your knowledge in established principles and conventional procedures and treatment in orthopaedic surgery. Orthopaedic residency programs use the OITE performance outcomes at the individual and programmatic levels to support orthopaedic resident education through study, research, discussion, review, and assessment.

Residents demonstrate their knowledge in key subject areas and are provided score summaries of their performance as well as comparative information regarding performance among their peers. The OITE is a formative examination designed to assist educators and educational programs with quantitative measures that will drive quality improvements in education.

Disclosure
By using AAOS site resources, including in-training or practice materials, self-assessment exam collections, tests, or study tools, you are consenting to the collection, use, and disclosure of your test data as described in the AAOS Privacy Policy and Terms of Use, which are available on the AAOS website and which may be updated from time to time. AAOS will not use or share your information with anyone except as described in its Privacy Policy, and the use of information collected shall be limited to the purposes stated under the Privacy Policy and Terms of Use.

OITE Format
The OITE is a 275 item, multiple-choice, computer-based examination. The test items are developed as single best answer among 4-5 response options. All items are scored correct or incorrect. There is no partial credit scoring. Items may include clinical scenarios, images and video clips. Each item is independent of other items. In other words, test items are not linked or are dependent on other items in order to be answered. The OITE is not offered in a paper-based or oral format.

Each examinee may use up to 7 (seven) hours of testing time to complete the OITE. The examination is assembled in two sections. You will have up to 3.5 hours of testing time to complete each section. During testing, you may flag items to review and are permitted to change answers. When you are finished Section I, you will be required to verify completion and submit your answers. Once you have done so, you will no longer be permitted to access the test items to review or change answers. The same process will follow for the second section of the examination, with an opportunity to flag items to review, change answers, and verify completion of the examination. Prior to the delivery of the examination, examinees must review and accept the AAOS confidentiality/non-disclosure statement (see Examinee Information) as well as participate in the pre-exam tutorial. The tutorial provides instruction on the layout, response options, and timing of the OITE. In addition, the tutorial displays how to enlarge images and play (replay) video clips.

Administration
The OITE is administered in a defined testing window determined by the AAOS. Your residency program coordinator or residency program director along with the AAOS will determine if any exceptions shall be made to the defined testing dates. Requests to test outside of the scheduled administration window shall be considered on a case-by-case basis.

Testing Environments
The 2020 OITE is available for administration as an on-line examination using state of the art remote proctoring or as an on-line examination administered in a group setting. The residency director shall determine which of the two administration models will be utilized for the 2020 OITE. The programs will adhere to a single model and thus examinees
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do not have the choice to test under conditions that differ from the residency director’s choice. The residency programs will notify the AAOS of their preferred administration model when submitting the OITE Registration Form.

Group (in-person) Testing
The residency programs participating in the group (in-person) administration model will be required to secure an appropriate location, free from distraction and spacious enough to host the OITE administration. All hardware (laptops, desktops) will be secured by the program. Compliance with all systems requirements shall be the responsibility of the program. (See Appendix A for details) Examinees will be notified by the program coordinator regarding the day, time, and location of the administration.

Remote Testing and Proctoring
The examinee must secure a private location, free from distractions and external stimuli. You are responsible for appropriate hardware (laptop, desktop) as well as all systems requirements for the exam administrations. (See Appendix A for details). Suitable locations include private office or home office/environment. Public locations such as coffee shops, libraries, facility dining areas are unacceptable locations for the OITE administration. You will be subject exclusion of participation or termination of the examination, if the testing environment is deemed to be unsuitable.

Examinee Information
To ensure that the OITE is administered under comparable conditions, the AAOS is taking steps to address the maintenance and standardization of the testing environments. OITE results may be withheld from the examinee and residency program if there is a determination that violations of expected conduct, confidentiality, and/or test security occurred. Any irregularities associated with the administration that were under the control of the examinee will be considered as evidence in considerations to hold results or invalidate scores. Individuals found to be in violation of expected conduct during the examination may be subject to exclusion of participating in future OITE administrations.

Examinee Conduct/Confidentiality
All individuals taking the OITE are expected to comply with the highest standards of test security. You may be subject to score invalidation or a hold on your examination score/results if upon review, you are in violation of the expected conduct described herein.

When the examination session begins, you will be required to read and agree to the following:

I hereby represent that:
- No one else will take the OITE in my name or on my behalf, nor will I take the OITE in the name of or on behalf of any other person;
- I will not receive or provide assistance during the exam, nor will I access or attempt to access prohibited aids or materials. Examples of prohibited aids or materials include, but are not limited to electronic devices, smart watches, mobile/smart phones, calculators, books, journals, notes; and
- I will not reproduce, in whole or in part, any OITE questions or answers, nor will I receive reproduced questions or answers.

I acknowledge and agree that if AAOS suspects conduct inconsistent with these representations, I may be reported to my residency program director by AAOS.

Test Security
AAOS reserves the right to withhold scores or cancel test results when if, in its judgment, a testing irregularity violating security measures occurs that is the responsibility of the examinee.

IDs
You will be expected to validate your identification with government or institution-issued photo ID. Person identification shall be validated by the residency director, coordinator, or proctors in the in-person testing model. Examinees testing in a remote environment shall receive an access code in advance of the scheduled administration and will be authenticated in the remote testing and proctoring administration.
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Test Data Usage

By using AAOS site resources, including in-training or practice materials, self-assessment exam collections, tests, or study tools, you are consenting to the collection, use, and disclosure of your test data as described in the AAOS Privacy Policy and Terms of Use, which are available on the AAOS website, and which may be updated from time to time. AAOS will not use or share your information with anyone except as described in its Privacy Policy, and the use of information collected shall be limited to the purposes stated under the Privacy Policy and Terms of Use.

OITE Development and Blueprint

Exam Content and development process
The OITE is developed in accordance with an 11-content area blueprint, generally recognized by orthopaedic educational community as contemporary, appropriate and relevant topics in orthopaedics. Skilled orthopaedic surgeons and members of the AAOS, volunteer their time and expertise to assist with the development if test items. All item writer contributors undergo standardized training and are guided by the AAOS item development style manual. Test items are authored at various times throughout the year and undergo a rigorous peer review process. Committees of physician experts review all test items for relevancy and accuracy. In addition, the defensibility of the discussion (rationale) and the cited references supporting the targeted construct are thoroughly reviewed and approved. The examination is assembled in compliance with the current and approved OITE Blueprint.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Proportion of Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot and Ankle</td>
<td>~9%</td>
</tr>
<tr>
<td>Hand</td>
<td>~8%</td>
</tr>
<tr>
<td>Hip and Knee</td>
<td>~10%</td>
</tr>
<tr>
<td>Orthopaedic Basic Sciences</td>
<td>~11%</td>
</tr>
<tr>
<td>Orthopaedic Oncology</td>
<td>~9%</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>~10%</td>
</tr>
<tr>
<td>Practice Management</td>
<td>~1%</td>
</tr>
<tr>
<td>Shoulder and Elbow</td>
<td>~8%</td>
</tr>
<tr>
<td>Spine</td>
<td>~12%</td>
</tr>
<tr>
<td>Sports Medicine</td>
<td>~7%</td>
</tr>
<tr>
<td>Trauma</td>
<td>~15%</td>
</tr>
</tbody>
</table>

Registration

The residency program director and coordinator will ensure that you are registered for the OITE. The process is completed with the AAOS months prior to the administration. Each program verifies the names, PGY, program etc. for their cohort of examinees and are subject to meeting defined deadlines set by the AAOS. Please direct questions regarding the exam registration to your program’s coordinator.

Pre-Exam Tasks - Minimum System Requirements

It is imperative that the minimum system requirements are reviewed and are deemed compliant in advance of the OITE administration. For group testing, it is the responsibility of the program to ensure each examinee is equipped with the appropriate hardware, operating system, and web connectivity. Those examinees testing in the remote administration model will be subject to systems checks in advance of the administration with the remote proctoring systems check tasks.
Remote testing system check:

1. You will receive an email from the AAOS with instructions to conduct a system requirement check and access a sample test
   a. Complete hardware/systems check
   b. Preview how to access the exam on test day
   c. Preview sample test item (question) formats

Note that remote testing and proctoring requires the use of Chrome browser. If testing on a personal computer, make sure that a Chrome browser is installed prior to executing the systems check. See Appendix A

The Day of the Exam

Preparation & Testing Environment

Check and prepare your testing environment in advance. Ensure a private, quiet, and comfortable space for the OITE administration. Make sure the lighting and temperature as well as the seating are adequate for the examination.

Check-in

In-person, group testing – Your residency director, coordinator, and/or assigned proctors will verify your identity, assign seating, and convey instructions regarding the administration.

Remote testing and proctoring – You will receive instructions via e-mail with details regarding how to check in and begin the examination

Breaks

There is one scheduled, optional 30-minute break permitted (highly recommended) during the examination. The break timer will begin once you have completed Section I of the examination and submitted your responses. You may begin Section II prior to the automated start for the examination timer by clicking the “Begin Section II” button. You may also opt to forego the scheduled break and continue testing.

Examination Start-up

1. Browser will be in full-screen mode, preventing access to any other programs
2. Loss of network connectivity will result in termination of the examination automatically (see Technical Issues)
3. Copy and paste function and clipboard will be disabled
4. All screens must be closed prior to starting the examination
5. All additional monitors may need to be disconnected prior to start ing the examination
6. Right click may be disabled
7. Print functionality is prohibited
8. Browser cache will be cleared once the examination is submitted

Technical Issues

The most common issue encountered in a web-based examination is the loss of internet connectivity. Whether it is resulting from a disruption with the ISP or a glitch in wireless capabilities, the results are frustrating. The OITE is designed to “recover” from the occasional connectivity interruption. Should you temporarily lose connectivity, your responses up to that point are stored and retained. When connectivity resumes, you will be brought to the last item that you answered. Click NEXT to move on to the next item. In the event of an extended internet outage (>60 minutes), you must contact the AAOS at exams@aaos.org and report the incident. The AAOS will work with you to schedule a session to complete the examination.

Scoring/Score Reporting

After the OITE testing window is complete, pre-scoring analyses are conducted by the AAOS. Item (question) analysis and key validation are conducted to ensure that all test items are valid and keyed correctly. On occasion, statistics generated after the administration may indicate that an item is not performing as expected. Items are reviewed by members of the examination committee subject matter experts (orthopaedic surgeons) to review the content and
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determine if they should be retained and scored in the examination or omitted from scoring. Final scoring will be performed on the final, approved set of items. AAOS generates score reports on the individual and program levels. Each program handles the dissemination of results differently. You will receive your results from the residency director or program coordinator. The AAOS sends all results to the residency director or designate.

Testing Accommodations

requests
AAOS will consider the requests of qualified persons with disabilities for reasonable testing accommodations. History of testing accommodations in an educational setting must be verified by the residency program in writing and submitted to the AAOS no less than 30-days prior to the test administration. In the event of an acute or temporary situation requiring an accommodation, a letter of support from a qualified healthcare provider must be provided to the AAOS no less than 30-days from the scheduled examination.

GDPR Personal Data Protection
AAOS works with specialized vendors in the development and administration of our online exam platforms. In order to successfully complete the exam registration process, AAOS will share the minimum amount of necessary Personal Data about each registrant: name and AAOS ID number. This limited Personal Data does not allow our vendor to identify the registrant outside of the scope of the exam. Because only AAOS holds Personal Data which could be used to individually identify registrants, their Personal Data remains private and confidential.

For more information on AAOS privacy practices, see the AAOS Privacy Policy at www.aaos.org/privacy or contact the AAOS Privacy Officer at privacy@aaos.org.

Contact Information and Technical Support

• AAOS
  For all questions on policy and logistics, please contact AAOS staff.
  o Email: exams@aaos.org (preferred)
  o Phone: 847-384-4103

• Technical Support Internet Testing Services
  o 24/7
  o Telephone: 1-800-514-8494
  o International Telephone Support: +1-443-573-8399
  o Email: aaossupport@testsys.com
Appendix A

Minimum System Requirements

**Windows Computers:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supported Browser:</strong></td>
<td>Microsoft Internet Explorer 11 or later</td>
</tr>
<tr>
<td><strong>Operating System:</strong></td>
<td>Windows 7 or higher</td>
</tr>
<tr>
<td><strong>Processor:</strong></td>
<td>233 MHz or higher Intel Pentium/Celeron family, or AMD K6/Althlon/Duron family; or compatible processor</td>
</tr>
<tr>
<td><strong>RAM:</strong></td>
<td>128 MB or higher</td>
</tr>
<tr>
<td><strong>Display:</strong></td>
<td>Minimum resolution of 1024 x 768 with at least 16-bit color or higher</td>
</tr>
<tr>
<td><strong>Internet Connection:</strong></td>
<td>Broadband connection or better</td>
</tr>
</tbody>
</table>

**Macintosh Computers:**

<table>
<thead>
<tr>
<th>Element</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supported Browser:</strong></td>
<td>Apple Safari 9.0 or higher</td>
</tr>
<tr>
<td><strong>Operating System:</strong></td>
<td>Mac OS X 10.11 or higher</td>
</tr>
<tr>
<td><strong>Processor:</strong></td>
<td>PowerPC G3, G4, or G5 processor; or Intel-based Mac</td>
</tr>
<tr>
<td><strong>RAM:</strong></td>
<td>256 MB or higher</td>
</tr>
<tr>
<td><strong>Display:</strong></td>
<td>Minimum resolution of 1024 x 768 with at least 16-bit color or higher</td>
</tr>
<tr>
<td><strong>Internet Connection:</strong></td>
<td>Broadband connection or better</td>
</tr>
</tbody>
</table>
## OITE System Requirements for Remote Online Testing and Proctoring

<table>
<thead>
<tr>
<th>Operating System/Device</th>
<th>Web browser and other requirements</th>
</tr>
</thead>
</table>
| **Windows 7 or higher** | ➢ Current version of Chrome with Proctorio Chrome extension  
➢ JavaScript must be enabled  
➢ 1024 x 768 minimum screen resolution  
➢ Processor: Intel Pentium or better |
| **Mac OS X 10.11 or higher** | ➢ Current version of Chrome with Proctorio Chrome extension  
➢ JavaScript must be enabled  
➢ 1024 x 768 minimum screen resolution  
➢ Processor: Intel |
| **Chromebook** | ➢ Current version of Chrome with Proctorio Chrome extension  
➢ 1366 x 768 minimum screen resolution  
➢ Processor: Intel or ARM |
| **Free Disk Space** | 250 MB |
| **RAM** | 4 GB RAM or more is recommended for optimal performance |
| **Internet/Network** | High Speed Internet connection required  
Bandwidth 300 Kbps minimum, 600 Kbps recommended |
| **Microphone** | Internal or external microphone |
| **Webcam** | 320x240 VGA resolution (minimum) internal or external |

*iPads are not supported. Virtual machines and proxy connections are not supported.*

**Note:** Browsers not in compliance with TLS 1.2 or higher will be unable to access the portal.