



Part III

Patient Encounters and Performance Skills (PEPS[®])

Candidate Guide

As of February 28, 2024

OVERVIEW OF ROLES

- **Candidate:** An individual taking the exam.
- **Encounter Examiner:** An individual trained to score the candidate's patient encounter note.
- **NCCTO Staff:** NBEO employees who are responsible for administering the exam.
- **Proctor:** NCCTO staff member who can confirm views in the Posterior Segment Skills Station.
- **Skills Examiner (SE):** The individual trained to score the candidate's skills station performance. On-site SEs may confirm views and ensure SP safety.
- **Standardized Patient (SP):** The individual trained to serve as a patient and interact with the candidate during the examination process.

OVERVIEW OF TERMS

- **Break:** Period of time between the previous station and the next station's observation time. Breaks are 4 minutes.
- **Device:** NBEO-provided laptop that candidates will use for the Part III PEPS examination.
- **Extended Break:** A longer break after the 8th cycle for candidates to snack and recharge. The extended break will be 14 minutes.
- **Evaluation Form:** A checklist that an examiner or SP uses to evaluate the candidate.
- **Exam Application/Platform:** The application (software) interface the candidates will use on an NBEO-provided device.
- **Exam cycle:** Time interval between the start and finish of an individual station (skill or patient encounter). All exam cycles are 15 minutes.
- **Finished:** Condition when a candidate has completed their performance and will no longer be scored on exam items.
- **Item:** A numbered procedural element within each skill or patient encounter evaluation.
- **NBEO®:** National Board of Examiners in Optometry®
- **NCCTO®:** National Center of Clinical Testing in Optometry
- **Note board:** NBEO-provided electronic writing tablet available for candidates to take notes while in the Patient Encounter Stations.
- **Observation Time:** Three minutes before the patient encounter or skill station cycle starts. Candidates may use this time to familiarize themselves with the room/station layout. During this time, the candidate will receive the station's overview information.
- **Overview Information:** Information provided during the observation time. The patient encounter stations' overview information is limited to patient demographics, the chief complaint, the review of systems (ROS), and a current medication list. The skill stations' overview information is a brief reminder of the skills to be performed in that station.
- **Patient Encounter (PE) Station:** A station in which the SP portrays a clinical case scenario; the candidate will interview the SP based on the chief complaint, synthesize and analyze clinical data, and generate a patient encounter note.
- **Patient Encounter Note:** The clinical note submitted from the encounter stations that the candidate must complete in the examination application/platform.
- **Repeat:** Condition where a candidate wishes to repeat a skill or item.
- **ROS:** Review of Systems
- **Session:** A complete 12-station exam; any scheduled testing day may have one or more sessions.

- **Skill Station:** Station in which clinical skills are performed on an SP.
- **Skill:** An action/skill the candidate performs on an SP.
- **Station:** Exam room where the candidate performs skills or engages in a patient encounter.
- **Stop:** When a candidate's performance is stopped for either safety purposes or because they have used all available attempts to complete a skill.

For further information regarding the blueprint and scoring development for this exam, please see the Part III PEPS Model and Blueprint available on the NBEO website.

Candidates are expected to thoroughly review this guide in preparation for the NBEO Part III PEPS examination.

In addition to reviewing this Candidate Guide, the following information should be reviewed by candidates in preparation for their examination.

EVALUATION FORMS

(Available on the NBEO website)

The following evaluation forms contain the items used in assessing candidate performance. Candidates are scored based on whether the candidate performed the item in its entirety (yes/no) and/or **how** the candidate performed the item (performance quality). The evaluation forms (located on the NBEO Part III PEPS webpage) listed below display the items/categories upon which candidates will be scored.

- Anterior Segment Skills Evaluation Form
- Posterior Segment Skills Evaluation Form
- Patient Encounters Evaluation Form

ADDITIONAL HELPFUL INFORMATION TO REVIEW

(Available on the NBEO website)

- Part III PEPS Site Information & Equipment List
- Part III PEPS FAQ's
- Part III PEPS Software Interactive Tutorial (optimized for laptop/desktop)
- Part III PEPS Orientation Video
- Part III PEPS Model and Blueprint

PART III PEPS OVERVIEW

The Part III Patient Encounters and Performance Skills (PEPS) exam is a 12-station performance-based exam designed to assess clinical decision-making and performance of essential optometric skills. The 12 stations consist of ten patient encounter stations and two clinical skills stations. The exam is completed over a 4.5-hour session involving standardized patients.

Stations

10 Patient Encounters
+
2 Performance Skills
= 12 Stations



3 minute - Observation Time (with station overview information)
15 minute - Patient Encounter or Skills Station
4 minute - Break (rest period in hallway)

Candidates will rotate through 12 stations. Patient encounters and skills stations are further described later in this document. Candidates may start in a skills station or a patient encounter station.

Candidates' starting stations are randomly assigned and cannot be chosen by the candidate.

Additionally, every exam station cycle will be fully recorded (audio and video).

Ten Patient Encounter Stations 15-Minute Examination Time

- Obtain a case history from the SP
- Analyze provided clinical data
- Request ancillary tests
- Educate SP about the diagnosis
- Complete patient encounter note

Anterior Segment Skills Station 15-Minute Examination Time

Biomicroscopy
4-Mirror Gonioscopy
Goldmann Applanation Tonometry

Posterior Segment Skills Station 15-Minute Examination Time

Binocular Indirect Ophthalmoscopy
Dilated Biomicroscopy & Non-Contact Fundus Lens Evaluation

PART III PEPS ADMINISTRATION

EQUIPMENT

The NCCTO will provide all necessary equipment used during the exam. Candidates should not bring their own equipment. Please review the Part III PEPS Site Information and Equipment List for information.

ATTIRE

- Candidates are expected to wear *professional attire*.
 - NBEO interprets professional attire as attire that **EXCLUDES** jeans, shorts, athletic pants, T-shirts, scrubs, garments that are immodest (e.g., tank tops, sheer clothing), tennis shoes, sneakers, or flip-flops.
 - Collared short-sleeved shirts are acceptable.
- **Candidates must bring and wear white lab coats throughout the exam.**
- The NCCTO staff will address candidates reporting to the NCCTO in attire deemed inappropriate, **and they may not be permitted to take the exam.**
- Please use the provided restrooms to change clothing if needed.

NBEO ACCOUNT INFORMATION

Candidates must know their OE TRACKER® number and NBEO password, which will be used to check-in at the NCCTO and sign into the exam device. The NBEO password is the same password the candidate created and used to register for the NBEO exam or to view scores on the NBEO website.

ARRIVAL TO NCCTO

REPORTING LOCATION

The reporting location is:

200 South College Street
Suite 2020
Charlotte, NC 28202
(20th floor)

REPORTING TIME

Candidates must report to the NCCTO on the date and time they registered online.

- The check-in process begins at the time reflected in the candidate's email regarding registration. Candidates can [review registration here](#).
 - **Candidates should carefully check their registration date and time. Please note: if a Candidate arrives at the NCCTO on the wrong date and/or at the wrong time, the NCCTO will not be able to accommodate the Candidate. Candidates who arrive later than their scheduled exam date/time will need to register again and the standard exam fees will apply.**
- Candidates should anticipate being on-site for approximately six hours for the exam. This time includes check-in, orientation, examination, and check-out.
 - Candidates should arrive no earlier than 10 minutes prior to their listed registration time. A candidate who comes to the building early may go to the 3rd floor which contains an indoor mall with restaurants, shops, and cafes.
 - Candidates who arrive late for check-in may be disqualified from the examination session.
 - Space and time constraints prevent candidates from being rescheduled to a later session on the same day.
 - In the event of a late check-in, the candidate forfeits their right to being tested (and the exam fee) for that date's administration.
- Additional information can be found in the FAQs on our website.

PHOTO IDENTIFICATION

You will be required to show two valid forms of personal identification. In order to be considered valid, the ID must match the name used to register for the exam. Both forms must contain your signature and must be current (not expired). At least one form must be a government-issued photo ID, such as a driver's license, a passport, or a military ID. The other ID may be a student identification card, a credit or debit card, or another card that has your name and signature. Candidates who do not have proper ID may be denied admission to the exam and are not eligible for a refund for the exam fee.

ON-SITE EXAM DAY CHECK-IN

ARM BANDS / CANDIDATE IDENTIFICATION

- All candidates will be provided with two armbands to display their assigned candidate badge number. These arm bands must be worn throughout the exam.
- The candidate badge number should always be displayed on the side of the arm.
- The back/inside of the badge will contain the candidate's name and OE TRACKER number. These are provided for verification purposes. Candidates should introduce themselves by their OE TRACKER when the exam cycle begins. Examiners, SPs, or staff may ask a candidate for their OE TRACKER if not stated.

PHOTOGRAPH

- A staff member will take a picture of each candidate during check-in to ensure that the correct candidate is being evaluated.
- For identification purposes, the candidate should appear in the photo as they will during the exam. For example, if the candidate plans to wear glasses during the exam, the candidate should wear them in the photo; if they plan to have their hair pulled up in a ponytail, they should do so in the photo.

PERSONAL ITEMS AND LOCKER USE

- **Candidates cannot enter the NCCTO with any item considered luggage. Please plan accordingly.**
 - Luggage items are considered: suitcases, roller bags (larger than backpack-size), and any item not able to fit in the lockers.
 - **Candidates will be turned away if luggage is brought to the NCCTO, which could impact the amount of time a candidate has for orientation.**
 - **NO FIREARMS OR OTHER WEAPONS OF ANY KIND ARE ALLOWED IN THE NCCTO. CANDIDATES FOUND TO BE IN POSSESSION OF ANY SUCH ITEM WILL NOT BE ALLOWED ADMITTANCE INTO THE NCCTO AND/OR WILL BE ESCORTED FROM THE PREMISES BY NCCTO SECURITY.**
- Lockers will be provided for candidates to store small personal items not allowed in the testing area. NCCTO considers cell phones, watches, wallets, purses, backpacks, etc., personal items.
 - Locker dimensions: 13 ½ inches deep, 11 7/8 inches wide, and 31 ½ inches tall. The opening is 9 inches wide. All personal items must fit securely inside the locker space.

HARD COPY AND ELECTRONIC FILES

- Upon arrival, candidates must place all electronics, study materials, and outside materials in their locker. If a candidate has a question about storing any item, please ask staff.
- **No notes (including both electronic and written materials) may be taken into the orientation room or testing area at any time.**
- Any notes and/or written materials discovered during the exam will be confiscated by NCCTO staff and may be considered Improper Conduct (as defined in the Candidate Exam Conduct and Exam Security Agreement).
- **Please see the Candidate Exam Conduct and Exam Security Agreement (available on the NBEO website) for information on Improper Conduct and the potential consequences for Improper Conduct.**

ORIENTATION TIME

Following check-in, the candidates will be directed into the orientation room. Orientation time may be used for candidates to familiarize themselves with the equipment and supplies which will be found in the exam stations.

EQUIPMENT OVERVIEW IN ORIENTATION ROOM

- Candidates are requested to treat the equipment with care.
- If there are any issues with the equipment or supplies, please inform a staff member immediately.
- Candidates should take time to become familiar with the candidate device (laptop), optional docking station, BIO headset, and slit lamp.

The following information will be available on the candidate's device during orientation time until 7 minutes before the start of the first exam cycle:

- Candidate Guide
- Site Information & Equipment List
- Evaluation Forms

Also available during orientation time but not on the candidate's device:

- Candidate Orientation Video
- Part III PEPS Software Interactive Tutorial

It is **optional** for candidates to review this information on exam day. **NBEO strongly encourages candidates to review all documentation, including the orientation video and software tutorial, prior to arriving at the NCCTO.**

Information regarding specific equipment and supplies should be reviewed online in the Part III PEPS Site Information & Equipment List.

DURING THE EXAMINATION

REASONABLE ITEMS

- Candidates are allowed to have "reasonable" items during the examination.
- All items must be provided to staff for inspection and approval.
- Examples of reasonable items are:
 - Tissues
 - Cough drops, mints, gum
 - Lip balm, hair ties, hair clips, sanitary items, etc.
 - Eye patch
- Bottles of water/soda, etc., and individually wrapped snack items must all remain outside the exam room. (Labels on bottles must be removed, and bottles must contain a lid.)
 - A storage area will be provided in the exam hallway for candidates wishing to store larger snacks to eat during the extended break. All snacks must be in clear plastic bags and labeled with the candidate's initials. Please note that candidates will not have access to a refrigerator.

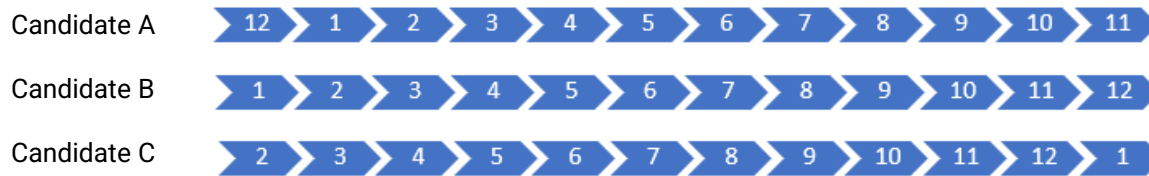
EXAM CYCLE

- The candidate will be assigned a specific station order and rotate as appropriate through the stations.
 - Depending on random assignment, candidates may start in a skills or patient encounter station. Below is a layout of the rooms in the NCCTO. Room layout will appear on your device throughout the exam.



Below are three examples of a starting station and rotation order a candidate may be given.

Example Starting Station and Rotation Order



CANDIDATE IDENTIFICATION & INTRODUCTION

During the exam, candidates should refer to themselves by their OE TRACKER number.

CLOCK AND TIMEKEEPING

- Candidates are responsible for monitoring their time.
- No watches are allowed in the exam rooms; watches must be placed in the candidate's locker at check-in time.
- There is a synchronized wall clock in each exam room.
- A countdown timer/clock is available in the platform application on the candidate device. It displays the official time.
- Examiners, proctors, or SPs will not remind candidates of the remaining time.
- Patient Encounter Notes (Assessment and Plans) will autosave throughout the station and will be automatically submitted at the end of the cycle.
- If time expires before a candidate completes the station, the items not performed cannot be scored.

ANNOUNCEMENTS

Following orientation and equipment review, candidates will be escorted to the exam hallway and stand outside their first assigned station. The following announcements will be played for each station:

- **"Candidates, please enter the exam room."** - signals candidates to enter their station and begin their 3-minute observation time. Candidates should close their doors after entering.
 - Skill station SPs will be in the room during observation and the entire 15-minute cycle.
 - An announcement will indicate that 30 seconds remain in the observation time. Patient Encounter SPs and Skill Examiners/Proctors will enter the room shortly after the 30-second announcement.
- **"The exam cycle has begun."** - signals the official start of the 15-minute cycle.
- **"The exam cycle has ended, please exit the room."** - signals the end of the cycle, at which point the candidate will exit the room and wait for the announcement to enter the next exam room.

OBSERVATION TIME

- Candidates are provided with three (3) minutes of observation time in the station before the exam cycle begins.
- Overview information for the specific station will be displayed on the candidate's device for candidates to review.
- Skills Stations: SP will be present in the room during observation time.
- Patient Encounter Stations: SP will not be present in the room during observation time, but will enter shortly before the announcement, "The exam cycle has begun," plays.

- **Please review the Skills and Encounter Stations' sections for more details on observation time.**
- Any scoreable item performed before the exam cycle begins will not be scored and must be repeated once the exam begins in order to receive credit.

CANDIDATE COMPLETION OF A STATION / END OF SCORING STATION

- The cycle ends with the last announcement or the candidate stating they are *finished*, whichever occurs first.
- Patient Encounter Stations:
 - If a candidate has not already submitted their patient encounter note, it will be automatically saved at the end of the cycle.
 - If the candidate no longer wishes the SP to remain in the room (preferring to complete the patient encounter note alone), the candidate may state to the SP, "Thank you, Mr. or Ms. Lee, you may check-out," or something similar.
 - The SP will leave the room if the candidate states they are finished.
- Skills Stations:
 - The SP will remain in the room but the proctor/examiner will exit the room if the candidate states they are finished.
 - Candidates who finish the station before the ending announcement plays and wish to end the scoring portion of the station may make the following statement to the SP: "**I am finished with this station.**" Consequently, the candidate **will not be scored on additional skills/items**, and the SP will start preparing the room for the next candidate. It is up to the candidate to decide whether to make this statement.
- If the candidate makes a confusing statement or begins any causal conversation, the SP or proctor/examiner will remind the candidate that it is the candidate's responsibility to let them know if they are finished with the station.

EXAM CYCLE

- Candidates are expected to remain in the exam room until the exam-cycle ending announcement plays.
- Once the cycle ends, candidates should proceed to the desk area to the left of their station.
 - An arrow on the back of the door indicates the next station's direction.
- Candidates will wait outside their next station until the announcement plays. Once the announcement plays, candidates may open the door, enter, and will again have 3-minutes of observation time to familiarize themselves with the station equipment, supplies, and overview information.

BREAKS

- Breaks occur between exam cycles and are 4 minutes in length (except that a 14-minute extended break is scheduled after the 8th cycle).
- During breaks, candidates may have a snack, use the restroom, and/or rest.
- During breaks (as is the case throughout the entire exam), candidates may NOT communicate with other candidates. Communication includes both verbal and non-verbal forms of communication.

END OF EXAM

- At the conclusion of the final station, the candidate will exit the room and sit at the desk to the left of the exam room and use their device to submit any incidents that the candidate wishes staff to review.
- Candidates should remain seated at the desk until dismissed by staff.

OBSERVERS

Occasionally, NBEO-approved personnel may be on-site observing the exam. Approved individuals may observe any aspect of the exam and be present in the exam room during the stations. Observers will not impact a candidate's score and should be ignored by the candidate. Observers have been instructed not to converse with candidates, examiners, or SPs in the examination rooms.

CANDIDATE QUESTIONS DURING THE EXAM

- Outside of regular exam questions (e.g., case history questions, confirming views, etc.) during the exam, SPs will only answer "where" questions, such as where the room lighting control is or where supplies/clinical materials are located.
- Candidates may ask "where" questions during observation and exam times.
- Questions on **how** to do things, **how** to use optometric equipment, or other instructional questions are not appropriate and will not be answered.
- **No additional examination time will be provided for any time used to ask and answer candidate questions.**

STAFF INTERACTIONS

Examiners, SPs, and staff are trained to be neutral or show little emotion during the exam. Candidates should not regard this as a personal dislike or as an indication of performance quality.

Candidates should be aware that NBEO is committed to fostering, cultivating and preserving a culture of diversity, equity and inclusion (DEI). NBEO employees have a responsibility to treat others with dignity and respect at all times, and all staff (including SPs) complete periodic DEI training.

Staff Interaction During Exam

- During the exam, examiners, proctors, and SPs are not permitted to say much beyond what has been scripted.
- If a candidate asks a question that cannot be answered, examiners, SPs, or staff may respond with "I do not have that information," "I cannot answer that," or "It is up to you." These comments are not indicators of a candidate's performance or decisions but simply an answer for a situation where the examiners/SPs/staff cannot provide guidance.
- If asked, examiners and SPs will not provide guidance on how or what to perform. Candidates must use their best judgment in these situations.

SP Titles

- Candidates may refer to the SP as "Mr. or Ms. Lee." Lee is the fictitious family name assigned to all SPs.

SP Personal Space

- Please be mindful of the SP's personal space, especially when using the slit lamp. In addition, be careful where patients are touched (e.g., do not touch the SP below the shoulder). Handshakes are permitted.

Issues

During observation time, candidates may ask for assistance from the SP or hallway monitor. In the event that a candidate has a problem with equipment, technology, or otherwise needs assistance during the exam cycle, the candidate must inform the SP. The SP will summon staff to evaluate the issue. Staff will resolve the problem and will instruct the candidate on how to proceed, including giving additional time if appropriate. If additional time is given, it will be clearly displayed on the candidate's device in the top left corner.

If a candidate is given additional time in a station, the non-affected candidates will not be notified during the cycle and their exam cycle will proceed as scheduled. At the end of the cycle, non-affected candidates will be notified on their device and by an announcement that the exam has been paused. This pause will allow all candidates to proceed to the next portion of the exam at the same time.

CASUAL CONVERSATION

- Beyond a cordial hello, SPs will not initiate any casual conversation with candidates.
- Casual conversation may occur **ONLY if the candidate initiates the conversation.**
- Candidates may not discuss specific topics like:
 - Information regarding NBEO/NCCTO
 - Information regarding Part III PEPS or any NBEO exam
 - SP's position (how long employed, experience with NBEO exams, etc.)
 - Candidate's performance
 - Optometry school the candidate attends/attended.
 - Other information about the candidate or their performance

CANDIDATE WOUNDS / INJURIES / MEDICAL EMERGENCIES

- Any open wounds on a candidate's finger or hand must be covered.
- If a candidate has questions or concerns about whether a wound needs to be covered, please show the wound to staff during the check-in process.
- A bandage and gloves will be provided if a candidate becomes injured during the exam.
- Candidates who believe they have injured themselves must immediately notify an NCCTO staff member.
- When a candidate experiences an injury in which the potential for blood-borne pathogen exposure is possible, candidates must use Universal Precautions. The CDC recommends Universal Precautions for the care of all patients, regardless of their diagnosis or presumed infection status.
- Out of concern for safety and to prevent contamination of exam equipment, **any bleeding must be reported and stopped before continuing the exam.**
- No additional time will be given during the exam for injuries due to a candidate error.
- In the event a medical emergency occurs during the exam, candidates should remain calm and a staff member will be there to assist and assess the situation.

RESTROOM / DRINKING FOUNTAIN USE

Candidates should use the restroom before the examination begins. **No additional time allowance** is given for restroom use during the examination session. If a candidate needs to use the restroom during the exam, they should inform the SP or hallway monitor, who will escort them to the restroom. The same principles for restroom use apply to using the water fountain. Breaks are specifically time-limited and although candidates may use break time to use the restroom or water fountain, no additional time will be given to candidates.

POST-EXAM INFORMATION

CANDIDATE INCIDENT REPORTS

- At the conclusion of the final station, all candidates will exit their exam room and sit at the desk to the left of their exam room.
- Candidates should complete a report of any incidents occurring during the examination. Staff will review all submitted incidents.
- Candidates will use their device to submit any incidents. Candidates can submit their incident report(s) up to 10 minutes after the conclusion of the exam. If not submitted within 10 minutes, the incident report will be automatically submitted with the information entered up to that point. The device-countdown timer will provide timing during incident report time.
- Misspellings or grammar will not impact the actions taken based on the submitted incident report.
- If staff have questions about the intent or meaning of a report, they will speak with the candidate directly.
- All candidates must select/indicate whether they have an incident to report. Candidates can submit an incident report for any station or multiple stations.
- Candidates are encouraged to think through their exam and use this opportunity to document any irregularity that may have occurred, which a candidate feels may have negatively impacted their performance. Incident reports **will not be accepted** from candidates once they have left the exam hallway.
- Candidates can document concerns involving the equipment, examiners, SPs, proctors, or the candidate's performance.

Once all incident reports have been submitted, staff will review them. **Staff may review videos or interview the SP, proctor, or examiner for more information regarding the incident report.** Additionally, staff will inspect any reported equipment malfunction.

- Staff will only discuss incidents with candidates if clarification or further information is needed. If staff discuss an incident report with a candidate in the exam room, the candidate should assume the discussion is being recorded.
- All incident reports will be reviewed. If action is being taken, staff will communicate appropriately before candidates are dismissed.
- Candidates should remain at their desk until dismissed by staff. Once all incident reports have been reviewed and it is determined that there are no administrative issues or that all issues have been resolved, staff will dismiss candidates from the exam hallway.

RETEST POLICY

NBEO retest policy dictates that repeat tests are provided only in the skills stations due to administrative irregularities (e.g., equipment failure, loss of electrical power, or a SP issue) negatively affecting the candidate's performance. Retests are limited to the skill or station impacted by the irregularity. **Retests are not allowed for Patient Encounter Stations.**

ADDITIONAL EXAM INFORMATION

CANDIDATE-TO-CANDIDATE INTERACTION

- Candidates may only engage in conversation with each other during the check-in and orientation time. **Once candidates are escorted to the exam hallway, candidates may NOT communicate with any other candidate until they complete their exam and exit the NCCTO.**
 - "Communication" includes conversation, verbal statements, non-verbal cues/expressions (e.g., thumbs up/down, shaking head, high-fives), and passing notes.
 - Violation of this policy may be considered Improper Conduct under the Candidate Exam Conduct and Exam Security Agreement.
 - Candidates are responsible for maintaining control of their laptops, and any trading/exchanging may be considered Improper Conduct (as defined in the Candidate Agreement).

EXAM CONDUCT

All exams administered at the NCCTO are recorded (audio and video). All candidates sign and agree to the Candidate Exam Conduct and Exam Security Agreement and Ethics Policy when registering for the Part III PEPS examination. Copies of the Candidate Exam Conduct and Exam Security Agreement and Ethics Policy are also available on the NBEO website.

SCORING PRACTICES

NBEO uses quantitative and qualitative data analysis to evaluate examination uniformity and fairness. Candidates who achieve scores above the overall cut-off requirement receive a passing score. A Part III PEPS score below the cut-off requirement will result in a failing score.

PATIENT ENCOUNTER STATIONS

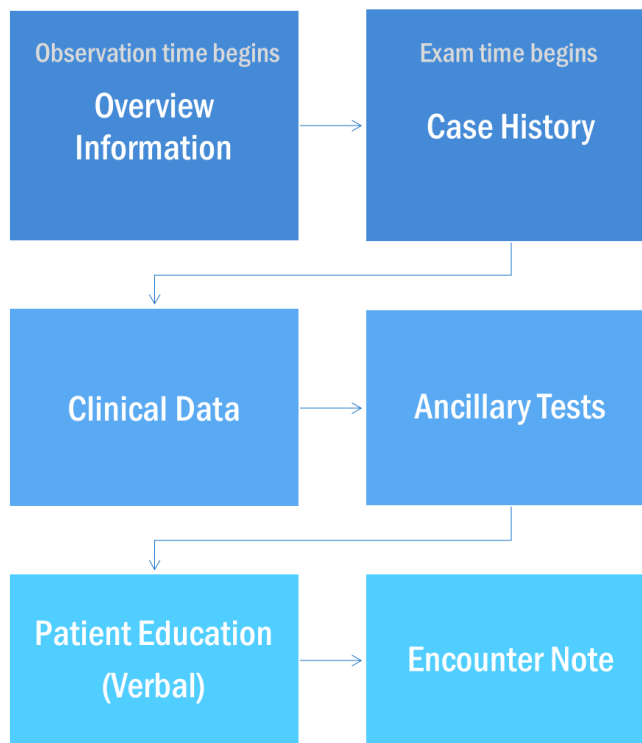
(10 stations)

The ten patient encounters have been classified into one of the following nine clinical presentation categories:

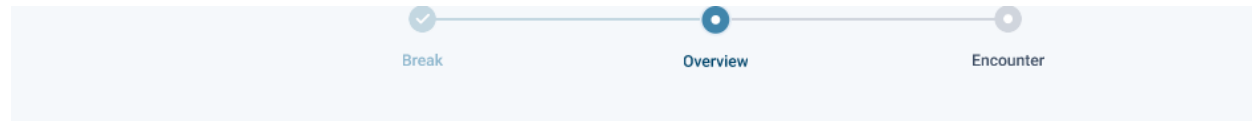
- Anterior Segment Disease
- Binocular Vision
- Contact Lenses
- Glaucoma
- Neuro-Ophthalmic Disease
- Pediatrics
- Posterior Segment Disease
- Refraction
- Systemic Disease

Candidates will experience one of the clinical presentation categories twice during the examination. One of the 10 Patient Encounter Stations is used for pre-testing to gather statistics.

General Encounter Flow



OBSERVATION TIME



Overview

Demographic information	Age: 31 Biological sex: Female Race: White Ethnicity: Not Hispanic or Latino	ROS	Constitutional: Denies ENT: Denies Cardiovascular: Denies Pulmonary: Denies Endocrine: Denies Dermatological: Denies Gastrointestinal: Denies	Genitourinary: Denies Musculoskeletal: Pain in elbows and wrists Neurologic: Denies Psychiatric: Denies Immunologic: Denies Hematologic: Denies Obstetrical/Birth history: Denies
Chief complaint	I have an occasional floater in my vision.			
Medications	Ibuprofen 200mg, every 6 hours			

- After an announcement to enter the exam room, candidates will have three minutes of observation time to review the overview information regarding the patient encounter. The overview information will include patient demographics, chief complaint, a current medication list, and review of symptoms (ROS).
 - Candidates can assume that the patient accurately filled out the ROS using non-medical terminology while in the waiting room and currently has the symptoms listed (i.e., ROS does not cover past history).
 - **Overview information will remain on the device as part of the clinical data, when the exam cycle begins.**

During observation time, if a candidate has a question, they may ask the hallway monitor. SPs will not be in the Patient Encounter rooms during the observation time. Candidates are not required to wash their hands in PE stations but must, at minimum, use hand sanitizer before entering.

Please note that if the patient presented in the patient encounter is a child, the candidate may be speaking with the parent/guardian of the patient. The SP will tell the candidate if they represent a parent or guardian.

When the exam cycle begins, the SP will enter the room, and the candidate will be allowed to start asking the SP questions.

CASE HISTORY (SUBJECTIVE)

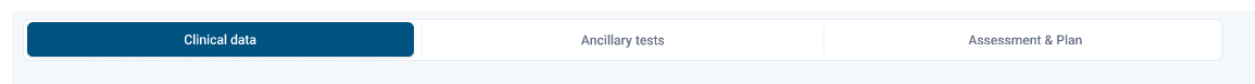
- The SP will portray a patient presenting in **your** office for the first time. Candidates should inquire about the patient's chief complaint, HPIs, medical/ocular history, medication(s), allergies, surgical history, family medical/ocular history, and social history.
- Candidates should be prepared to respond to the patient being **portrayed** rather than the SP's actual personal characteristics. **For example, the SP may be a white female in her mid-40s not wearing glasses, portraying an elderly Asian male who wears glasses.**
- The candidate is expected to conduct an appropriate Subjective Interview, engaging the patient with questions directly, informed by the chief complaint and preliminary information given, at a level

sufficient to inform the course of the remainder of the patient encounter. Candidates should inquire about the following elements:

- HPI questions
 - Such as: where, onset, how long, how bad, how often, better/worse, further description, etc.
 - Past ocular history questions
 - Such as: condition(s) including how long and treatment, eye surgery, last exam, correction wearing, type of correction, compliance, age of script, etc.
 - Medical information questions
 - Such as: last exam, condition(s) including how long and treatment, medications, allergies, reaction if allergies, etc.
 - Familial history questions
 - Such as: medical, eye
 - Social history questions
 - Such as: job, hobbies, substance use, risky behaviors, etc.
- If a candidate asks a question during the Case History for which the answer is not provided to the SP on their script, the SP will respond, "I do not have that information."
 - Candidates are not required to enter subjective information into a patient encounter note. The scoring of the subjective information is based on what is verbalized by the candidate for this section.
 - In the patient encounter rooms, candidates will be able to take notes during observation time and during the encounter using a note board. The note board will remain in the room and will not be used for scoring.
 - Candidates may ask the SP questions at any time throughout the exam station.
 - Candidates will not be penalized for referring to information on the device during the encounter station. When a candidate needs to review information on their device for an extended amount of time (e.g., reviewing clinical data, ordering and reviewing ancillary tests, completing the assessment and plan), candidates may state, "Please give me a moment to review some information on my device." This statement is not required but may ease transitions. The SPs are trained to expect that there may be extended pauses while candidates review information or make notes.

Points are collected throughout the entire station and not just arriving at the correct diagnosis and treatment.

CLINICAL DATA



Clinical data will be available on the candidate's device once the overhead announcement, "The exam cycle has begun," has played. Clinical data will remain on the device until the exam cycle ends.

The clinical data presented is dependent on the specific patient encounter and will vary. The following information will be in the clinical data **if associated** with the patient encounter:

- Pretest information
- Refractive information
- Anterior segment evaluation
- Posterior segment evaluation

After receiving the clinical data on the device, candidates may choose to review data, order ancillary tests, ask the SP questions, or fill out the patient encounter note in any order they wish.

Candidates may click each of the tabs within the program to navigate between clinical data, ancillary tests and assessment and plan.

ANCILLARY TESTS (OBJECTIVE)

After reviewing the clinical data, the candidate can select ancillary tests. Candidates must type out ALL tests to be ordered and provide indications for why each test is ordered. Ancillary tests should be ordered as *specifically* as required in a clinical setting.

Candidates may request commonly grouped tests such as a CBC or a metabolic blood panel. Candidates should not order unnecessary tests or tests they already have clinical data for as there will not be any “updates” to any clinical data already presented to the candidate. Some patient encounters may not require ancillary testing, so selecting “No ancillary tests to submit” along with “No further testing indicated” would be appropriate in those patient encounters. Candidates should order ancillary (additional) tests, labs, or imaging needed to rule-in or rule-out a diagnosis as they would in their own practice, understanding that test results may not be immediately available or accessible while the patient is still in the office.

Example Candidate ancillary test entry:

Test name: Westergren ESR

Indication: Rule out Giant Cell Arteritis

The screenshot shows a web interface with three tabs: "Clinical data", "Ancillary tests" (which is active and highlighted in blue), and "Assessment & Plan". On the left, there is a sidebar with a blue header and a sub-header "Ancillary tests". The main content area is titled "Ancillary tests" and contains the following text: "What ancillary tests would you order for this patient? Please document the specific test name and a concise indication or reason for ordering said test." Below this is a paragraph: "You may add another test by clicking the '+' sign at the bottom of the page. You may also choose not to document any ancillary tests by clicking the 'No ancillary tests' button below." A second paragraph follows: "When you have documented all the ancillary tests that you will order, click 'Submit ancillary tests'." There are two input fields: "Test name" and "Indication". Below the "Test name" field is a "+ Add another test" link. At the bottom right, there are two buttons: "No ancillary tests to submit" and "Submit ancillary tests".

Once “Submit ancillary test(s)” is selected, no other tests can be ordered/submitted.

After submitting their ordered ancillary tests, the candidate will receive the ancillary tests associated with the patient encounter. The ancillary test results given to the candidate **may or may not correspond with what the candidate ordered**. Candidates should use the provided ancillary tests to inform their assessment and plan. Some test results may be normal. It is the candidate's responsibility to recognize abnormalities.

Candidates are advised to order tests exactly as they would in a clinical setting for a specific case. It should not be assumed that receiving a test result not ordered indicates missed points. Candidates are being scored on what they have ordered with the understanding that multiple tests may be correct.

These ancillary test results will remain on the device until the exam cycle ends.

PATIENT EDUCATION (VERBAL)

The candidate should educate the SP about their condition by explaining the diagnosis, its etiology, pathophysiology, and treatment plan including any follow-up. Except for the actual diagnosis, candidates should avoid medical jargon when communicating with the SP. Explanations should be in a patient-centered language.

After Patient Education, if the candidate no longer wishes the SP to remain in the room (preferring to complete the patient encounter note alone), the candidate may state to the SP, "Thank you, Mr. or Ms. Lee; you may check out." or something similar. Note that once the SP leaves the room, they are not allowed to reenter. Candidates must be confident that they have completed all questions and patient education before dismissing the SP. It is the candidate's choice to dismiss the SP. If the candidate does not dismiss the SP, the SP will remain in the room with the candidate until the exam cycle ends.

(Note: Skill station SPs will remain in the room for the entire exam cycle.)

ENCOUNTER NOTE (ASSESSMENT AND PLAN)

Please note that the Subjective and Objective portions of the patient encounter will not need to be recorded by the candidate and are being collected through the interaction with the SP and the submission of ancillary tests.

ASSESSMENT

The screenshot shows a software interface with three tabs: "Clinical data", "Ancillary tests", and "Assessment & Plan". The "Assessment & Plan" tab is active. Below the tabs, there is a section titled "Assessment". A text box contains the instruction: "As you type into the Part III PEPS Diagnosis List, all diagnosis containing those letters will be shown on the dropdown. You should select your diagnosis from the list and then select the location by clicking one of the buttons." Below this is a search box labeled "Part III PEPS Diagnosis List *" with a dropdown arrow. Underneath the search box is the text "Type into the box to search". At the bottom, there are radio buttons for "Eye *" with options: OD, OS, OU, and N/A.

Candidates document their diagnosis (assessment) by selecting a diagnosis from the searchable Part III PEPS Diagnosis List.

- Typing anything into this box will enable an elastic search and drop-down menu, which will enable you to select your intended diagnosis.
 - Candidates must remember to include the appropriate location. The location options the candidate will select from are: OD, OS, OU, and N/A.
 - **If a diagnosis is related to anything other than eye(s) or ocular structure, the candidate should select the option "N/A" in the location field to indicate not applicable.**
- Final diagnosis should address the issues raised in the chief complaint and the HPIs.

PLAN

Plan

Plan *

Patient Education Plan *

With regard to the primary diagnosis, the plan should be written as it would be in a medical record and include:

- **Treatment**
 - Medical therapy: e.g., pharmaceutical prescriptions (with instructions on use)
 - Pediatric medications can just be listed as “prescribed at pediatric dose”.
 - Non-medical therapy: e.g., refractive prescriptions (with instructions on use)
 - Referrals (if any) and reason for referral; this should also include to whom and why.
 - For example, it is unacceptable to indicate “refer to ophthalmology.” The referral must be specific and state, for example, “Refer to retina specialist for the repair of retinal detachment.”
 - Additional testing requirements based on standard of care and indications (rule-ins or rule-outs), if appropriate
- **Patient Education**
 - Example elements which may be included:
 - Home-care instructions.
 - Appropriate activity/lifestyle modification
 - Potential alternative treatment plans
 - Side effects of medications or treatment
 - Explanation of the cause of the problem to the patient
 - Prognosis
 - Explanation of the warning signs the patient should be aware of
 - Patient education should be written in patient-centered language. It should explain the diagnosis, its etiology and pathophysiology.
- **Return-to-clinic or follow-up date**
 - Date should a period of time and not specific to a current date (i.e., 1 day, 1 month, etc).

Punctuation, grammar and spelling errors will not affect scoring as long as the documentation is written in a way that would be acceptable in a medical record.

The information typed by the candidate is saved continually. **The application will automatically submit what was typed when the cycle ends.**

ALL SUBMISSIONS ARE FINAL

Submission of ancillary test(s) is final. Candidates cannot return to this element during the exam cycle following submission.

- After candidates submit ancillary test(s) with or without the inclusion of an indication, they cannot go back and resubmit.

Patient Encounter Notes (Assessment and Plans) will be submitted automatically at the end of the cycle.

- Encounter notes cannot be edited after the end of the cycle.
- Candidates cannot return to previous Patient Encounters once the exam cycle ends for that encounter.

SKILLS STATIONS

(2 stations)

There are two stations in which the candidate will perform optometric skills on the SP. **(Please note that the patient encounter station's case history is also considered a skill and will be scored as such.)** See the "Case History (Subjective)" section for more information.

OBSERVATION TIME

- Candidates are encouraged to focus the slit lamp and wash their hands **during** observation time to save time during the cycle. The SP may request the candidate to wash their hands during the cycle if it was not done during observation time. Additionally, anytime the candidate contaminates their hands during observation time or the exam, the SP, proctor, or examiner may request the candidate to wash their hands before touching items in the room.
 - Additionally, candidates may disinfect the slit lamp during observation time.
 - The surfaces of the slit lamp biomicroscope that come into contact with the patient's face should be cleaned before use by wiping with an alcohol wipe.

During the observation time in the skills stations, candidates are encouraged to:

- Review the station's overview information.
- Become familiar with the layout of the exam room.
- Practice with equipment
 - Try on the BIO headset and adjust the pantoscopic tilt and oculars.
 - Become familiar with slit lamp operation.
- Focus the slit lamp.
- Wash hands.
- Disinfect the slit lamp.
- Set out supplies that will be used (do not open packages).
- Practice adjusting the lighting.
- Review the skills station's Repeat Policy (posted on the back of the exam room door).
- Ask "where" questions, if needed.

During the observation time, candidates cannot:

- Perform any action on an SP (this includes asking the SP to move into the slit lamp)
- Open any sealed packages.

During the exam:

The candidate should ask which eye (OD or OS) to perform the skill for each skill tested. If at any point a candidate does not remember, they may ask for clarification.

Candidates must state structures as they are viewed and state findings verbally in the same manner as they would enter them into a patient record.

ANTERIOR SEGMENT SKILLS STATION



Anterior segment instructions

All items will be performed on one eye of the standardized patient. The Examiner will instruct you on which eye to perform each skill. You must state your findings verbally in the same manner as you would enter them into a patient record. The findings must be accurate for credit. You must state structures while viewing them.

Biomicroscopy

Perform a comprehensive slit lamp examination.

- You may use a cotton-tipped applicator to assist in the eversion of the upper eyelid

Goldmann applanation tonometry

Perform Goldmann Applanation Tonometry

Gonioscopy

Obtain and maintain a clear view and perform a systematic gonioscopic examination of:

- All four anterior chamber quadrants
- Center the view of the angle in the corresponding mirror
- Identify the iris approach for the inferior angle

BIOMICROSCOPY

Candidates are to perform a slit lamp examination to include each item listed in the evaluation form on **one eye** of the SP, as indicated by the examiner. Candidates must verbally state their findings while examining the structures to the examiner in the same manner as would be entered into a patient record.

You may use a cotton-tipped applicator to assist in the eversion of the upper eyelid.

4-MIRROR GONIOSCOPY

Candidates should assume the gonioscopy lens is already cleaned and ready for use but still must state they would properly disinfect prior to use.


Candidates are to perform gonioscopy on **one eye** as indicated by the SP. Anesthetic must be used in the examined eye only. To promote patient comfort during gonioscopy, Celluvisc™ must be used. During the skill, the candidate is expected to obtain and maintain a clear gonioscopic view of the anterior chamber angle and perform a systematic examination of all four quadrants, **centering the view** of the angle. The candidate must identify the correct quadrant when viewing. The candidate must verbally state the findings in the same manner as would be entered into a patient record.

GOLDMANN APPLANATION TONOMETRY

Candidates should assume the tonometer probe is already cleaned and ready for use but still must state they would properly disinfect prior to use. Candidates should assume the SP has less than three diopters of corneal cylinder.

Candidates are to perform Goldmann Applanation Tonometry on **one eye** of the SP, as indicated by the examiner. Anesthetic must be used in the examined eye only. The candidate must verbally state their findings in the same manner as would be entered into a patient record.

POSTERIOR SEGMENT SKILLS STATION



Posterior segment instructions

All items will be performed on one eye of the standardized patient. The standardized patient will instruct you on which eye to perform each skill. You must state your findings verbally in the same manner as you would enter them into a patient record. The findings must be accurate for credit. You must state structures while viewing them.

Binocular indirect ophthalmoscopy

Perform BIO – the patient may be seated or reclined (with patient consent)

Dilated Biomicroscopy & non-contact fundus lens evaluation

Properly examine the following structures without the non-contact fundus lens:

- ✓ Crystalline lens (with direct and retroillumination)
- ✓ Retrolental area/anterior vitreous

Properly examine the following structures with the non-contact fundus lens:

- ✓ Posterior vitreous and optic nerve
- ✓ Four vascular arcades
- ✓ Fovea
- ✓ Macula

The candidate should ask the SP which eye (OD or OS) to perform the skill. If a candidate does not remember which eye they were to perform a skill, they may ask for clarification.

- Surfaces of the slit lamp biomicroscope that come into contact with the patient's face should be cleaned before use by wiping with an alcohol swab; this can be done during observation time.
- Candidates should efficiently perform the dilated skills and be mindful of not shining light in the same area of a patient's eye for an extended time. SPs may ask for a break as needed.

BINOCULAR INDIRECT OPHTHALMOSCOPY

Candidates are to perform binocular indirect ophthalmoscopy (BIO) on one eye of the SP. Candidates can perform BIO with the SP seated or reclined (pending consent).

Candidates must state their findings verbally in the same manner as they would enter them into a patient record. The findings must be accurate for the candidate to receive credit.

- The SP will set the light for BIO at the appropriate mark, and candidates should not adjust the BIO rheostat.
- The optimal working distance is between 18-25 inches, and the camera will record the image the candidate views through either ocular.

DILATED BIOMICROSCOPY AND NON-CONTACT FUNDUS LENS EVALUATION

You are to properly examine the crystalline lens (with direct and retroillumination) and the retrolental area/anterior vitreous using the biomicroscope **without** the non-contact fundus lens.

- For retroillumination only, your light source must be on maximum illumination, and you must move the light source to obtain the necessary retroilluminated image.

Candidates will examine the posterior vitreous, optic nerve, **four** arcades, and macula using the biomicroscope **with** a non-contact fundus lens. All items will be performed on **one of the SP's eyes**. Candidates must state structures while viewing them and state their findings verbally in the same manner as they would enter them into a patient record.

ADDITIONAL INFORMATION ABOUT THE SKILLS STATIONS

EXAMINERS / PROCTORS

- Examiners/proctors are present in the Anterior and Posterior Segment Skills Stations. (Note: Only the SP will be present in the Patient Encounter Stations.)
- The examiner/proctor may talk to the candidate during the exam or provide instructions. Do not be alarmed; this is part of the exam.
- Examiners/proctors will confirm the presence of a view if asked.

STATING FINDINGS

- Candidates are strongly encouraged to talk throughout their exam.
- Candidates are encouraged to speak **clearly** and **audibly**.
- Candidates must state their findings in the same manner as they would be entered into a patient's medical record.
- Candidates must identify and describe what is being examined as they view it.
 - Appropriate **clinical terminology** (structures being identified/assessed) should be used when evaluating ocular health in the skills stations.
- Candidates should avoid stating their ocular health findings using terminology such as "OK," "fine," "WNL," or "not bad."

SKILL STATION VIEWS

- As part of the exam process, the slit lamp and BIO headset are equipped with cameras that obtain live images as viewed by the candidate.
- When examining any ocular structure, the views cannot be "**fleeting**."
- Additionally, when the item requires viewing an entire structure, it means 360 degrees or complete view of the structure.

Location of Cameras

- Slit lamps:
 - The camera is mounted on the **left** ocular of the slit lamps. Candidates should ensure that the image they are viewing is completely seen through the left ocular.
 - Candidates are scored based on what the camera captures through the left ocular.
- BIOs:
 - The camera is mounted centrally for the BIO headsets, with images recorded through each ocular.
- Extensive time has been spent ensuring cameras, monitors, video feeds, and recording systems are calibrated to the best of the NCCTO's ability. As a result, if the view is not obstructed, the recorded image will be exactly as viewed.

Obtaining and Confirming Views

- Candidates are responsible for ensuring the examiners or proctors have a view.
- Candidates may ask at any point if there is a view, and they will be given a response of either "I have a view" or "I do not have a view."
- Examiners and proctors will only comment on the views while they are being performed. If a candidate asks at the end of a skill if the examiner or proctor had views during the skill, they will be told, "I can only comment on a view while it is being performed."
- If an examiner or proctor confirms the presence of a view, it means that something is visible.
- Confirmation of a view does not indicate:
 - Quality of a view.
 - Whether the view meets the minimum criteria.
 - Whether the view is of the correct angle/structure.
 - Whether the view is a "good view."

- If an examiner/proctor says they do not have a view, candidates are encouraged to troubleshoot and ensure nothing obstructs the view through the left ocular of the slit lamp or the central camera for the BIO headset.
- There will be a monitor in the room for proctor/examiner use only. Candidates are not allowed to view the monitors at any time. Monitors are calibrated and positioned in a certain manner for optimal views by examiners/proctors trained to view the monitors.
- If it is determined that a candidate is attempting to view the monitor, this action may be considered Improper Conduct under the Candidate Exam Conduct and Exam Security Agreement.

Candidate Concerns

- Candidates who are amblyopic or monocular are advised to use the better eye for observing through the left ocular of the slit lamp. This may involve candidates altering their position at the slit lamp so that they can look through the left ocular using their right eye or wearing a patch on their right eye.
- If a Candidate needs to request test accommodations in accordance with the Americans with Disabilities Act, as amended, they should submit a Request for Test Accommodations using the process found in the NBEO Test Accommodations Policy at https://www.optometry.org/policies/test_accommodations.

SAFETY AND PROCEDURE ATTEMPTS

Handwashing

- Candidates are expected to follow the CDC's guidelines for hand washing. Handwashing can occur during observation time, but if hands become contaminated, the candidates may be asked to wash their hands again.
- Please note that the candidate touching their hair or face after washing their hands breaks hygiene protocol, and they may be asked to wash their hands before touching the patient or contact side of the equipment.

Intervenes/Corrective Actions

- If there is an intervention by the SP, proctor or examiner, corrective action is expected on the part of the candidate. The candidate may then proceed with the rest of the skill.

Safety and STOPS

- After four attempts at an item, a candidate will be stopped. If a candidate endangers the SP, the candidate will be stopped immediately.
 - Upon unsuccessfully performing the fourth attempt, the candidate will be stopped by the examiner and instructed to move on to the next skill.
- If a candidate is stopped, they will be scored "no" on any remaining items for that skill and are not allowed to repeat the skill.
- If the SP is concerned about their safety, they can stop a candidate from continuing with a skill.

The candidate may be stopped before the fourth attempt if the examiner or SP believes the candidate is placing the SP at harm. In this case, the last intentional performance of an item will be scored.

PERFORMANCE OF SKILLS / ITEMS

- Items are sequenced in the order in which they should be optimally conducted.
- Candidates may alter the sequencing of certain items performed within a skill **as long as the candidate's sequence makes logical sense.**

REPEATING ITEMS / SKILLS

Repeat information is posted in the skills rooms on the doors.

Repeating Items

- **If repeating an item, the last intentional performance of an item will be scored.**
- Candidates can repeat item(s) as long as they are within the same skill.

Repeating Skills

- Candidates **must announce** their intention to repeat before repeating the skill.
- Once the candidate makes the repeat statement, all previous scores recorded by the examiner are erased, and the candidate proceeds and is evaluated as if performing the skill for the first time.
- A stopped procedure or skill cannot be repeated.

Repeating Cautions

- While repeating can be a positive option, candidates are strongly cautioned to consider the remaining time limitation and whether they can repeat all the items within the skill in the time left. It has been noted that candidates who have not monitored their time sufficiently and try to repeat an entire skill for one missed item often run out of time.
- Additionally, it has often been noted that candidates repeating a skill tend to focus so much on the missed items that they overlook other items, resulting in a lower score than initially obtained.

NBEO would like to extend its collective best wishes for your success.