



National Center of Clinical Testing in Optometry®

Clinical Skills Exam®

CANDIDATE GUIDE

Part III – Clinical Skills Examination

August 2016 - July 2017

The Part III – Clinical Skills Examination (CSE) is a practical examination comprised of 20 clinical skills, including Injections, assessed during a 3.75-hour session and involving actual patients. Described in this document are the clinical assessments that are to be performed at each of the 4 Stations. The Candidate Instructions included at the end of this document will be posted in the appropriate examination rooms for review during the examination.

The Evaluation Forms, Candidate Guides, Equipment Lists and other helpful resources are available on the NBEO's website at: www.optometry.org/nccto

Candidates are expected to thoroughly review this manual in preparation for the Part III Exam. This manual contains all relative information a Candidate would need to adequately prepare for the clinical skills exam.

Candidates should be aware that the majority of the information in this manual will not be reviewed again during the Candidate Orientation process.

August 2016 - July 2017 Candidate Guide

OVERVIEW OF TERMS

- **NBEO:** National Board of Examiners in Optometry
- **NCCTO:** National Center of Clinical Testing in Optometry
- **Candidate:** an individual taking the Clinical Skills Exam
- **NCCTO Staff:** the (full-time) personnel responsible for executing the exam and serving as a Candidate advocate and liaison to the NBEO. Referred to as “Staff” throughout this guide.
- **In-House Examiner (IHE):** the on-site Examiner responsible for both scoring the Candidate’s performance in Station 2 and also for ensuring Standardized Patient safety
- **Remote Examiner (RE):** the individual responsible for scoring the Candidate’s performance remotely
- **Standardized Patient (SP):** the individuals trained to serve as a patient and interact in a neutral manner with the Candidate during the examination process. Referred to as “SP” throughout this guide.
- **Proctor:** the individual who will confirm views and volume of medication in Station 4.
- **Session:** a complete 4-Station, 20-skill exam; each day may be comprised of several sessions
- **Station:** an exam room that contains required skills to be assessed during a delineated time period; CSE has 4 Stations
- **Examination Cycle:** the 30-minute time allocation for each Station
- **Observation Time:** the time between cycles where Candidates can familiarize themselves with the Stations
- **Skill:** 1 of the 20 tests performed in CSE
- **Item:** a numbered procedural element within each skill
- **Evaluation Form:** the yes-no checklist an Examiner uses to evaluate the Candidate
- **Candidate Performance:** when Candidate is actually performing the procedures/skills
- **STOP:** When a Candidate’s performance is stopped for either safety purposes or because they have used all available attempts to complete a Skill. See Stopped Skills information in guide.
- **Repeat:** When a Candidate wishes to repeat a Skill or Item. See Repeat Information in guide.
- **Finished:** When a Candidate has completed their performance and will no longer be scored on any exam items. See Candidate completion of a Station information in guide.

PART III OVERVIEW

The Part III examination is composed of 20 clinical skills which Candidates will demonstrate across 4 Stations. The clinical skills to be assessed are the same for all test sessions and utilize the same scoring criteria.

All 4 Stations will be audio and video recorded for review during the scoring process by either a Live or Remote Examiner. Four Examiners contribute to each Candidate's Clinical Skills Examination score.

The CSE evaluation forms contain the criteria Examiners use to assess Candidate performance. The exam criteria are in the form of yes-no checklists and items must be completed **in their entirety** to receive credit.

The following are the required Skills to be completed, broken down by Station.

Station 1:

1. Case History / Patient Communication
2. Patient Education
3. Binocular Extraocular Muscle Motility and Gross Horizontal Saccadic Eye Movement Evaluation
4. Static Peripheral Confrontation Visual Fields
5. Near Cover Test and Near Point of Convergence
6. Pupil Testing
7. Blood Pressure Measurement
8. Ophthalmic Lens Evaluation

Station 2:

9. Biomicroscopy
10. Goldmann Applanation Tonometry
11. 3-Mirror Gonioscopy
12. Collagen Implant Insertion and Removal
13. Soft and GP Contact Lens Insertion, Evaluation, and Removal

Station 3:

14. Retinoscopy
15. Distance Subjective Refraction
16. Heterophoria and Vergence Testing at Distance
17. Accommodation Testing

Station 4:

18. Binocular Indirect Ophthalmoscopy
19. Dilated Biomicroscopy and Non-Contact Fundus Lens Evaluation
20. Injections

EXAM PREPARATION

PREPARATION:

- In addition to reviewing this Candidate Guide, the following information should be reviewed by Candidates in preparing for their exam:
 - Evaluation Forms
 - Candidate Orientation Video
 - NCCTO Site Information and Equipment List
 - Information regarding traveling to Charlotte, hotels, etc.

These resources can be found at: www.optometry.org/nccto

EQUIPMENT:

- All necessary equipment used during the exam will be provided by the NCCTO.
- **Candidates may bring their own retinoscope** to use in lieu of the one provided.
 - Retinoscopes and extra handles are allowed
 - The Retinoscope case, accessories and any transillumintors **will not be allowed**
 - **Any identifying information should be removed** from your Retinoscope prior to arriving to the test center (ie: label with your name, initials, etc)
- **Candidates should not bring any other equipment with them to the test center.**
- The NCCTO provides a *Site Information and Equipment List* on our website that all Candidates should review prior to arriving for their test date.

ATTIRE:

- Candidates are expected to wear professional attire and are encouraged to use “**business casual**” as a reference.
 - The NBEO interprets business casual as attire that **EXCLUDES** jeans, shorts, t-shirts, scrubs, garments that could be viewed to be immodest (e.g. tank tops, sheer clothing), tennis shoes, sneakers, and/or flip flops.
- Candidates must bring and wear white lab coats throughout the exam (see lab coats for additional information).
- Candidates reporting to the test center in attire deemed to be inappropriate will be addressed by NCCTO Staff **and may not be permitted to take the exam.**

NBEO ACCOUNT INFORMATION:

- Candidates must know their NBEO website User ID and Password, which will be used to complete a required Incident Report and optional Survey at the end of your exam. This is the same User ID and Password the Candidate created and used to register for NBEO exams and/or view scores on the NBEO website.

PHOTO IDENTIFICATION:

- To be admitted to the test center, you must present an acceptable form of photo identification that includes **both an embedded photograph and signature**. ID Forms from membership organizations, clubs, banking facilities, or other non-government or non-school related resources are not permissible for admission to a NBEO exam.
- The **only** acceptable forms of identification are:
 - A valid driver’s license or an official photo ID issued by the government of the state or province where you reside.
 - A valid passport.
 - A valid student identification card from an accredited school or college of optometry is acceptable, provided this ID card includes **both a photograph and signature embedded in the card**.
 - In order to be considered valid, **the ID must:**
 - Match the name listed on your NBEO Profile (<https://www.optometry.org/profile/>)
 - If the name does not match, a Candidate may be denied access to the exam.
 - To submit a name change, click here: <https://www.optometry.org/pdf/namechange.pdf>. Your online profile will be updated once the NBEO records are updated internally.
 - Be current and not expired (if the ID is expired, a Candidate may be denied access to the exam).

ON-SITE TIME

- Candidates should anticipate being on-site for approximately 4 hours. This time includes the registration, orientation, exam process and check-out.
 - The 8:30 AM exam should be finished by 12:30 PM.
 - If you are taking the AM exam, we recommend scheduling flights after 2:30 PM
 - The 12:00 PM exam should be finished by 4:00 PM.
 - If you are taking the PM exam, we recommend scheduling flights after 6:00 PM.

EXAM REGISTRATION

CANDIDATE REGISTRATION

- **Candidates must report to the test center on the date and at the time for which they registered online.**
 - The Registration process begins at the time reflected on the registration. You can review your registration here: [check registration time](#).
- In the event a Candidate finds they have arrived to the BB&T center early, the 3rd floor of the building contains an indoor mall with restaurants, shops and cafes. **Candidates are welcome to spend time on the 3rd floor while waiting for their registration time.**
- Candidates who are late for registration may be disqualified from the examination session.
- Space and time constraints may prevent a Candidate from being rescheduled to a later session, and, in that event, the Candidate then forfeits his/her right to being tested (and his/her examination fee) for that date's administration of CSE.

LAB COATS

- Candidates are required to bring and wear a white lab coat during the exam.
- If a lab coat has identifying information displayed such as a Candidate name or school name, white tape will be provided on-site by Staff to cover this information, ensuring anonymity.

ARM BANDS / CANDIDATE IDENTIFICATION

- All Candidates will be provided with two arm bands. These arm bands should be worn at all times during the exam, with the number displayed on the side of your arm. In the event a Candidate removes their arm bands during the exam, Staff will advise the Candidate to reattach their arm bands. If at any point an arm band cannot be clearly seen, Staff may ask Candidates to turn the arm band so the band is more prominently displayed.
- The front of the Arm Bands identifies a Candidate's ID number, which is randomly assigned and may be any number between 1 and 20. The front of the arm bands will also list a Candidate's Station rotation assignment.
- Candidates will be assigned a specific Station order and will rotate as appropriate through the Stations. This means that not all Candidates will start the examination at Station 1. Candidates may start at any Station and will rotate through the remaining Stations as appropriate. Each Candidate's Station order will be listed on their respective arm bands.

The rotation sequences through the Stations are:

- 1 → 2 → 3 → 4
 - 2 → 3 → 4 → 1
 - 3 → 4 → 1 → 2
 - 4 → 1 → 2 → 3
- On the back of the **right** arm badge will be each respective Candidate's name and OE Tracker number. These are provided for verification purposes. Throughout the exam, Examiners and SPs may ask you for your OE Tracker number.

PHOTOGRAPH

- A staff member will be taking a picture of each Candidate during the registration process to assist in ensuring the correct Candidate is being evaluated in the correct Station.
- For identification purposes, you should appear in the photo as you will during the exam. For instance, if you plan to wear glasses during the exam, you should have your glasses on during the photo; if you plan on having your hair pulled up in a ponytail, you should do so in your photo.

PERSONAL ITEMS & LOCKER USE

- Lockers will be provided for Candidates to store all personal items.
- Personal belongings including cell phones, watches, wallets, purses, etc, must be stored during the exam.

- In the event you have an oversized bag, there is a non-secure area in the lobby where Candidates can store luggage.
 - Candidates are welcome to leave items outside of a locker, but should be aware that the area is accessible by others, and, while it is under video surveillance, it is not locked or secured.
 - While this area is under video surveillance, Candidates may use this space at their own discretion as the NBEO will not be responsible for items that are lost and/or damaged.
- Non-compliance with any aspect of this policy is an irregularity, which will be reported to the NBEO, and may be subject to the consequences associated with cheating.

ORIENTATION

- Following registration, the candidates will be seated for the Candidate Orientation, a slideshow presentation will be given which Candidates are required to attend. This presentation is only intended to provide a brief overview of the expectations of the exam, as well as to remind Candidates about the highlights of the exam process.
- Following Orientation, Staff will be available to address any questions Candidates may have.
- Candidates can view the Orientation video online at www.optometry.org/nccto

EQUIPMENT OVERVIEW

- Following Candidate Orientation, in the Orientation Room, Candidates will be provided ample time to view all of the individual Station equipment and supplies.
- During this time, Candidates are encouraged to become familiar with the equipment.
- Candidates are requested to treat the equipment with care and to inform an NCCTO Staff Member if there are any issues with equipment or supplies.
- The injections arms will not have fluid in the arm.
- Candidates are encouraged to spend time with the simulated arms and to become familiar with the layout in preparation for the injections portion of the exam.
- Candidates should also take time to become familiar with the BIO Headset and Slit Lamp.
- Information regarding specific equipment and supplies should be reviewed online in the NCCTO Site Information and Equipment Guide at www.optometry.org/nccto

PERSONAL NOTES, EVALUATION FORMS, ETC.

- Candidates may keep personal notes during the Orientation time only.
- **No notes or other written materials may be taken into any examination room at any time.**
- All notes and written materials must be left in the Candidate locker or the lobby area.
- Any notes and written materials discovered during the exam will be subject to confiscation.
- All notes taken during the exam on NCCTO provided materials must remain in the exam room.
- **Violation of these policies may be cause for disqualification from, dismissal from, and/or failure of the examination.**

DURING THE EXAM

REASONABLE ITEMS:

- Candidates are allowed to take “reasonable” items through the exam.
- All items must be provided to Staff for inspection and approval
- Example of reasonable items are:
 - Bottles of water/Gatorade/etc (any labels must be removed, must contain a lid)
 - Tissues
 - Cough Drops, Mints, Gum
 - Granola Bar, Other individually wrapped snack item
 - Chap Stick, Hair Ties/Hair Clips, Sanitary items, etc.
 - Eye Patch
- Pens and Pencils will be provided in each Station for Candidate use.

CANDIDATE IDENTIFICATION & INTRODUCTION

- During the exam, do not refer to yourself by name, but by the Candidate number you have been assigned on your arm band.
- For instance, if your arm band says “7” you may introduce yourself as: **"I am Candidate 7"** or **"I am Dr. 7"**

CLOCKS & TIME KEEPING

- Candidates are responsible for monitoring their time.
- No watches are allowed in the exam rooms.
- There are synchronized clocks provided in each exam room, to the right of the Exam Chair.
- Examiners, Proctors, and/or SPs will not remind Candidates of the remaining time at a Station.
- If time expires before a Candidate completes the Station, the items not performed will be scored as “no”. Because of this, Candidates are urged to carefully monitor their time.
- Additionally, Candidates should carefully consider repeating any Skills at the end of the Station if they are unaware of the remaining time.

ANNOUNCEMENTS

There are four announcements that play throughout an exam session:

- #1: The first announcement “**Patients and Examiners, please report to your designated exam rooms**” signals test center personnel to prepare for the exam to start. *This announcement is not relative to Candidates.*
- #2: Once Candidates are in the hallway, the second announcement “**Candidates please enter the exam room**” signals Candidates to enter their Station and begin their observation time.
- #3: The third announcement “**The exam cycle has begun**” signals the official start of the first 30-minute exam cycle.
 - Candidates should close the exam room door
 - Station 2 In House Examiner and Station 4 Proctor will enter the room at this point.
- #4: The fourth announcement “**The Exam cycle has ended, please proceed to your next exam room**” will indicate the official end of each examination cycle, at which point the Candidate will exit the exam room.

EXAM STRUCTURE

- Following Orientation and Equipment Review, Candidates will be escorted to the test center and will stand outside of their assigned Station.
- Once Announcement #2 plays, Candidates may enter the exam room and begin their observation time.

CANDIDATE OBSERVATION TIME:

- Candidates are provided with observation time in the Station before each exam cycle begins.
- A Candidate’s starting Station will have 5 minutes of observation time.
- Each following Station will have approximately 4 minutes of observation time as the one minute is used by Staff to prepare the Station for the next Candidate.
- Staff will be monitoring time and if it is determined that an SP took longer to prepare the Station and a Candidate’s observation time was significantly impacted, that Candidate may be compensated with additional observation time.
- During the observation time, Candidates should familiarize themselves with the Station equipment, room layout, Station supplies, etc.
- Station Instructions, located at the end of this document, is posted on the computer monitors for Candidates to review.
 - Exam room computers are only for viewing the Station Instructions, Candidates are prohibited from using these computers for anything else.
- Any scorable actions taken before the exam begins (washing hands, focusing the slit lamp) will not be scored during the observation time and must be repeated once the exam begins.
- During the Observation Time, Candidates are encouraged to:
 - Become familiar with the layout of the Station
 - Practice with equipment (remember items will not be scored during this time)
 - Set-out supplies that will be used (do not open packages)
 - Practice adjusting the lighting in each Station
 - Review Station Instructions
 - Review Repeat Policies (posted on back of the exam room door)
 - Try on the BIO Headset in Station 4
 - Palpate the injections arm
 - Set-out Injections supplies, but do not open any packages

- During the Observation Time, Candidates cannot:
 - Perform anything on an SP (this includes asking the SP to move into the slit lamp)
 - Take blood pressure or perform an injection on the simulated arms
 - Write on any pieces of paper
 - Open any sealed packages

CANDIDATE COMPLETION OF A STATION

- The Candidate's performance ends at each Station with Announcement #4, or by the Candidate stating they are finished, whichever occurs first.
- Candidates who finish a Station before the Station 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". At this time the Candidate **will not be scored on any additional skills/items** and the SP will start preparing the room for the next Candidate. It is up to the Candidate whether or not to make this statement.
- If a Candidate begins any casual conversation with the SP after completing the Station skills, the SP may remind the Candidate that it is the Candidates' responsibility to let them know if they are finished with the Station, but again it is not required.
- In the event a Candidate appears to have finished, but has not stated such and the SP and Candidate find themselves sitting, uncomfortably staring at each other, the SP may then remind the Candidate of their responsibility to state whether they are finished, but the Candidate is still not required to state they are finished.

THROUGHOUT THE EXAM SESSION

- A Candidate who completes the Station prior to the end of the 30-minute examination cycle will remain in the exam room until announcement #4 plays, except for the last cycle.
- Once the cycle ends, Candidates will rotate to their next assigned Station, closing the exam room door behind them (there is an arrow on the back of the door you exit which indicates the direction of the next Station).
- The Candidates will wait outside their next Station until the door opens. **Candidates should not open the exam room door.**
- Once the door has been opened, Candidates may enter and will again have observation time to familiarize themselves with the Station equipment and supplies.
- Announcement #3 will again indicate the start of the next 30-minute examination cycle.
- This process will continue until all 4 examination cycles have been completed.

FINAL CYCLE / END OF EXAM

- For the **final cycle** (after the 4th station), after the Candidate states they are finished or announcement #4 plays, whichever is first, the Candidate will exit the room and sit at the computer desk to the left of the exam room where they will fill out an Incident Report and complete a Survey.
- On the final cycle, if Candidates state they are finished before the announcement plays, SPs may remind the Candidates that they can exit the room and sit at the computer Station.
- Candidates should remain at the workstation until dismissed by Staff.

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**. However, Candidates are discouraged from doing so and encouraged to follow the sequence of items on the evaluation forms. Following the evaluation form helps ensure Candidates will not forget to perform any required item and facilitates scoring.
- **Candidates may also alter the sequence of Skills within a Station but again are similarly discouraged from doing so. The only exception to this policy is in Station 3 - Retinoscopy must be the first skill performed (see Station 3 overview for additional information).**

REPEATING ITEMS / SKILLS

All repeat information is posted in each Exam Room for Candidate review during the exam.

Repeating ITEMS

- Candidates who wish to repeat items within a skill may do so at their discretion, **if** they have not begun the next skill.
 - For instance, if during Blood Pressure, a Candidate was not confident in the measurement, they could check the measurement again before stating their final findings.

Repeating SKILLS

- While items can be repeated *within* a Skill, once a Candidate begins the next Skill, **they will not be scored on individual items/procedures from a prior Skill.** In this scenario they would be required to repeat the **entire** Skill.
 - For instance, if a Candidate had completed Skill 7, Blood Pressure, but forgot to state their findings and realized this once they had already started Lensometry, they could not stop Lensometry and simply state their Blood Pressure Findings. They would need to complete the Blood Pressure Skill from the beginning if they wished to receive credit for the omitted items because they had left the Skill and started a new Skill.
 - An additional example would be in Station 3, Skill 15, if a Candidate completed this Skill and started on Skill 16, but remembered they did not complete the items for Binocular Balance from Skill 15, they would need to repeat the entire Skill 15 to receive credit for the Binocular Balance items.
- Candidates **must announce** their intention to repeat a Skill and include the Skill number to the Examiner and/or SP by stating, for example, "I am going to repeat Skill 7, Blood Pressure." At this point the Candidate should return to the first item in the skill and repeat all items in the Skill.
- Once a Candidate makes the repeat statement, all scores recorded by the Examiner are erased, and the Candidate proceeds will be scored as if performing the entire skill for the first time.
- In the event a Candidate is stopped during a Skill, they cannot repeat the Skill. Stopped Skills cannot be repeated at any time during the exam. Even if a Candidate has remaining attempts, they will not be able to use those attempts.

REPEAT CAUTIONS

- While repeating can be a positive option, Candidates are strongly encouraged to ensure they can repeat the Skill within the time limitation and that they are confident they can repeat all of the items within the Skill. 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 ultimately miss other items overall, resulting in a lower score than initially obtained.

INJECTIONS REPEAT POLICIES

- See the Injections Skills section for a more detailed explanation of repeating procedures for the Injections Skills Exam specifically.

NOTE-TAKING

- During the exam, Candidates will be provided with a ½ sheet of blank green paper.
- This green paper is provided **once the exam cycle begins (when announcement #3 plays).**
- The green paper **should not be used or written on during the observation time** since Examiners, SPs and Staff may be unable to distinguish notes created in the room from notes inappropriately brought into the room.
- **Writing notes before announcement #3 plays may be cause for disqualification from, dismissal from, and/or failure of the exam.**
- If for some reason a Candidate does not receive a piece of green paper, simply ask the SP in the Station and they will provide it to you.
- The green paper may be used to write down the start time of the exam cycle, to make notes on findings or general notes, if desired, by the Candidate.

- Candidates should keep in mind that nothing written on this green paper will be scored or maintained for scoring purposes.
- At the conclusion of each Station, Candidates must leave behind this green paper, along with any notes or data recorded during the examination with the SP in the Station.

EXAMINERS/PROCTORS

- Examiners and Proctors are present in Station 2 and Station 4 only.
- Stations 1 and 3 will be the Candidate and SP only.
- Examiners and Proctors will enter the examination room when announcement #3 plays, signifying the start of the rotation.
- Examiners and Proctors will exit the room once a Candidate has stated they are finished or when Announcement #4 plays, whichever occurs first.
- Examiners and Proctors will indicate which eye to perform procedures **when asked by the Candidate**. In the event a Candidate did not hear which eye the Examiner/Proctor stated, they can ask to clarify.
- Examiners and Proctors will be confirming the presence of a view **when asked** (see views for more information).
- The Proctor in Station 4 will be answering all questions relating to the Injection Skills portion of the exam.

OBSERVERS & VISITORS

- Occasionally, additional personnel may be on-site observing the exam. Observers and/or Visitors will not have any effect on a Candidate's score and should be ignored by the Candidate. These personnel have been instructed not to converse with Candidates, Examiners and/or SPs in the examination rooms.

CANDIDATE QUESTIONS DURING THE EXAM:

- Outside of regular exam questions (e.g., case history questions, inquiring about views, asking about allergies, etc), during the exam, Examiners, Proctors and SPs will only answer "where" questions, such as where equipment switches are located, where the room lighting control is, or where supplies/clinical materials are located.
- Candidates may ask "where" questions at any time during the observation time and exam time.
- Questions on **how** to do things, **how** to use the 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.**

STATING FINDINGS

- Candidates are strongly encouraged to talk through their exam process.
- Candidates are reminded that specific performance items in each Station, as indicated on the evaluation forms, require that the obtained findings be **stated** to the Examiner and/or SP verbally in the same manner as they would be entered into a patient's medical record.
- Speaking clearly and audibly is important for these performance items, since these items also test communication skills.
- When evaluating the ocular health in Stations 2 and 4, Candidates should be descriptive in their stated findings, using **appropriate clinical terminology** (structures being identified/assessed, etc).
- Candidates should avoid stating their ocular health findings using terminology such as "OK," "fine," "WNL," and/or "not bad."
- Skill 8, Lensometry is the only Skill where Candidates are not required to verbalize their findings. Instead, Lensometry findings should be documented on the form provided to the Candidate in Station 1. Lensometry findings that are verbalized will not be scored.

VIEWS:

- As part of the exam process, in Stations 2 and 4, the Slit Lamp and BIO headset are equipped with cameras that obtain live images as viewed by the Candidate. It is the Candidate's responsibility to maintain views through the Slit Lamp and the BIO video when these skill items are being performed.
- When examining any ocular structure, the views cannot be "fleeting".

Location of Cameras:

- For the Slit Lamps, the camera is mounted on the LEFT ocular.
- For the BIO Headsets, the camera is mounted centrally, with images being recorded through each ocular.
- Extensive time has been spent ensuring all of the cameras, monitors, video feeds and recording systems are calibrated to the best of the NCCTO's ability. As a result, as long as the view is not obstructed, Candidates should know the images will be recorded exactly as viewed by the Candidate

Obtaining and Confirming Views:

- Candidates are responsible for ensuring the Examiners and Proctors have a view on the monitor.
- 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 views while they are being performed. In the event a Candidate asks at the end of a Skill if the Examiner/Proctor had views during the Skill, they will be told "I can only comment on a view while it is being performed."
- It should be noted that in the event an Examiner/Proctor confirms the presence of a view, it only means that something is visible on the monitor.
- Confirmation of a view does **not** indicate: clarity or quality of the view, whether the view meets the minimum criteria, whether the view is of the correct angle/structure or that the view is a "good view."
- In the event an Examiner/Proctor says they do not have a view, Candidates are encouraged to troubleshoot and ensure nothing is obstructing the view through the left ocular of the slit lamp.
- 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 who are trained in how to view the monitors.
- **If a Candidate is determined to be attempting to view the monitor, this action may result in disqualification from, dismissal from, and/or failure of the exam.**

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 are able to look through the left ocular using their right eye.
- Candidates are encouraged to make a simple statement such as "I will be using my right eye to look through the left ocular" so the Examiner/Proctor is aware the Candidate is intentionally choosing to utilize the equipment in this manner.
- Candidates who believe that their amblyopic or monocular status warrants special accommodations other than what is described above should submit a written request to the NBEO as described on the NBEO website http://www.optometry.org/disability_part3.cfm. Any written requests must be submitted by the deadline specified on the NBEO website. **Additionally, Candidates who may require special accommodations should not schedule their Part III Exam until there is a decision made on their appeal.**

SP SAFETY and PROCEDURE ATTEMPTS

Hand-Washing

- The NBEO has adopted the CDC's guideline for hand washing, which includes the specified timeframe of washing hands for at least 15 seconds. Candidates are expected to follow this guideline for credit. For further information about hand-washing, Candidates should view the recommended CDC guidelines on their website.

Intervenues

- Examiners, SPs and Proctors may request Candidates to disinfect or redisinfect equipment, wash hands, etc. if either have been compromised prior to or during use.

SP Safety

- During Station 2, Examiners are responsible for ensuring SP safety. If an Examiner believes the examination techniques or procedures used by a Candidate are placing the SP at harm, the Examiner has the responsibility and authority to terminate the clinical skill being assessed **at any time** and will state, "You are being stopped for Patient safety reasons."
- There are also safety concerns in Station 4 (i.e., poking SP's eyes, touching the SP's eye with the non-contact fundus lens) that require stops. In the event the Proctor or SP believes a Candidate's performance to be inappropriately rough, the Candidate may be stopped.
- If a Candidate is stopped, they will be scored "no" on any remaining items in the stopped Skill. Items leading up to the point of the stop will be scored as appropriate. As a reminder, Candidates cannot repeat a stopped skill.
- If the SP is concerned about their own safety, they have the ability to "Stop" a Candidate from continuing on with a skill.

Procedure Attempts

- The Examiner and/or SP may also terminate the skill being assessed after 4 attempts. If such intervention is necessary, the Candidate will receive no credit for that item or the remaining items in that clinical skill.
- Candidates are only scored on the first 4 attempts at obtaining blood in Procedure 3 of ISE. Any further attempts will not be scored and it will be treated as a stop, however the Proctors will not verbally stop a Candidate as it is up to the Candidate to **monitor their own attempts during ISE**. See the Injections section for additional information.
- This is not an all inclusive list but examples to make Candidates aware that patient safety (even on a simulated arm) is of concern for the NBEO.

STAFF INTERACTIONS:

Neutrality:

- Examiners, SPs and Staff may appear to be neutral or show little emotion during the exam. Candidates should not regard this as a personal dislike or an indication of performance quality.
- Examiners, SPs and Staff are instructed to conduct the examination in a personally neutral manner to promote uniform, standardized, equal treatment of Candidates.
- This neutrality produces a more objective, impartial evaluation of the exam.

Staff Interaction during Exam:

- During the Exam, Examiners and SPs are allowed to say very little other than 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 can't answer that," or "It is up to you." If asked, Examiners and SPs will not provide you guidance on how and/or what to perform and if you should repeat a skill. Candidates must use their best judgement in these situations.
- These comments are not indicators of a Candidate's performance or decisions, but simply an answer for a situation where the Examiner/SP/Staff do not have a standardized response.

SP INTERACTIONS:

SP TITLES:

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

SP FAMILIARIZATION

- In order to be evaluated objectively and uniformly, Candidates must **not** have any prior knowledge of an SP whom they are to examine. During the course of the examination, if Candidates realize that they are acquainted with an SP or have knowledge of the SP's condition (e.g., refractive error, disease), they are **required** to notify Staff of this familiarity immediately. An alternate SP will be provided for examination at that time.
- **Failure to disclose familiarity with an SP may result in a score of zero for the affected Station.**

Repeating Candidate:

- In the event a Candidate is **re-taking CSE**, Staff will ensure there are no conflicts with assigned SPs.
- Repeating Candidates will either be assigned SPs they have not previously seen, or they will not see the same SP in the same Station. For instance, you may see someone in Station 1 that you previously saw in Station 3, etc.
- You are not required to bring this situation to a Staff member's attention as careful attention was given to ensure there are no conflicts with these assignments.

SP PERSONAL SPACE

Please be mindful of the SP's personal space, especially when using the slit lamp and phoropter. In addition, be careful where you touch the patient (e.g., when positioning the SP or pointing to a position of gaze, you should not touch the SP below the shoulder).

CASUAL CONVERSATION:

- Beyond a cordial hello, SPs should not initiate any casual conversation with Candidates.
- During the observation time intervals between Stations/cycles and when the Candidate finishes the Station early, SPs will remain in the room with the Candidates. Since it would be unnatural for the SP and Candidate to simply stare at each other, casual conversation may occur, **ONLY if the Candidate initiates the conversation.**
- Once the exam rotation begins, SPs are instructed not to continue with casual conversation. This is to prevent any time from being taken away from a Candidate's performance.
- After a Candidate states they are finished with the Station no casual conversation should occur unless again specifically initiated by the Candidate.
- Candidates may start casual conversations with SPs by specifically asking a neutral question (see list below).

A Candidate is initiating a casual conversation when asking:

- "How long have you lived in North Carolina?"
- "Do you like the Panthers?"
- "What's your favorite restaurant in Charlotte?"
- "I love your shoes, where did you get them?"
- Or any other neutral question

Examples of appropriate topics:

- The Charlotte/North Carolina area
- Sports
- Current events
- Weather
- Hobbies, Movies, Books, etc.

Examples of inappropriate topics:

- Information regarding the NBEO/NCCTO
- Information regarding the overall Clinical Skills Exam
- Questions about the SP or their position (how long employed, what stations qualified for)
- SP experience or ocular information (if you've worn contacts, had any surgeries, have a prescription)
- Candidate's performance
- Optometry School the Candidate attends
- Other Candidate's information and/or performance

CANDIDATE WOUNDS / INJURIES / MEDICAL EMERGENCIES

- Any open wounds on a Candidate's finger or hand must be covered during the examination. This applies to pre-existing wounds and those that may develop during the examination. In the instance of the latter, band-aids and gloves will be provided to protect the Candidate and SP.
- If you have questions or concerns about whether a potential wound needs to be covered, you can show the wound to Staff during the registration process and a recommendation will be made as to whether or not a bandage will be required.

- Should a Candidate become injured during the exam (e.g.: a needle prick during Injections), a band-aid and glove will be provided.
 - If a Candidate believes they have injured themselves, they should notify personnel in the exam room.
 - Candidates should not assume that they are not bleeding. Often an incident like a needle prick will take several minutes to produce any blood.
 - Candidates should bandage any potential wounds that occur to ensure overall safety of personnel.
 - Bandaging the wound early ultimately saves Candidates time during the process and prevents further issues from occurring in regards to blood contaminating materials and equipment.
 - When a Candidate experiences a needle prick or any other 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.
 - **Universal Precautions** apply to 1) blood; 2) all body fluids, secretions, and excretions, *except sweat*, regardless of whether or not they contain visible blood; 3) non-intact skin; and 4) mucous membranes. Standard precautions are designed to reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection in hospitals.
 - Universal Precautions include the use of: hand washing, appropriate personal protective equipment such as gloves, gowns, masks, whenever touching or exposure to patients' body fluids is anticipated.
- No additional time will be given during the exam for injuries that occur as a result of Candidate's error.
- In the event a medical emergency should occur during the exam, Candidates should remain calm and a Staff member will be there to assist and assess the situation.

RESTROOM / DRINKING FOUNTAIN USE

- It is advisable for Candidates to use the restroom before the examination begins. No time allowance is given for restroom use during the examination sessions. In the event a Candidate needs to use the restroom during the exam, they should inform the SP who will escort them to the restroom.
- If a Candidate is in the Observation Time OR has stated they are finished in the Station and would like to use the restroom they should inform the SP. Again, no additional time will be added to the Observation Time or to the Station time for restroom use.
- The same principles for restroom use apply to using the drinking fountain.

POST EXAM INFORMATION

CANDIDATE INCIDENT REPORTS & SURVEYS

- At the conclusion of the exam, all Candidates will sit at the workstation to the left of their final exam room.
- At the workstation will be a computer that will be used by Candidates to submit an incident report and to complete the optional survey.
- Candidates will log into the Incident Report using the same user name and password (created by the Candidate) used to register for the exam or view scores on the NBEO website.
- Candidates are encouraged to think through their exam and use this opportunity to document any irregularity that may have occurred in each Station which a Candidate feels may negatively have impacted their performance. Incident Reports **will not be accepted** from Candidates once they have left the test.
- Candidates can document any concerns involving the equipment, Examiners, SPs, Proctors or the Candidate's individual performance.

- Once Candidates have completed the Incident Report, they will be offered the opportunity to complete an optional survey. The survey is a basic set of questions that allows you to review your experience at the test center.
- Once all Incident Reports have been submitted, they will be reviewed by Staff. **Staff will be reviewing videos and interviewing the patient, proctor or examiner for more information regarding your Incident Report.** Additionally, staff will inspect any reported equipment malfunction. This process may take some time so completing the Candidate Survey will provide you with something to occupy your time
- During the Incident Reports Review, since videos are available to view any issues, Staff will only discuss incidents with Candidates if clarification or further information is needed.
- Once all Incident Reports have been reviewed and it is determined there are no administrative issues or all issues have been resolved, Staff will dismiss Candidates from the exam hall.

CANDIDATE DISMISSAL

- Once dismissed from the exam hall, Candidates will return to the lobby to sign out on the registration log, return the issued arm bands, and begin retrieving any personal belongings.
- Candidates must *not* leave the test center until dismissed or re-enter the test center after dismissal.

RETEST POLICY

- The NBEO retest policy dictates that repeat tests are provided only due to administrative irregularities (e.g., equipment failure, loss of electrical power, or an unacceptable patient).
- Staff are permitted to approve provisional retests on exam day because of the time-sensitive nature of the CSE process. However, only NBEO review of a retest and its accompanying documentation can determine if the retest was warranted or if the original test results should be accepted. This determination will be made by NBEO staff prior to scoring of the retest, to avoid any bias.

ADDITIONAL EXAM INFORMATION

CANDIDATE TO CANDIDATE INTERACTION

- Candidates may engage in conversation during the registration and orientation process.
- **Once Candidates are escorted to the test center hall, no communication should occur between Candidates at any time during the exam or post-exam process.**
- “Communication” includes conversation, verbal statements, non-verbal cues/expressions (e.g., thumbs up/down, shaking head, high-fives, etc.), and passing notes, as examples.
- Violation of this policy will not be tolerated and may be cause for disqualification from, dismissal from, and/or failure of the examination.

CODE OF CONDUCT

- All exams performed at the NCCTO are audio and video recorded. Candidates will be scored on what is seen on the recording. It is important to note that actions will be taken by the NBEO if it is determined that a Candidate has falsified data/findings during the examination or if a Candidate has abandoned a Patient during a skill.
- Below are excerpts from the Candidate Agreement/Ethics Policy all Candidates agreed to when registering for CSE:

A primary concern of the NBEO Ethics Policy is the confidentiality and security of exam items and materials. All NBEO exam items (such as questions, answers, case scenarios, images and Clinical Skills Examination (CSE) patient data, scripts, or other materials) contained in past, current, or future exams are strictly confidential and are the copyrighted property of the NBEO.

Any verbal discussion or written disclosure of any aspect of the copyrighted exam items, clinical cases, scripts, or standardized patient information after the examination is strictly forbidden.

...the NBEO has the right and sole discretion, exercised in good faith, to determine the appropriate penalty or sanction for any Improper Conduct or violation of NBEO proprietary rights, including without limitation any one or more of the following:

- *Disqualification from taking or continuing to sit for the current examination.*
- *Disqualification from taking any future NBEO examinations; such disqualification can be for any period of time that the NBEO determines is appropriate in the circumstances, perhaps even for multiple years, or permanently.*
- *Disqualification from reporting of examination scores.*
- *Cancellation of examination scores.*
- *Inclusion of a permanent score of "0F*" in a Candidate score report. This signifies a failing score of zero on the CSE. The licensing board, school, or other third party to whom such score is reported may contact the NBEO for more information including a summary of the findings regarding the Improper Conduct.*

APPEALS

- Once scores are released, if a Candidate believes their scores are not accurate, they may appeal their CSE results.
- All appeals should contain substantive issues to be considered and should be filed online at the NBEO website within 30 days from the date on which the CSE scores are posted.
- The appeals process takes approximately 6 to 8 weeks.
- If the initial appeal is denied, Candidates may appeal further to the Judicial Committee of the Board of Directors.
- Additional information regarding the appeals process can be found online.

SCORING PRACTICES

- The NBEO uses quantitative and qualitative data analysis to evaluate examination uniformity and fairness in order to identify potentially poor measurement. Candidates who achieve scores above the overall cut-off requirement receive a passing score. A CSE score below the cut-off requirement will result in a failing score.
- Additional information regarding scoring practices, score breakdowns and reports is available online.

Station 1 Overview

At the start of Station 1, the SP will hand the Candidate a Patient Data Form (PDF) with the Ophthalmic Lens Evaluation Form on the back, [click here for a sample](#). This form will include the name, age, race/ethnicity, and gender of the Patient being portrayed and indicates whether the **portrayed** Patient uses glasses and/or CLs. Candidates should be prepared to respond to the Patient being **portrayed** rather than on the SP's personal characteristics. For example, the SP may be a white female in her mid-40s not wearing glasses portraying an elderly black male who wears glasses. The PDF also contains information about the portrayed Patient's ocular and medical history and pertinent family history. Candidates should assume that the portrayed Patient filled out the PDF prior to entering the examination room. Information on the PDF should be used to conduct the Case History.

If a Candidate asks a question during Case History / Patient Communication for which the answer is not provided to the SP on their script, the SP will respond "I do not know," or a similar response.

Note that one item in Skill 1 requires that the Candidate obtain at least 4 HPI elements; however, it may be necessary for the Candidate to gather additional information in order to determine the best tentative diagnosis.

At the conclusion of the case history skill, Candidates are to verbally STATE their best tentative diagnosis for the Chief Complaint. There may be more than one correct response to the tentative diagnosis question that would receive full credit, and one or more answers that are partially correct that receive partial credit. However, you are to indicate what you believe is the *one best* diagnosis. If more than one diagnosis is given, Candidates must clearly state which one is their best tentative diagnosis.

After Case History, for the remainder of the examination skills in Station 1, Candidates must ignore the information provided on the PDF and the information obtained from the SP during Skill 1 and examine the actual SP sitting for the Station. Candidates should not consider **any** of the Case History / Patient Communication information to be relevant to the other skills performed at Station 1, to include prescriptions, eye wear, or diagnosis.

As with all skills, the Candidate is responsible for initiating Skill 2. After completion of Case History, the Candidate would proceed to Skill 2, Item 1. **When asked**, the SP will respond with a scripted question about a condition. The condition in Skill 2 is not relevant to Skill 1. When providing facts/details for Skill 2, the Candidate must provide the minimum number of facts/details requested and all facts/details stated must be correct.

For Pupil Testing, the Candidates' findings are compared to premeasured findings in which the pupil size was rounded to the nearest 0.5 mm. Additionally, you should clearly state that you are checking for a Consensual response.

All Blood Pressure measurements should be taken on the Life/Form Blood Pressure Measurement Arm. This simulated arm is made out of latex, so if a Candidate is allergic to latex, they should request latex-free gloves from the Standardized Patient before handling the arm. Candidates are required to make sure the equipment is **turned on** in order to obtain a measurement. There will be a label covering the display, Candidates should make sure they do **not** remove this label. A corner of the display has been left uncovered so Candidates can ensure the box is turned on and functioning. Verbally state your BP findings before or after removing the cuff but **NOT** during removal as this will ensure the BP findings will be audible.

The glasses for the ophthalmic lens evaluation are not the glasses the SPs are wearing. At the start of the Station, the SP will provide separate single vision and progressive spectacles intended for the Lensometry Skill ([Ophthalmic Lens Evaluation Form](#)).

Station 2 Overview

All ophthalmic equipment should be cleaned prior to use. This includes the tonometer probe, gonioscopy lens, forceps, and surfaces of the slit lamp biomicroscope that come into contact with the SP's face. The steps for cleaning and disinfecting the hand instruments used in Station 2 are as follows:

1. Place the instruments in the Opticide® tray basket. The tonometer probe and gonioscopy lens should be placed in the basket so that the contact surfaces **face downward**.
2. Close the lid to immerse the instruments.
3. The instruments must soak for approximately 3 minutes (longer is acceptable). **The Candidate should perform slit lamp biomicroscopy while the instruments are soaking.**
4. Raise the lid of the tray to lift the basket out of the solution.
5. Remove the instruments from basket, and immediately rinse the ocular side of the instruments with sterile saline for at least 5 seconds so no opticide remains on the instrument, and thoroughly kim-wipe-dry them before use. If needed, Candidates may place the disinfected forceps and/or gonio lens on a **clean** tissue after removal from the Opticide® tray. (Any instruments dropped after being removed from the tray must be resoaked in the opticide before use.)
6. Candidates must wash their hands after rinsing the equipment from the Opticide tray.

The Opticide® solution in the instrument disinfecting tray will be changed by NCCTO Staff.

For Biomicroscopy, Goldmann Applanation Tonometry, 3-Mirror Gonioscopy, and Soft and GP contact lens insertion, evaluation and removal, you should ask the Examiners which of the patient's eyes (OD or OS) to perform the skills. In addition, the Examiners will only state "I have a view" when asked by the Candidate.

It is important to note that, when an Examiner reports having a view, he/she is simply indicating that the view is unobstructed; it does not imply anything about the quality or clarity of the view. The Examiner is not permitted to comment on the quality of the view as that would be providing feedback on the Candidate's performance.

When examining any ocular structure, the views cannot be "fleeting". Additionally, when the item requires viewing an entire structure, it means 360°.

Four attempts are allowed to complete each skill. Upon unsuccessfully performing the fourth attempt, you will be stopped by the Examiner. You may also be stopped prior to the fourth attempt if the Examiner or SP believes you are placing the SP at harm. (See SP Safety and the attempts section of this document.)

For tonometry and gonioscopy, anesthetic must be used in the tested eye only. To promote patient comfort during gonioscopy, Celluvisc™ is provided. Regarding gonioscopy views, Candidates must state the correct quadrant.

During Punctal Plugs, Candidates should properly **insert half of the implant** into the punctum. In most cases, the Candidate may choose which eye to perform this skill. For certain SPs, the Examiner may direct you to perform Punctal Plugs on one eye or the other. This is because with certain SPs, one punctum may be more open than the other. **Do not rest the forceps on the SP's eye lid.** Additional anesthetic is not allowed for punctal plugs.

Skill 13 combines gas permeable contact lens (GPCL) and soft contact lens (SCL) insertion, evaluation and removal. These procedures have been combined into a single skill for purposes of efficiency. When asked, the Examiner will instruct the Candidate to insert a GPCL on one of the Patient's eyes (OD or OS) and a SCL on the other eye. The SCL is a toric lens with markings at 3 and 9 o'clock. Candidates should report the rotation from the doctor's perspective. For the GPCL, Candidates can assume the lens is clean for insertion. Once removed it should be stored in the case from which it was removed.

If the Candidate is unable to safely and effectively remove the lens from the SP's eyes and is stopped by the Examiner, the Examiner will remove the lens. Candidates will not receive any additional time for the Examiner to remove the lens. Also, the Candidate will not be able to perform any further items for that portion (SCL or GPCL) of the Contact Lens Skill in which they had the difficulty but may continue with the other lens if it hasn't been removed yet. Additionally, Examiners have been instructed, for SP comfort and since Examiners are not being scored, to remove the GPCL with a suction cup.

At any point, if a Candidate does not remember which eye the Examiner directed them to use for a Skill, they may ask the Examiner to clarify.

Station 3 Overview

In Station 3, results from one clinical skill are used in the performance of a subsequent skill. This design simulates clinical reality and facilitates a smooth flow in the Station. Although it is inevitable that some errors may affect the results in performing a subsequent clinical skill, **steps have been taken to minimize the impact of this linkage by emphasizing the *process of how* the Candidate examines the SP, rather than the findings.**

The SP's **actual age** will be displayed on the Patient name badge. If the badge is not visible, Candidates may ask the SP for their actual age.

For camera lighting purposes, at minimum, keep the computer monitor on at all times

Skill 15: Retinoscopy

Candidates will perform a “3-eyed” Retinoscopy:

1. Retinoscopy on OD
2. Retinoscopy on OS
3. Quick repeat of sphere component OD

Performing “3-eyed” Retinoscopy prevents the need to do a careful fogging prior to starting Retinoscopy. Either eye can be done first; however, it will usually be OD. You must verbally state your findings. Do not forget to state your working distance.

It is important that you state your Retinoscopy findings before you start subjective refraction or before you take a visual acuity. If you decide to perform Retinoscopy after taking a visual acuity, it will NOT be used for scoring purposes. Any repeat of retinoscopy is done on your own accord and will not be scored by the Examiners. Additionally, if you take a visual acuity before completing Retinoscopy, you will be scored “no” for the entire Retinoscopy Skill.

During Refraction, while checking cylinder power and axis, you must use the JCC.

For Heterophoria and Vergence Testing at Distance, you must state your findings verbally in the same manner as you would enter them into a patient record. The horizontal phoria findings must include the magnitude and direction of the phoria, e.g. 6 pd exo; 2 pd eso. For the vertical phoria, the eye must also be specified, e.g. 2 pd right hyper. The horizontal vergence findings must specify directionality, e.g. BI or negative relative vergence; BO or positive relative vergence. Findings should include blur, break, and recovery for BI/BO. The vertical vergence findings must specify the eye and the directionality, e.g. or infra OD; or supra OS.

In measuring relative accommodation in Accommodation Testing, you must clearly state what you are using as your near base (distance subjective refraction or BCC). The NRA and PRA findings should be stated relative to the patient's near base you have chosen.

At the end of each of the Skills 15, 16, and 17, the Candidate must briefly educate the SP on their findings using layman's terms.

Station 4 Overview

In addition to the SP, Station 4 will have an additional person in the room called a Proctor. For Skills 18-19, when asked, the Proctor will direct the Candidates on which eye (OD or OS) to perform the skills. At any point, if a Candidate does not remember which eye the Proctor directed them to use for a procedure, they may ask the Proctor to clarify.

When setting the lighting for the BIO, please adjust the light **slightly brighter** than what you would normally use, especially on the darker eye patients.

When examining any ocular structure, the views cannot be a “fleeting” view.

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

Regarding views, the Proctor will only state “I have a view” or “I do not have a view” as appropriate, when asked by the Candidate.

It is important to note that, when a Proctor reports having a view, he/she is simply indicating that the view is unobstructed; it does not imply anything about the quality or clarity of the view. The proctor is not permitted to comment on the quality of the view as that would be providing feedback on the Candidate’s performance. (see views for more information)

Station 4 – Injection Skills Exam Overview

During the Injection Skills Exam, the Proctor will serve as the “Patient.”
All questions and inquiries should be directed to the Proctor for confirmation.

The Injections Skill is comprised of 4 distinct procedures that must be performed in order:

- Procedure 1 - preparation for intravenous (IV) injection for fluorescein angiography,
- Procedure 2 - preparation for intramuscular (IM) injection of epinephrine,
- Procedure 3 - performing an intravenous injection for fluorescein angiography, and
- Procedure 4 - performing an intramuscular injection of epinephrine.

This Station integrates IV injection, as would be done for fluorescein angiography, with the intramuscular injection of epinephrine. This is clinically realistic since a needle/syringe filled with 1:1000 epinephrine could be prepared prior to performing fluorescein angiography in the event the patient experiences an anaphylactic reaction due to the injection of fluorescein sodium dye.

Given the nature and criticality of the injections to be performed, Candidates should assume that:

- an appropriate written Informed Consent has been discussed with and signed by the Patient prior to performing the injections.
- the Patient’s identity has been verified using 2 methods such as name, date of birth, last 4 digits of the SSN, and/or address prior to performing the injections.
- the nature of the injection procedure and the injection site have been verified by asking the Patient to verbalize his/her understanding of these issues.
- the Patient is male and has been found to have a normal BP measurement during the pre-procedure work-up.

Whatever materials are placed ON the drape at the start of injections will be considered aseptic. Materials NOT initially placed on the drape at the start of Skill 20 are not considered aseptic. Candidates are advised to be cautious and ensure they are maintaining aseptic technique throughout the injections exam.

The gloves that are donned in performing an intravenous injection for fluorescein angiography may be left on while performing an intramuscular injection of epinephrine. If desired, Candidates may wash their hands while wearing the protective gloves.

A standard multi-use medication vial will be provided and labeled “25% fluorescein sodium” with an expiration date; however, the solution in the vial will be clear as it is simulated medication and not actual medication.

Candidates are strongly encouraged to thoroughly palpate the arm and not to choose injections sites based on a visual inspection of the arm. Palpation is essential.

Regarding the 4 intravenous injection attempts, an “attempt” is viewed as piercing the skin of the arm and removing the needle from the skin or excessive manipulation of the needle within the simulated arm. After 4 instances of inserting and removing the needle, this is an automatic stop and **will not continue to be scored**. Candidates have 4 attempts total. Once the 4th attempt has been reached, no other attempts will be scored. This includes any repeats. For instance, if you complete two attempts and decide to repeat the Procedure, you would have two attempts remaining. The Proctor will not initiate any reminder of the number of attempts taken or remaining nor will the Proctor stop the Candidate after the 4th attempt.

It should also be noted that **excessive manipulation** of the needle within the arm is not acceptable. Excessive manipulation will be counted as an attempt or possibly multiple attempts if the manipulation of the needle within the arm is egregious. Candidates should treat the simulation arm as they would a human arm during the injections procedures.

An IM injection of 1:1000 epinephrine solution is to be performed in the center of the deltoid muscle pad on the simulated arm. The NBEO recognizes that injection of epinephrine to treat an anaphylactic reaction is usually administered intramuscularly in the outer thigh of a patient. However, the NBEO views the skills needed to perform IM injection in the center of the deltoid muscle pad of the simulated arm to be similar to the administration of epinephrine by injection at another anatomical site as performed clinically.

To provide additional information regarding the simulated injections arm:

The simulated arms are designed to replicate an adult human arm. Veins that would be reasonable veins to draw blood from on a human arm are replicated in the simulated arm. When completing an IV injection, if the tubing is not filling **solidly** with blood, the Candidate is not appropriately in a vein. Any “splatter” of blood or intermittent blood flow is an indication that the Candidate has not appropriately entered a vein (see the Orientation video for pictures).

Often Candidates will assume that because they saw *some* blood, they are appropriately in a vein and will pull the plunger of their syringe back so far, that the plunger reaches the end of the syringe. Now the Candidate has no room to pull back on the syringe for “suction” on any other attempts. In these situations, due to the nature of the exam, before completing any additional attempts, it is to the Candidate’s benefit to safely express any air aspirated into the syringe, so there will be “suction” for the future attempts. Again, if a Candidate is putting light pressure on the plunger and the tubing is not filling **solidly** and **consistently** with blood, the Candidate is not appropriately in a vein.

Proctors/SPs will be draining the arm in between Candidates. This is for regular maintenance and does not indicate anything is wrong with the arm.

WHEN REPEATING INJECTIONS:

In the event the Candidate wishes to repeat part of ISE, it is necessary to clearly announce which specific ISE procedure (Procedure 1, 2, 3 and/or 4) you wish to repeat. When a Candidate wishes to repeat either Procedure 3 (IV) or Procedure 4 (IM), a needle and syringe can be quickly assembled with fluid (not for scoring purposes) to complete the procedure. It is not necessary to repeat preparation items unless you are specifically repeating Procedures 1 and/or 2. Instead you are only obtaining the supplies you will need to perform Procedures 3 or 4.

Candidates who wish to repeat one or more items within a procedure may do so at their discretion, **if** they have not begun the next procedure. However, Candidates who have begun the next procedure and wish to return to a prior procedure to repeat items are expected to redo the **entire procedure**. Candidates must announce their intent to the Proctor and return to the first item in the procedure – not the first item of the Injections skill. In repeating the procedure, **all** of the prior scores recorded by the Examiner are erased, and the Candidate is evaluated as if performing the entire procedure for the first time. Specific Injections repeat policies are posted on the back of the exam room doors for reference during the exam.

As a reminder, a stopped Skill cannot be repeated. As such, if a Candidate has completed 4 attempts on the IV injection, it is considered a stop and should not be repeated.

**AUGUST 2016-JULY 2017 CANDIDATE INSTRUCTIONS FOR STATION 1
(posted on the exam room computer)**

Surfaces of the ophthalmic equipment that come into contact with the SP's face should be cleaned prior to use by wiping with an alcohol swab and drying with a tissue.

Skill 1: Case History / Patient Communication

You are to obtain a complete case history from the SP, who will **portray** a Patient presenting to your office for the first time. You will be presented a Patient Data Form (PDF) which will include the portrayed patient's general information, personal and family history as well as review of systems. You may use the Patient Data Form to take notes.

When you are finished gathering the case history data, **you must STATE the best tentative diagnosis** for the Patient's Chief Complaint.

REMINDER: The Case History script information and tentative diagnosis, prescriptions, eye wear, etc., are not related to any other skills in this Station and must be disregarded for the rest of the skills.

Skill 2: Patient Education

You are to educate a Patient regarding an ocular condition by describing the condition and how it affects the eyes/vision, preventative, diagnostic and/or treatment options, and prognosis, interval, and/or follow up. Your explanation (facts/details) to the Patient of the ocular condition must be accurate, clear, and in non-technical terms to promote Patient understanding.

Skill 3: Binocular Extraocular Muscle Motility and Gross Horizontal Saccadic Eye Movement Evaluation

You are to assess and describe the SP's binocular extraocular muscle motility in 6 cardinal positions of gaze (up right, right, down right, up left, left, and down left), using a penlight or transilluminator and assessing eye alignment in a physiological H pattern. You must also evaluate Gross Horizontal Saccadic Eye Movements using the silver/gold wands. You must state your findings verbally in the same manner as you would enter them into a patient record.

Skill 4: Static Peripheral Confrontation Visual Fields

You are to assess and describe the peripheral confrontation visual fields responses of the SP using the finger counting method. You must state your findings verbally in the same manner as you would enter them into a patient record.

Skill 5: Near Cover Test and Near Point of Convergence

You are to perform a Near Cover Test on the SP and objectively measure any oculomotor deviation by neutralizing any observed motion with prism, or confirming orthophoria using 2-4Δ BI and BO, and perform Near Point of Convergence. You must state your findings verbally in the same manner, as you would enter them into a patient record (e.g., for NCT include phoria vs. tropia).

Skill 6: Pupil Testing

You are to assess and describe the pupils and pupillary responses of the SP. You must state your findings verbally in the same manner as you would enter them into a patient record.

Skill 7: Blood Pressure Measurement

You are to obtain a blood pressure measurement on the Simulated Arm. You should assume that the procedure is being done as part of a comprehensive examination and that the sphygmomanometer provided in the room is the appropriate size for the patient. You must state your findings verbally in the same manner as you would enter them into a patient record. If you wish to repeat Skill 7, you should inform the SP who will reset the equipment.

Skill 8: Ophthalmic Lens Evaluation

You are to evaluate two pairs of ophthalmic spectacle glasses, one progressive and the other single vision. These spectacles do not belong to the Patient at the Station. You should record, on the [Ophthalmic Lens Evaluation Form](#) provided, all of the data required for these spectacle lenses.

Candidates are encouraged to review the Station 1 Evaluation Forms for detailed information on the items required to be completed during the examination.

AUGUST 2016-JULY 2017 CANDIDATE INSTRUCTIONS FOR STATION 2
(posted on the exam room computer)

*All ophthalmic equipment should be cleaned prior to use, including surfaces of the slit lamp biomicroscope that come into contact with the Patient's face. The 3-minute or longer disinfecting soak of the tonometer probe, gonioscopy lens, and forceps using the Opticide tray should begin before you start your first skill. The tonometer probe, gonioscopy lens, and forceps should then be rinsed for 5 seconds with sterile saline and kim-wipe-dried **before** being used on the Patient.*

Skill 9: Biomicroscopy

You are to perform a comprehensive slit lamp examination on *one* eye of the SP, as indicated by the Examiner. You may use a cotton-tipped applicator to assist in eversion of the upper eyelid if needed. You must verbally state your findings to the Examiner in the same manner as you would enter them into a patient record.

Skill 10: Goldmann Applanation Tonometry

You are to perform Goldmann applanation tonometry on *one* eye of the SP, as indicated by the Examiner. You must state your findings to the Examiner verbally in the same manner as you would enter them into a patient record.

Skill 11: 3-Mirror Gonioscopy

You are to perform gonioscopy on *one* eye of the SP, as indicated by the Examiner. During the procedure, you are expected to obtain and maintain a clear gonioscopic view of the anterior chamber angle and perform a systematic examination of all 4 anterior chamber angle quadrants using the appropriate mirror. You must state your findings to the Examiner verbally in the same manner as you would enter them into a patient record.

Skill 12: Collagen Implant Insertion and Removal

You are to prepare and then insert half of the collagen implant into the inferior punctum on one lid of the SP. The plug is *not* to be moved into the horizontal canaliculus, but should be held in place in the vertical canaliculus for a minimum of 2 seconds but a maximum of 3 seconds, and then **MUST** removed. Upon removal, the collagen implant should be discarded. After removing the implant, you must accurately describe to the Examiner how the collagen implant should be moved into the horizontal canaliculus. Topical anesthetic should **not** be instilled prior to performing this Skill.

Skill 13: Soft and Gas Permeable Contact Lens Insertion, Evaluation, and Removal

You are to properly prepare and insert a toric soft contact lens (SCL) on one eye of the SP and a gas permeable contact lens (GPCL) on the other eye, as indicated by the Examiner. Topical anesthetic should **not** be instilled prior to inserting the lenses. You should assume that the GPCL provided has been cleaned and disinfected and, since a disposable SCL is used, there is no need to clean or disinfect it. Using the slit lamp biomicroscope, you are expected to evaluate the lenses on the SP's eyes. Fluorescein should be instilled only in the eye with the GPCL. After evaluation, you should remove both contact lenses from the SP's eyes. The SCL should be discarded; the GPCL should be stored in the appropriate case. Suction cups and other mechanical removers are *not* permitted. You must state your findings to the Examiner verbally in the same manner as you would enter them into a patient record.

Candidates are encouraged to review the Station 2 Evaluation Forms for detailed information on the items required to be completed during the examination.

AUGUST 2016-JULY 2017 CANDIDATE INSTRUCTIONS FOR STATION 3
(posted on the exam room computer)

Surfaces of the phoropter that come into contact with the SP's face should be cleaned prior to use by wiping with an alcohol swab and drying with a tissue.

Skill 14: Retinoscopy

You are to perform static distance retinoscopy on *both* eyes of an SP. You must verbally state your findings in the same manner as you would enter them into a patient record prior to any subjective response by the SP. This must be done prior to starting your subjective refraction or taking a visual acuity.

Any repeat of retinoscopy will not be scored.

Skill 15: Distance Subjective Refraction

Based on the static distance retinoscopy and PD finding previously obtained, you are to perform a distance subjective refraction on *both* eyes of the SP, including a prism dissociated balance. You must state your findings verbally in the same manner as you would enter them into a patient record.

Skill 16: Heterophoria and Vergence Testing at Distance

You should assume that the SP is non-strabismic, and use the findings from your distance subjective refraction for this skill.

You are to conduct a von Graefe measurement of the SP's horizontal and vertical heterophorias at *distance* only. You may perform the "pursuit" technique or the "flash" technique. You must state your findings verbally in the same manner as you would enter them into a patient record. For the horizontal phoria the findings must include the magnitude and direction of the phoria, e.g. 6 pd exo or 2 pd eso. For the vertical phoria, the eye must also be specified, e.g. 2 pd hyper, OD.

You are to measure the SP's horizontal and vertical vergences at *distance* only. The horizontal vergence findings must specify directionality, e.g. BI or negative relative vergence; BO or positive relative vergence. The vertical vergence findings must specify the eye and the directionality, e.g. infra OD; or supra OS.

Skill 17: Accommodation Testing

You will determine the SP's binocular (fused) crossed-cylinder dioptric value relative to the distance subjective refraction. You must determine and state the near base prior to performing NRA and PRA. You must state the NRA and PRA values relative to the SP's near base (distance subjective refraction or BCC). If the PRA is greater than -3 diopters, stop and state, "The patient's PRA is greater than -3 diopters."

You must verbally state your findings in the same manner as you would enter them into a patient record.

Candidates are encouraged to review the Station 3 Evaluation Forms for detailed information on the items required to be completed during the examination.

**AUGUST 2016-JULY 2017 CANDIDATE INSTRUCTIONS FOR STATION 4
(posted on the exam room computer)**

Surfaces of the slit lamp biomicroscope that come into contact with the Patient's face should be cleaned prior to use by wiping with an alcohol swab and drying with a tissue.

Skill 18: Binocular Indirect Ophthalmoscopy

You are to perform binocular indirect ophthalmoscopy (BIO) on *one* eye of an SP as indicated by the Proctor. You have the choice of performing BIO with the SP seated or reclined. During this assessment, you are expected to obtain an image for Proctor observation through the monitor of the peripheral retina and posterior pole, and perform a systematic examination of the ocular fundus, correctly stating which quadrant you are observing.

You must state your findings verbally in the same manner as you would enter them into a patient record.

Skill 19: 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. You are to examine the posterior vitreous, optic nerve, 4 vasculature arcades, fovea and macula using the biomicroscope **with** the non-contact fundus lens. All items will be performed on *one* eye of an SP. You must state structures when viewing and also state your findings verbally in the same manner as you would enter them into a patient record.

Skill 20: Injections Skill Examination

All Injections questions/communications should be directed to the Proctor.

Procedure 1: Preparation for Intravenous (IV) Injection for Fluorescein Angiography

Prepare a 5mL syringe and needle appropriately for intravenous injection with 3.0 mL 25% fluorescein sodium while maintaining aseptic technique.

Procedure 2: Preparation for Intramuscular (IM) Injection of Epinephrine

Prepare a 1mL syringe and needle appropriately for intramuscular injection with 0.4 mL 1:1000 epinephrine while maintaining aseptic technique.

Procedure 3: Performing an Intravenous Injection for Fluorescein Angiography

Perform an intravenous injection of fluorescein sodium into an appropriate venous site of the simulated arm (hand, antecubital, or other site in the lower arm). State the injection elements that should be documented in a patient record (drug, dose, delivery method, location). Discard all items into a wastebasket as non-biohazards except for needles, which should be discarded in the Sharps Container.

Procedure 4: Performing an Intramuscular Injection of Epinephrine

Perform an intramuscular injection of 1:1000 epinephrine into the **center** of the deltoid muscle on the simulated arm. State the injection elements that should be documented in a patient record (drug, dose, delivery method, location). Discard all items into a wastebasket as non-biohazards except for needles, which should be discarded in the Sharps Container.

WHEN REPEATING INJECTIONS:

- In the event the Candidate wishes to repeat part of ISE, it is absolutely necessary to clearly announce which specific ISE procedure (Procedure 1, 2, 3 and/or 4) you wish to repeat.
- When a Candidate wishes to repeat either Procedure 3 (IV) and/or Procedure 4 (IM), a needle and syringe can be quickly assembled with fluid (not for scoring purposes) to complete the procedure.
- It is not necessary to repeat preparation items unless you are specifically repeating Procedures 1 and/or 2.

Candidates are encouraged to review the Station 4 Evaluation Forms for detailed information on the items required to be completed during the examination