

# **OEBC EXAM STUDY GUIDE**



As the saying goes, "Luck favours the well-prepared."

This quote by Andrew Peterson holds true, especially when it comes to preparing for your OEBC board exams. It emphasizes the importance of thorough preparation and how it can significantly increase your chances of success.

2025

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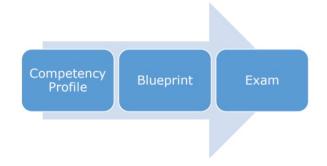
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# **ABOUT OEBC**

In 1995, the Canadian provincial optometry regulatory bodies established the Optometry Examining Board of Canada (OEBC) to develop and administer a national entry-to-practice examination for optometrists (board exam).

This exam, designed in the public interest, is a crucial and significant step in your journey to becoming a professional optometrist. The OEBC, as part of the profession, plays a vital role in ensuring the competence of future optometrists. It does this by developing and administering the national entry-to-practice examination, a gold standard in measuring competence. The OEBC's commitment to supporting high standards in the profession is evident in this guide, which is a testament to that commitment.



### INTRODUCTION

Completing your board exam is not just a step but a significant milestone in your journey to becoming a registered optometrist. It signifies your readiness to serve the public with your professional skills and knowledge.

We understand that board exams can be stressful, and we are here to support you as part of the profession. Our team provides the resources and guidance you need to succeed. Preparation is critical to your success, and we welcome suggestions to improve this guide and enhance your preparation.

The guide offers detailed information about the exam, including the blueprint, competency model, preparation tips, and guidance on transitioning to professional practice.

As future optometrists, you are essential in developing the OEBC exam components. The profession shapes the content, while psychometricians ensure the validity of each test item. Our OSCE examiners are volunteer optometrists, and we hope that you will become one in the future. Your input and experiences are invaluable in shaping the exam. The OEBC employs best practices to establish standards for its written exam and OSCE. You are not just a candidate but also a contributor to the profession, and your contributions are vital to the exam's evolution.

# **DOCUMENT SUMMARY**

The OEBC Exam Study Guide provides comprehensive information for candidates preparing for the Optometry Examining Board of Canada (OEBC) exams, including the written and OSCE components.

- Importance of Preparation: The guide emphasizes the significance of thorough preparation to increase the chances of success in the OEBC board exams, highlighting the need for structured study plans and understanding the exam blueprint. Before you start your preparation, you will find the Candidates' Guide helpful for information about exam details.
- **Study Plans**: This guide recommends creating parallel study plans for the Written Exam and OSCE, starting six months before the exam, and includes detailed timelines and strategies for adequate preparation.

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- **Exam Components**: The OEBC exam consists of a written, case-based assessment delivered via computer with remote proctoring and an Objective Structured Clinical Examination (OSCE) conducted in a clinical setting, focusing on different competencies necessary for optometry practice.
- Blueprint Breakdown: The Blueprint outlines the competencies and topics covered in the exam, ensuring
  candidates are tested on essential areas for safe and effective optometry practice, with detailed weightings for
  different practice areas.
- Written Exam Preparation: To help with your preparation, OEBC provides a 2.5-hour practice exam that mirrors the format and content of the actual written exam. Familiarize yourself with the exam structure and content, understand the pace needed to complete the exam thoughtfully, and experience the surroundings of an examday environment.
- **OSCE Preparation**: Preparing for the OSCE involves practicing patient interaction and clinical skills and understanding the patient interaction rating scale, with tips from examiners on approaching standardized patients and common mistakes to avoid. It is encouraged to practice with friends, family, and classmates to refine clinical skills and receive feedback on communication and professionalism.
- Creating Practice Cases: The previous guide's instructions on generating OSCE practice cases have been updated. In addition, this guide illustrates how to use large language models (LLM), such as ChatGPT or CoPilot, to create sample OSCE and written cases.
- Exam Pass Score: Standards are set for each case or question. The sum of these standard scores determines the pass score. For reporting results, this aggregate sum is normalized to one. The Key Competency Report and the Performance Report on the website provide insight into the percentage of scoring items successfully achieved by competency needed to pass the exam. The written exam uses the Angoff method, while the OSCE uses borderline regression to ensure fair and valid scoring.
- Scoring Methods: A computer grades the Written exam answers and the OSCE score forms, but a psychometrician reviews and verifies the results before OEBC provides them to candidates. Each question is worth one mark for the Written exam, and for the OSCE, each case has 12-15 weighted scoring items plus points for the patient interaction scale. A candidate's raw score is calculated by adding all ratings across all cases/stations and then converted to a scaled score. Details are available on the OEBC website.
- Exam Results: Your results are determined by comparing your total score to the Minimum Performance Level of "1.0" required to pass. OEBC uses the Angoff method for standard static assessments and borderline regression, as well as the best practices for dynamic exams in OSCE. Your pass-or-fail outcome depends solely on your performance. After an examination, all results are verified before being sent to candidates.
- Failed results: A panel of optometrists reviews all failed candidates' results, under the psychometrician's guidance, to ensure scores reflect the candidate's performance. Test items that don't meet psychometric standards may be removed from scoring. If an item fails to discriminate effectively, it is deleted for all candidates to ensure valid and fair results. Due to this thorough review, rescoring the exam will likely produce the same result.
- Feedback Reports: If you still need to pass a component of the exam, OEBC issues a Feedback Report highlighting the competencies where substantial gaps were identified. However, it is essential to note that not every competency is assessed in each exam, though there are equal chances to demonstrate your proficiency in a particular area. Therefore, carefully review the report for valuable insights and use the Blueprint to guide your preparation for the next attempt.
- Managing Exam Day: On exam day, candidates should stay calm, follow instructions, and remember that failing one station does not mean failing the entire exam. The written and OSCE components are separated by at least three weeks.
- **Resources and Study Materials**: The guide and class notes are essential for preparation, and some candidates also recommend other resources like Optoprep, KMK, and the Willis Manual of Eye Disease.

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- **Practice and Feedback**: Practicing with friends, family, and classmates is encouraged to refine clinical skills and receive feedback on communication and professionalism, using feedback forms and creating study groups.
- Exam Results and Feedback Reports: Results are determined by comparing total scores to the Minimum Performance Level. Feedback reports are issued to candidates who do not pass, highlighting areas for improvement.

# UNDERSTANDING THE FXAM FORMAT AND CONTENT

A competency-based entry-to-practice examination is the gold standard, measuring entry-to-practice competence relevant to professional practice.

Optometrists develop the content for OEBC exam components, and psychometricians ensure the validity of each test item. The OSCE examiners are volunteer optometrists.

OEBC outlines the OSCE administration process and exam design in our website's materials. We encourage you to watch the videos and read the materials.

The exam consists of two components:

- 1. A case-based assessment (Written Exam) delivered via computer with remote proctoring, which includes multiple-choice questions based on various case scenarios. Some cases provide digital media along with the case data.
- 2. An Objective Structured Clinical Examination (OSCE) conducted in a clinical setting, where you are presented with eight clinical scenarios and four technical skill assessments.

The exam is a public quality assurance tool that optometry regulatory authorities utilize to ensure you are prepared to practice independently. The cases included in the exam are designed to assess the competencies outlined in the National Competency Model (found in the Blueprint) necessary for practicing optometry safely.

### Understanding Competence And How It Is Measured

Your Board exam evaluates critical competencies for optometrists, as outlined in the Blueprint. These competencies are organized into four levels, represented by a pyramid.

Each case in the OSCE station consists of 10 to 15 checklist items that reflect the necessary competencies. The computer-based test assesses the "knows" and "knows how" levels, while the OSCE evaluates advanced problem-solving skills. The "does" level is measured through professional practice and ongoing competency activities.

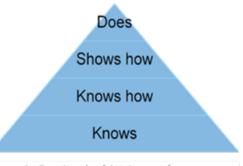


Figure 1 - Four Levels of Attainment for Competencies

### Understanding the Blueprint

The Blueprint outlines the content and format of the OEBC exam, ensuring it assesses the competencies necessary for effective patient care in Canada.

This document details the potential topics that may be covered in the exam and assigns weightings to various practice areas. This approach helps the OEBC develop fair and consistent tests, giving all candidates an equal opportunity to showcase their skills.

The Blueprint, divided into sections for both the computer-based exam and the OSCE, is a crucial study resource. Table 1 presents the weightings of case content by domain and practice area.

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Besides selecting exam content based on the domains detailed in Table 1, a topic matrix (Table 2) ensures that critical subjects are adequately represented in each exam component. OSCE cases may incorporate multiple competencies.

Table 1 - Case Selection by Prime Practice Area

	nains tice Areas	Written	OSCE				
1.0	Clinical Expertise	88%	83%				
	Assessment (1.1-1.3)	30%	33%				
	Diagnosis & Planning (1.4-1.6)	27%	17%				
	Patient Management (1.7-1.11)	28%	33%				
2.0	Communication	-	*				
3.0	Collaboration	5%	-				
4.0	Patient-centred Care 3% 179						
5.0	Professionalism	-	*				
6.0	Scholarship	2%	-				
7.0	7.0 Practice Management 2% -						
Cases/stations are selected based on the primary practice area  * See Appendix B in the Blueprint - Patient Interactions							

Table 2 - Exam Topic Matrix Targets

Topics	Written	OSCE			
1. Refractive	19%	14%			
2. Accommodative	5%	7%			
3. Oculomotor	12%	14%			
4. Sensory Integrative	12%	7%			
5. Ocular Disorders	35%	56%			
6. Systemic Disorders	17%	7%			
7. Other		up to			
		14%			
Target Range	± 3%	± 7%			
Note: Integrated Technical Skills assessment					

within an OSCE station includes a patient interaction and technical measurement, e.g., tonometry, gonioscopy, retinoscopy, BIO

See Appendix A in the Blueprint

# PATIENT INTERACTION RATING SCALE

**Assessment Scales** 

Optometrists make informed decisions and display professionalism when interacting with patients. This includes building rapport and creating a comfortable environment for patients to express concerns. They must also respect patient autonomy, be sensitive to diverse populations, and tailor care accordingly. Every OSCE station assesses the quality of these interactions, with the scoring rubric found in Appendix B of the Blueprint.

### LINK TO THE COMPETENCY PROFILE

The Blueprint outlines the domains, key competencies, enabling competencies, and indicators relevant to the exam. It is essential to review the Blueprint thoroughly to evaluate your readiness for independent optometric practice.

An "indicator" refers to a behaviour observed in a specific assessment method, demonstrating your competency in line with OEBC's assessment techniques. Therefore, focusing your preparation on these indicators will be beneficial.

### **SUCCESS RATES**

Table 3 presents the pass rates of first-attempt candidates by training country since the introduction of the new exam.

Table 3- Pass Rates Since 2017

	CDN OD Programs	US OD Programs	Bridging Programs	
Written - Pass Rate	98%	86%	80%	100%
OSCE - Pass Rate	91%	73%	77%	100%

See Website – Pass Rates for more details.

The Competency Profile and examination for entry-level optometry in Canada are tailored for the Canadian context, emphasizing "safe, effective, and ethical practice."

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Canadian health systems reflect unique cultural and systemic approaches, influencing the OEBC exam's communication and professionalism expectations.

While assessment, diagnosis, and planning areas are similar globally, Canada's patient-centred care and management practices stand out. These practices treat patients as partners in their health care.

Candidates trained outside Canada should focus on patient management and patient-centred care, as these required skills may differ from their training.

### PREPARING FOR YOUR BOARD EXAM

This guide provides insights to help you prepare for the upcoming OEBC exam.

On the OEBC website, under Preparing for the Exam, candidates can find the following:

- The Exam Blueprint
- The OSCE Administration Video, which sets out the process
- The OSCE Station Video provides an impression of the OSCE exam format
- The Candidate Guide
- Sample questions

The exam blueprint is a vital document that outlines the exam curriculum and should guide your study plan. It is based on the competencies required for entry into optometry practice. Understanding and following the blueprint will ensure you are tested in the essential areas necessary for safe and effective optometry practice.

Focus on formulating practical responses for the OSCE. Unlike traditional exams, the OSCE emphasizes patient-centred approaches, requiring you to base your answers on case data and patient interactions. Communicating your solutions clearly and in layperson's terms is essential, showcasing your competencies effectively.

# Preparing for the Written Component

#### **OVERVIEW**

The exam includes a variety of question types. The case-based written exam presents four questions for each case and may consist of high-resolution media on eye diseases. The selection of cases matches the Blueprint requirements. The exam has three sessions, each 2.5 hours long and addressing 20-25 cases per session. OEBC builds in 25% extra time, so all candidates have ample time to consider the cases and provide their responses.

It is delivered in an online format that uses a secure browser and remote proctoring.

### **PRACTICE EXAM**

Some candidates have suggested that more sample written cases would assist them in their exam preparation. So, we have now included a practice exam when you register for the written exam. This initiative is part of OEBC's ongoing commitment to support candidates and ensure they are well-prepared for their professional careers. There is no additional cost for the practice exam to ensure all candidates have access to this valuable preparatory tool.

This 2.5-hour practice exam mirrors the format and content of the actual written exam. It includes multiple-choice questions based on realistic case scenarios and high-resolution images. Attempting this practice exam provides candidates with a valuable opportunity to familiarize themselves with the exam structure and content and understand the pace needed to complete their exam thoughtfully. In addition, it is an excellent opportunity for candidates to set up and experience their surroundings for an exam-day environment.

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#### **GENERATE PRACTICE CASES**

In the guide's first edition, we set out how to create OSCE cases to enable you to develop your cases for practice. We have added **Appendix E—Using LLM To Generate Practice Cases** to allow you to make additional cases. You can create realistic cases that mirror the exam format using tools like Copilot, ChatGPT, or Gemini, which use large language models (LLM).

Although Al-generated cases are helpful for exam preparation, LLMs rely on pattern matching rather than logical reasoning, so the outputs may need to be corrected. Always verify Al-generated information and cross-check it with reliable sources before making decisions or recommendations. While Al can provide valuable support, it is crucial to ensure that the final decision-making remains in the hands of healthcare professionals.

## PREPARING FOR THE OSCE COMPONENT

#### **OVERVIEW**

The OSCE is a standard format for clinical exams among health professionals. It features multiple stations where candidates demonstrate skills in communication, professionalism, patient-centred care, diagnosis and planning, and assessment. Stations adhere to quality assurance guidelines and use standardized patients for realistic scenarios.

This exam component evaluates your clinical expertise, patient management abilities, technical skills, and patient interaction skills. During the OSCE, you will rotate through various clinical scenarios every ten minutes. Standardized Patients (SPs) will simulate real clients, allowing you to take medical histories, communicate procedures and diagnoses, and explain treatment plans.

Research indicates that doctors often perceive their OSCE performance differently than their performance on computer-based exams. This suggests that the experiences and insights of successful exam takers can vary. When participating in the OSCE, approach it confidently and conduct yourself as a professional optometrist in a clinical setting.

# SCORING PROCEDURES FOR THE OSCE

Trained examiners use a checklist to assess candidates' performances. At each station, they evaluate if the candidate meets the criteria based on the competency indicators and patient interaction rating scale. A candidate's raw score is calculated by adding the ratings across all stations. It is then converted to a scaled score.

### **EXAMINERS**

The OEBC-trained examiners are practicing optometrists in Canada. They assess candidates solely based on their performance, without engaging in conversation or influencing the candidates in any way. All evaluations follow a standardized procedure, and examiners report to the Chief Examiner to maintain integrity. If any discrepancies arise, the examiner promptly reports them to the Chief Examiner. Additionally, examiners are trained and required to complete a Significant Disruption Form when necessary.

# WHAT IF SOMETHING AFFECTS MY PERFORMANCE DURING THE EXAM?

If you feel that an extraneous factor impacted your performance during the

- OSCE: you will request a "Significant Disruption Form" during sequestration. The chief examiner reviews this report and may take corrective action before the next exam session begins.
- Written Exam: you would download an Incident report and submit it within an hour of finalizing your exam.

# COMMENTS ABOUT YOUR EXAM EXPERIENCE

We seek your comments and insights via a survey that will be emailed to you after each exam. The topics include registration, preparation time, exam logistics, and more.

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# MAKE A STUDY PLAN

The OEBC exams are case-based examinations that reflect practice. Creating parallel plans for the Written Exam and the OSCE is helpful. You can start with a written case and expand it into a complete clinical scenario.

Preparing for your optometry board examination can be a structured and manageable process with the right approach. The following is a recommended method and timeline to help you prepare effectively:

#### 6 Months Before the Exam

- Gather Study Materials: Obtain the OEBC study guides, textbooks, and class notes.
- Understand the Blueprint: Familiarize yourself with the exam blueprint to learn the topics and competencies covered. The Blueprint provides the proportion of materials covered and outlines the topics covered.
- Carefully read the patient interaction rubric (Appendix A of the Blueprint) and apply the eight items in your clinical work. Ask your supervisor to give you feedback. This element is measured in all 12 OSCE stations.
- Set Goals: Break down your study material into manageable sections and set weekly goals.

# 4-5 Months Before the Exam

- Start Studying: Begin with the basics and gradually move to more complex topics. Dedicate specific hours each day to study.
- Develop practice cases.
- Create/Join a Study Group: Collaborate with peers to discuss complex topics, exam format, practice, and share resources.

#### 3 Months Before the Exam

- Practice Questions: Start doing practice questions and case studies to test your knowledge.
- Simulate OSCE Scenarios: Practice clinical skills with classmates or mentors to get comfortable with the OSCE format.

# 2 Months Before the Exam

- Review and Revise: Focus on areas where you feel less confident. Use flashcards, summaries, and mnemonics to reinforce your memory.
- For the OSCE, create a 12-station (full-length) practice exam. Do it under timed conditions to build stamina and
  get used to the exam format. Include four technical stations to practice gonioscopy, tonometry (Perkins),
  retinoscopy, and BIO.

### 1 Month Before the Exam

- Final Review: Review the material again, focusing on weak areas.
- Relaxation Techniques: To stay calm, practice stress management techniques like deep breathing, meditation, or light exercise.
- Written Practice Exam: Candidates may challenge the practice exam provided upon registration for the written
  exam. It is available for a 2-week window and is 2.5 hours long. While the questions on the practice exam are
  representative of the ones you'll see on the written exam, they are not repeated on the written exam.

#### **Exam Week**

• Light Review: Do a light review of critical concepts and avoid cramming.

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- For the OSCE, re-read the insights provided by examiners in the study guide.
- Re-read the Candidate Guide.
- Rest Well: Ensure you get plenty of rest and keep a healthy routine.

### **Exam Day**

- OEBC has separated the written and OSCE components by at least three weeks.
- Stay Calm: Trust your preparation and stay calm. Follow all exam day instructions carefully.
- OEBC assess your cumulative performance, so if you think your performance is less than adequate to pass a station/case, do not worry; you may be able to get some of the scoring items. Failing one station does not mean that you fail the exam.

Following this suggested structured timeline and method, you can prepare effectively for your optometry board examination. OEBC strives to ensure candidates are well-prepared for their board exams. Please pass along your suggestions to strengthen this guide to <a href="mailto:exams@obec.ca">exams@obec.ca</a>.

Good luck with your studies!

# PRACTICE-PRACTICE FOR YOUR OSCE

You probably encountered over 1,000 patients throughout your studies, usually with a clear objective. Unpredictability is typical in an OSCE, like actual practice. Therefore, maintain utmost professionalism in both behaviour and communication.

#### PRACTICE WITH YOUR FRIENDS AND FAMILY

Describe conditions and scenarios to your family and friends using simple language. Ensure they comprehend what you explain and note any questions they ask. Request feedback on your verbal and non-verbal communication and have them complete the **feedback form in Appendix A** to assess your communication and professionalism.

#### **PRACTICE WITH YOUR CLASSMATES**

Studying in both environments can be advantageous as classmates can highlight areas you may have overlooked or where extra attention is needed. Family and friends might assist in predicting the type of questions and prompts you could receive from the SP. Develop feedback forms using the indicators for each practice area. Classmates generally have a clearer understanding of the technical demands; however, occasionally ask them to think from a patient's perspective.

### PRACTICE CHOOSING THE MOST APPROPRIATE PRESCRIPTION

In everyday practice, you examine patients with Refractive Error issues. Therefore, the enabling competencies required may include:

- 1.8.5 Apply the patient's refraction, visual requirements and other findings to develop a plan for vision therapy.
  - a) Determines a plan for vision therapy and lens therapy (including prism and add power) for binocular vision disorders and accommodative disorders
  - b) Determines a plan for the treatment of amblyopia with refractive correction and occlusion
    - a) Differentiates patients requiring surgery from those who would benefit exclusively from vision therapy and/or lens therapy for binocular vision disorders
- 1.10.1 Prescribe a pharmaceutical prescription for treating ocular conditions or diagnosed diseases.
  - c) Writes a pharmaceutical prescription correctly
  - d) Identifies indications for the pharmaceutical treatment of diagnosed ocular conditions
  - e) Determines a management plan for the pharmaceutical treatment of diagnosed ocular conditions
  - f) Explains the proper use of pharmaceutical prescription and schedule of dosing
  - g) Identifies the appropriate use of OTC eyedrops and ointments for the treatment of anterior segment conditions
  - h) Recommends the appropriate use of oral nutritional supplements for ocular conditions

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#### PRACTICE CASE

You have just completed an eye examination for a new patient in your clinic. Create a summary of the Exam Record and possible prescriptions (The template is in **Appendix B**)

Set a chief complaint related to Refractive Error, i.e., the patient feels his distance vision is okay with his glasses but cannot read with them. In the practice sessions, pick the most appropriate prescription and discuss why.

Then, vary some elements (Age, Gender, Histories, clinical data elements, etc.) to make one of the three other prescriptions the most appropriate. Finally, repeat for the remaining two.

In an OSCE, a prescription may be one element of the station. So, keep practising until you are comfortable selecting the most appropriate prescription in 2-3 minutes.

# **Summary of Patient Exam Record**

Patient Name	Angela Stewart			
Gender	Female			
Age	54			
Occupation	High	n school teacher		
Hobbies	Run	ning		
Chief Complaint	clos ima	es her left eye she is ge.	shing lights and now when she seeing a fuzzy circular blurred	
Additional History	Non	е		
Ocular History	CL	wearer for sports		
Medical History	Non	е		
Family History	Cata	aracts parents, macul	ar degeneration mother	
Clinical Data				
Current Spectacles	OD OS	-1.00 DS -1.50 DS	6/7.5 6/6	
	OD	1.00 00	6/	
Unaided Visual Acuity	OS		6/	
Subjective Refraction	OD OS	-1.25 DS -1.50 DS	6/6- 6/6	
Binocular Vision			10.0	
Colour Vision	OD	WNL		
Ishihara Plates				
Tonometry	OD 14 mmHg			
D	OS   15 mmHg			
Pupils	PERRLA			
Fundus Examination	See photographs in station			
Diagnosis		<del></del>		

Figure 1 - Summary of Exam Record (Sample Case on website)

# **CREATE A STUDY GROUP**

Form a study group of 4 people. Create your own OSCE cases to practice. For each practice session, assign a case writer. The instances should cover a different practice area. Draw on the group's strengths as they worked in diverse practice settings and client groups.

# **KNOW THE CASE OBJECTIVES**

Stations start at various points; some may require a complete history, while others provide clinical data and patient history. In addition, the station may require your higher-level thinking to address the case's objectives.

# In the Sample cases

	Sample 1	Sample 2
Case Name	Presbyopia Management	Macula and Retina Assessment
Case Type	Interactive	Technical Skills
Issue	Presbyopia requires a prescription for	Age-related Posterior Vitreous
	progressive glasses	Detachment and Choroidal Nevus
Practice Areas	Communication	*Assessment
(primary practice area	Patient-Centred Care	Diagnosis and Planning
marked *; other areas	Diagnosis and Planning	
are secondary)	*Patient Management	
Competencies	Select a communication style	Assess ocular health status
	appropriate to the situation	Determine posterior segment ocular
	Establish a shared decision-making	health status
	process with the patient	

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	<ul> <li>Engage in dialogue with the patient to bring about understanding, acceptance and cooperation</li> <li>Formulate a management plan</li> </ul>	
Objectives	<ol> <li>Explain the diagnosis of presbyopia</li> <li>Explain the treatment options</li> <li>Recommend progressive lenses</li> </ol>	<ol> <li>Identify the primary and secondary diagnoses for this patient</li> <li>Identify the patient's retinal associations for the primary diagnosis</li> <li>Determine the appropriate management for the patient's condition</li> <li>Determine the increased risk of malignancy for this patient's secondary condition</li> </ol>
Type of Encounter	New patient	Existing patient
Setting	Optometry Clinic	Optometry Clinic

### **KNOW YOUR PATIENT**

The OSCE information sheet provides patient information.

Some stations may present an emergency patient, e.g., an ocular trauma patient, where time may be essential to ensure a patient does not lose vision or preserve what vision they have. Take a targeted case history and develop a management and treatment plan for an ocular emergency.

### **DEVELOP INDICATORS FOR A COMPLETE HISTORY OF VARIOUS CASES**

In day-to-day practice, you must take a complete history of a new patient from time to time on various chief concerns. For example, Indicator 1.1.1 b) Determines the history of present illness, e.g., difficulty with distance vision, personal ocular history, family ocular history, and medical history. It is best if you use systematic questioning to obtain comprehensive information efficiently. You should be able to do it in 4-5 minutes. The history might include items related to:

- the chief complaint, e.g., frequency, onset, progression
- ocular/vision history, e.g., aggravating factors, alleviating factors, associated symptoms
- medical history, e.g., health issues
- family and social history, family ocular history, health issues, drugs, alcohol
- risk factors, e.g., the type of work, driver's licence, protective eyewear
- other factors

When a complete case history of a patient is needed, you have 10-15 indicators for each potential issue. Your task is effectively gathering this information while adhering to communication and professional standards. Verify that you have identified all the relevant indicators you deemed necessary. Request additional feedback from peers using the form in **Appendix A** for better practice.

# Types Of Cases That May Be Presented

Case writers create realistic scenarios to assess new practitioners in clinical practice. Despite outlining four competency levels earlier, many focus on disease study instead of communication and professionalism for the OSCE. With your degree, you've proven your knowledge and skills; the OSCE lets you demonstrate how you apply these competencies.

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The case types include taking a case history, referrals, cognitive disabilities, dealing with guardians/parents, diagnosis and management, surgery complications, ethical issues, and treatment initiation.

The scenarios presented may include a wide range of disease and eye issues, such as anterior uveitis, cataract management, primary open-angle glaucoma, deuteranopia, foreign body management, refractive error, BIO choroidal nevus, cross-linking, retrobulbar optic neuritis management, glaucoma management, amblyopia management, amaurosis fugax, drance hemorrhage, atrophic age-related macular degeneration, contact lens associated red-eye, allergic conjunctivitis, acute bilateral uveitis, presbyopia, corneal abrasion, exo, and eso.

### PRACTICE REFERRING CASES

As you enter professional practice, it is essential to understand your knowledge and experience limitations. Thus, a referral may be required.

Simulate situations where a referral might be necessary. Candidates sometimes attempt to showcase their expertise to the examiner. Know how to balance the amount of information you share. Prioritize the patient's needs and avoid inundating them with details when referring them to a specialist. The competencies and indicators from the patient management practice area offer valuable guidance.

The communications competencies require you to communicate in plain language:

- 1. Explain the diagnosis
  - Explain what the issue is
  - Explain how diagnosis relates to their chief complaint
- 2. Explain possible treatment and management options
  - Explain treatment options, e.g., devices, surgery
  - Explain if it is legal to drive now and under the various scenarios
  - How referral for surgery occurs
  - · Changes to vision if they do nothing
- 3. Explain follow-up
  - Explain the need for following up and the time frame under each of your management options

# THE CASE WRITER

Case writers are essential, bringing their background and experience to the case. They provide the details that make the case realistic and reasonable. As the case writer, you will provide:

- Case background, synopsis, description and references
- Practice area(s), competencies and goals
- Instructions for the candidate (the tasks to be performed in the station)
- Checklist for the assessor (things to look for to determine if objectives are met)
- Scoring rubric for the assessors identifying the practice area and select the indicators from the Blueprint that you would expect a colleague, acting as the candidate, to discover
- A description of the patient for the SP and training staff, including history and physical findings
- Props and equipment, if any

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Remember that you're attempting to simulate an optometry practice area rather than a holistic approach. For this reason, the objectives of the case are narrowly focused. Resist the temptation to include too much in your case.

Ask yourself, "How can I write the case so that candidates can demonstrate their knowledge of the topic?" This might involve an SP or assessor asking a question at an appropriate time. Again, your focus is on trying to help your colleagues improve.

As the case writer for the simulation, you act as a standardized patient for your cases. Two colleagues are the examiners who use your score sheet, and the fourth member of your group is the candidate.

# **PRESENTATION OF THE CASE**

This deviates from the case regarding specifics, but understanding how to present the SP is crucial before drafting the case. Start by creating point-form notes that include the SP's age, gender, and overall condition. Additionally, consider jotting down potential questions the SP may pose. These notes will be beneficial for your role-play with the SP.

Select common conditions that entry-level optometrists are likely to encounter. Consider ethical cases, as they frequently arise. Preparing for your provincial jurisprudence exam can also help with these scenarios.

Your case should accurately present a realistic encounter between a patient and an optometrist. Basing the case on typical conditions and situations you have encountered helps ensure the case is realistic. For example, you may want to combine data from several patients.

As the SP, ensure you include:

- A description of the condition
- The patient's demographics
- Their appearance, behaviour, and starting position
- Details regarding the chief complaint (and any secondary complaints)
- Relevant ocular, medical, and social history
- Signs and symptoms to demonstrate
- Statements or questions to initiate interaction, respond to the candidate, or prompt the candidate if needed

SPs might use makeup or props to highlight case features. For instance, if an SP can't show a particular sign or symptom, a photo might be used, or the assessor may give the needed information when appropriate.

### INSTRUCTIONS FOR THE CANDIDATE

The candidate is the optometrist. Include the patient's name, age, location of the appointment, and reason for the visit. Be creative with the patients' names!

Include only the pertinent clinical information necessary for the case. Exclude any irrelevant details, as the candidate has limited reading time. Ensure every word is essential.

Clearly outline the candidate's clinical scenario(s). The scenarios should be suitable for the case's length and relevant to the entry-to-practice level.

Specify any actions the candidate should avoid in the instructions.

WHAT'S MEASURED

A typical OSCE case has 15-20 checklist items, plus 8 measurements related to patient interaction. High performing candidates achieve more than 85 percent of the possible marks in each case.

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State any assumptions the candidate needs to make to save time. For instance, you might indicate that a young patient is accompanied by a parent in the waiting room.

Complete the Summary of Patient Record if an assessment has already been done. If a diagnosis is given or the case requires the candidate to diagnose based on the provided information, ensure all necessary details support the accurate diagnosis.

#### ASSESSOR CHECKLIST

The assessor focuses on specific elements during the interaction. The main challenge is to be precise. Set your checklist items to meet the minimum standards for a newly qualified practitioner.

If masks are required, candidates should speak clearly and loudly. Practice scenarios while wearing a mask, as it can hinder communication among the SP, candidate, or assessor.

Identify which items are crucial for achieving the objective. Mark necessary items if you believe they should carry more weight.

#### **RUNNING THROUGH A CASE**

Start an 8-minute timer when the candidate is ready. The SP should keep things on track and use prompts if the candidate finishes without covering all specified topics.

Afterward, give the candidate a copy of the score sheet and have the examiners provide feedback on their scores, as the SP, note which prompts you used. Discussing these differences as a group helps candidates understand the scope required to show competency.

Create multiple cases and play various roles in them. If your classmates form similar groups, have a visiting SP and use their case.

- ✓ You can reuse cases with people playing different roles. However, keep the case writer as the SP
- ✓ You can do this via video calls. So, start early and practice often
- ✓ Templates are available in Appendix A

#### SETTING THE STAGE

Current information is collected and documented during every patient interaction, whether in person, by phone, or in written communication. During the OSCE, you will converse with the patient at each station. Your space is private, ensuring confidentiality and an uninterrupted conversation for the 8 minutes of your exam. Keep the following tips in mind:

- Practice good personal hygiene and proper grooming to make a positive impression on your patient, demonstrate professionalism, and establish rapport.
- Present yourself as a professional yet friendly clinician; avoid appearing cold or sterile.
- Convey confidence as an optometrist to help put your patients at ease.

The following recommendations aim to enhance the effectiveness of each information exchange:

- Before starting, review any provided patient information. Understanding their background and medical history shows interest and concern and helps you formulate relevant questions.
- Maintain a comfortable, relaxed, and open posture; avoid crossed arms, which can signal rejection. A rigid stance
  may seem intimidating, while slouching appears unprofessional.
- Position yourself at eye level with the patient and face them directly. If culturally appropriate, maintain eye contact.
- Show engagement through facial expressions and nonverbal cues such as smiling and nodding.
- Listen attentively and focus on the dialogue. Patients can tell when their concerns are not being genuinely heard.

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- Begin with broad questions such as "How may we assist you today?" before moving to more detailed inquiries. This approach helps establish rapport and gather essential background information.
- Formulate your questions to encourage detailed responses from the patient in their own words. This technique, known as open-ended questioning, fosters comprehensive answers. Reserve closed-ended questions for obtaining specific information.
- Identify discrepancies by noting cues that contradict the patient's statements. Consider what might be bothering the patient beyond their initial complaint. It is essential to address both their primary issue and any other concerns they may have.
- Recognize that many responses are subjective and unique to the patient; for example, what one patient describes as pain may be discomfort to another.

### **INSIGHTS FROM OEBC EXAMINERS**

### TIPS TO PREPARE FOR THE OSCE

- As a confident professional optometrist, practice taking charge. Your instructor may ask for more details at school, but in an OSCE, the assessor remains silent and scores based on what you provide.
- Understanding of the competencies and their indicators as they reflect professional practice.
- Ensuring your knowledge and clinical skills align with the Blueprint's competencies and indicators.
- Integrating your clinical skills, reasoning, and professional judgment with entry-to-practice competencies outlined in the Blueprint.
- Practicing, including the indicators of the five practice areas in clinical settings.
- Avoid depending on the experiences of past examinees, as every exam varies.

### TIPS FOR TAKING THE OSCE

- Carefully read case-specific instructions.
- Greet the examiner politely, then focus on the patient.
- Communicate with empathy and a patient-centred approach.
- Use safe methods for history taking.
- Be systematic during the physical exam to stay focused.
- · Prioritize management and investigations.
- Ask about the patient's perceptions and any concerns with your plan.

Each case is crafted to let an examiner evaluate if you have the basic knowledge, skills, and abilities to practice the scenario safely and effectively. To assist in your preparation, we asked our examiners for their advice on the following four questions.

#### HOW SHOULD I APPROACH THE STANDARDIZED PATIENT AND THE EXAMINER?

- Read the instructions thoroughly.
- Have a tentative diagnosis after reading the exam question.
- It is best to greet the examiner when you enter the room and then forget they are there—an examiner is "a fly on the wall."
- Don't rush to interact. Instead, take the time when you first enter the room to center yourself and have a plan to quide you through the interaction.
- The standardized patient is your priority. Professionally approach the standardized patient with your complete focus on the patient—figuring out how to address their known and unknown ocular issues. Interaction with actual patients (i.e., in a clinical internship or externship) should be the same as in previous clinical settings.
- Interact well with the SP, as you would in an optometry practice.

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- Speak clearly and confidently. After finishing, review the information and restate the critical facts, perhaps adding extra details to give a well-rounded answer.
- Imagine that you have just finished an examination. Please educate the patient about their condition and develop a plan with as many options as possible.
- Focus on the patient. Look at the cues they are giving you.
  - Are they in visible distress?
  - o Are they unable to look at you for some reason?
  - Always engage with the patient first and ask them for information even if you may be confident in your diagnosis--what is the valid question you are being asked?
- Stress the importance of avoiding jargon when explaining conditions to the standardized patients. Clear and straightforward explanations, without assuming their knowledge, are essential.
- Your assessment is based on your ability to deal with the scenario presented and react appropriately to the standardized patient responses.
- Emphasize the importance of clear and audible communication. Speak clearly and loudly enough for the examiner to hear, but direct all conversation to the patient. Communicating effectively is a crucial part of your competence as an optometrist.

### AS EXAMINERS, WHAT ARE THE BIGGEST MISTAKES YOU HAVE SEEN CANDIDATES MAKE, AND HOW SHOULD THEY OVERCOME THEM?

- Not reading the question or understanding the purpose of the interaction. You should reread the question at the end and ensure you have answered it.
- Lacking a plan. It's essential to structure the case logically and in order, beginning with the primary issue and concluding with potential treatment options.
- If a method does not go as planned, relax and try another approach.
- Some candidates overlook the patient, reciting facts about a condition without genuinely addressing the question. Engage with the patient and respond to the specific query in the case.
- Some candidates try to impress me (the examiner) with their knowledge. It would be best if you focused on solving the patient's problem.
- As a student, I thought I was being graded on many more fact-based points, but I learned that wasn't the case as an examiner. You believe you're being graded on certain things (i.e., mentioning that a point doesn't meet driving requirements due to their diagnoses), but these facts are not grading points focus on the patient and their issue.
- Some candidates sit quietly, waiting for time to run out after they think they've finished speaking. Instead, it's beneficial to use the remaining time to inform the patient about differential diagnoses, potential symptoms, and related conditions.
- Some candidates quickly address the key points and then find themselves with surplus time, prompting them to seek additional information to share (which neither helps nor hinders). Use any extra time to educate the patient.
- Anxiety appears to be a constraint stay calm. It's merely another typical clinic day for which you've adequately prepared. Avoid overanalyzing yet remain focused on the objectives outlined in the instructions.
- Some go down a rabbit hole on a detail the patient gives them that may be a red herring. You need to know how to properly and efficiently deal with real-life patient problems.
- Some candidates have poor eye contact/interaction with the patient. They are not listening to what the patient is saying.
- If it looks like a duck, swims like a duck, and quacks like a duck, it probably is a duck! Don't overthink it!
- I've seen candidates use technical language from books to explain conditions. It's better to focus on solving the patient's issue and use terms they understand to involve them in the solution. There's often no need to stray from the primary task in instructions.

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- Some candidates let the Q&A of the exam take them on an extended tangent to the goal of the exam. READ the INSTRUCTIONS
- Break down the answer to the exam question into 3 or 4 sections and explain it to the patient.
- Many candidates find it challenging to present a clear plan. They often jump between points or use overly
  technical jargon, sometimes contradicting themselves. It seems they are responding to a university exam rather
  than addressing a real-world scenario involving an uninformed patient. While the examiner may grasp their
  explanation, it is difficult for a patient to understand or follow their instructions. Candidates must remember that
  their diagnosis explanations should be comprehensible to individuals without medical training. The advantages
  and disadvantages of not receiving treatment should be communicated so that patients can make informed
  choices.
- Some candidates appear too assertive, often interrupting patients before they can express themselves. Listening carefully and focusing on what the patient is communicating is essential.
- Some candidates wait for feedback from the examiner, which an examiner does not give. Instead, ask the patient if you have solved the issue and understand the treatment.
- During technical sessions with model eyes, candidates should handle them like human eyes. Some are too harsh, making it hard for the examiner to deem the procedure safe.

# WHAT DO I NEED TO DO FOR YOU TO RATE MY OVERALL PERFORMANCE AS "EXCEEDS EXPECTATION?"

- Besides meeting the case's requirements, you should display your personality empathy, sympathy, and
  humour. While showing human traits and smiling during a stressful exam is challenging, some candidates meet
  expectations but appear robotic. This can come across as cold, detached from the patient, and insincere, possibly
  due to nerves or indicative of future practice style.
- Thoroughly address all questions related to the content. Maintain control and ensure patient cooperation during the interview. Please communicate with the patient to ensure they fully comprehend your explanations.
- Display confidence and charisma during the encounter.
- Become the associate I would instantly choose to employ! Be assured in your diagnoses and treatment plans. If uncertain, demonstrate your willingness to seek the appropriate course of action.
- Provide the patient with additional relevant information.
- Connect subsequent thoughts to the problem you are addressing, not merely the issue.
- Ensure there are no major diagnostic oversights or risks to the patient.
- Demonstrate understanding of various alternative solutions to the patient's issue.
- Achieve all the station's systemic objectives.
- Meets all criteria on the assessment form and builds rapport with the patient.
- Focused on the task, asks for clarification or provides additional explanations when needed.
- Shows empathy and listens well throughout the interaction.
- Explains clearly to the patient, adjusts appropriately to the standardized patient, and anticipates concerns when presenting the treatment plan.
- Adheres to a standard close to current practice in a non-testing context.

# WHAT WOULD CAUSE YOU TO RATE MY PERFORMANCE AS "BELOW EXPECTATION?"

- Failing to solve or communicate the problem effectively.
- Ignoring the patient's specific issue.
- Appearing unsure of your actions.
- Missing objectives and poor patient communication.
- Rude or interruptive behaviour towards patients.
- Misinterpreting clinical information and critical assessments.

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- Abusing the patient.
- Providing unsatisfactory care, leading to incorrect diagnoses and treatments.
- Struggling with diagnosis and treatment.
- Alarming the patient and failing to build comfort.
- Making numerous content mistakes, poor communication, and causing harm.
- Poorly understanding and conveying exam questions.
- Giving vague summaries without details.
- Missing critical procedures or questions.
- Being incoherent, contradictory, and inconsiderate.

# WHAT ONE PIECE OF ADVICE WOULD YOU HAVE FOR ME TO SUCCEED AT THE OSCE?

- Stay calm and rely on your training. You've got this!
- You've made it this far; you know what you're doing. So, please do it!
- Continuously practice with friends and family and seek candid and sincere feedback.
- Trust your skills and perform as you would in a clinical environment. If the task seems simple, it probably is; deal with the issue accordingly. Focus on treating your patient and ignore the examiner's presence.
- Stay calm, take deep breaths, and maintain a pleasant demeanour even if you feel terrified.
- Prepare effectively by honing clinical skills, and then trust that preparedness. Relax.
- Make sure to shadow at a clinic an OD known for excellent patient care, not just the basic standard. Follow these expectations to exceed the minimum requirements.
- Upon completion, if time permits, reflect on whether you addressed the question posed about that session.
- Be confident and thoroughly consider the case to ensure you don't overlook any key aspects. Cultivate strong communication skills with patients. If you aren't prepared yet, take some additional time to practice and get ready.
- Imagine you are caring for a beloved family member. Provide your patient equal respect and dedication, offering the same information and attention.
- Carefully read the question before discussing it with the patient to review the information provided. If it's a diagnosis or treatment case, brainstorm possibilities and use your conversation to pinpoint the issue. Take notes if necessary, then concentrate on what you need to do.
- Don't remain silent; engaging, educating, and explaining the condition to the patient can elicit more information and make them feel more comfortable.
- You've completed rotations and encountered many patients. Trust your knowledge and try to forget it's a test, which might help you stay calm. The testing stress can sometimes lead to simple errors.
- Keep your composure and organize your thoughts before speaking. There's ample time to explain things to patients or complete tasks. Rushing can lead to mistakes that may be hard to fix.
- Understanding the rationale behind the required testing and interpreting results is crucial for effectively communicating with patients.
- Practice delivering diagnoses and information to patients clearly and with empathy. Address the cases methodically:
  - o What is the problem/issue?
  - What evidence tells you that is the problem?
  - How do you plan to solve it? (i.e., referring, treating or monitoring)

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# **USEFUL RESOURCES**

OEBC does not endorse any study materials that our organization does not publish. Some high-performing candidates reported using only this guide, the OEBC Blueprint, and their class notes. Some candidates noted that they used some of the following materials:

- OEBC's website
- Optoprep
- daily questions from Optoprep's emails
- KMK 7th Edition, KMK Part 1 and 2 books, a small Canadian guide by KMK
- Willis Manual of Eye Disease
- Kanski's Clinical
- NBEO Part 2 study guide
- Massachusetts Eye and Ear Infirmary
- The American Academy of Ophthalmology

**Note:** Candidates suggested the abovementioned resources. OEBC is not directly associated with the listed companies and does not endorse their materials. If you know of any other study resources that could be helpful, please email exams@oebc.ca, and we may consider including them in a future update.

# **OPTOMETRIC SCOPE OF PRACTICE ACROSS CANADA**

Practices differ among provinces, with drug prescriptions, referrals, and optometric services variations. Therefore, OSCE case objectives for both the Written Exam and OSCE are generally tailored to professional practice across Canada, and optometrists review national standards as needed.

The following table summarizes the optometric scope of practice by province. No provinces have changed their scope of practice since 2022, and all provinces except New Brunswick seek to expand their practice scope.

OEBC is developing a Laser and Minor Surgery Examination and will provide a separate Board Certification. As more jurisdictions authorize these procedures, the assessment of the unique competencies required for them will become part of the entry-to-practice exam.

Table 1 - Optometric Scope of Practice Across Canada

	AB	ВС	MB	NB	NL	NS	ON	PE	QC	SK
Diagnostic Pharmaceutical Agent	Y	Y	Υ	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Υ	Υ	Y-Sch 1
T-cycloplegics	Y	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Υ	Υ	Y-Sch 1
T-antiallergic	Y	Υ	Y	Y-Sch 1	Y-Sch 1,2	Y	Y-List	Y	Υ	Y-Sch 1
T-Non-Steroidal Anti-Inflammatory	Y	Υ	Y	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Y	Υ	Y-Sch 1
T-anti-infective	Y	Υ	Y	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Y	Υ	Y-Sch 1
T-antibiotic	Y	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Υ	Υ	Y-Sch 1
T-anti-viral	Υ	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Υ	Υ	Y-Sch 1
T-antifungal	Υ	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Υ	Y-List	Υ	Υ	Y-Sch 1

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	AB	ВС	MB	NB	NL	NS	ON	PE	QC	SK
T-steroid	Y	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Y-Cat	Y-List	Y	Y	Y-Sch 1
T-glaucoma	Y	Υ	Υ	Y-Sch 1	Y-Sch 1,2	Y-Cat	Y-List	No	Υ	Υ
immunomodulators	Y	Υ	Υ	Y-Sch 1	Y-Sch 1,2	No	Y-List	Y	Y-Cat	Y-Sch 1
O-antiallergenic	Y	No	у	Y-Sch 1	Y-Sch 1,2	No	No	No	Y-Sch 2	Y-Sch 1
O-Non-Steroidal Anti-Inflammatory Drugs	Y	No	Υ	Y-Sch 1	Y-Sch 1,2	No	No	No	Y-Sch 2	Y-Sch 1
O-anti-infective	Y	No	Y-Cat	Y-Sch 1	Y-Sch 1,2	No	No	No	Y-Sch 2	Y-Sch 1
O-antibiotic	Υ		Y-Cat	Y-Sch 1	Y-Sch	N/A	No	No	Y-List	Y-Sch
0-anti-viral	Y	No	No	Y-Sch 1	Y-Sch	N/A	No	WA	Y-List	Y-Sch
O-anti-fungal	Y	No	No	Y-Sch 1	Y-Sch 1,2	Y	No	No	Y-Sch 2	Y-Sch 1
O-steroid	Y	No	No	Y-Sch 1	Y-Sch 1,2	No	No	No	Y	Y-Sch 1
O-glaucoma	Υ	Y-Cat	Y-Cat	Y-Sch 2	Y-Sch 1,2	No	No	No	Υ	Υ
Foreign Body Removal	Y	Superficial	Υ	Superficial	Υ	Υ	Superficial	Υ	Superficial	Υ
Laboratory Testing	Υ	Y	Υ	No	No	No	No	No	No	No
Ultrasound Imaging	Y	Corneal thickness	No	No	Υ	No	No	No	Corneal thickness	Corneal thickness
Dilation/irrigation	Υ	Υ	Y	Y	Y	Υ	Υ	Y	Υ	Υ
Insertion/Removal of Punctual Plugs	Y	Y	Y	Υ	Υ	Y	Y	Υ	Y	Y
Injections	No	No	No	No	No	No	No	No	No	No
YAG Capsulotomy	No	No	No	No	No	No	No	No	No	No
Laser Peripheral Iridotomy (LPI)	No	No	No	No	No	No	No	No	No	No
Selective Laser Trabeculoplasty (SLT)	No	No	No	No	No	No	No	No	No	No
Argon Laser Trabeculoplasty (ALT)	No	No	No	No	No	No	No	No	No	No
Minor surgical procedures (e.g. minor lesions removal)	No	No	No	No	No	No	No	No	No	No

# Key

Cat = Specific category of drugs

O = Oral

Sch 1 = Schedule 1 drug (requires a prescription)

Sch 2 = Schedule 2 drug (only available from a List = Specific list of agents)

T = Topicals

Y = Yes

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# APPENDIX A - PATIENT INTERACTION FEEDBACK FORM

An examiner evaluates how well you understand and address the patient's emotions and requirements in your board exam. They also assess the coherence of your interaction, verbal and non-verbal expressions, integrity and relationships, respect for professional boundaries, and adherence to mandatory reporting guidelines. Refer to Appendix B of the Blueprint.

Please offer feedback on what was effective and areas that could be enhanced.

Indicators	Went well	Could be improved
Communicates clearly		
I spoke to you clearly and concisely and used plain language.		
I used an appropriate tone of voice and body language when speaking to you.		
I wrote clearly and concisely, using plain language (if written instructions are provided)		
Uses the right style		
I adjusted our interaction based on your communication and comprehension.		
I used common medical and optometric abbreviations in written communications and medical records.		
I conveyed medical and optometric concepts to you using plain language.		
Active listening		
I showed the principles of active listening by: - giving you my undivided attention and acknowledging your message - showing that I was listening - providing feedback - deferring judgment - responding appropriately		
I responded appropriately to your body language.		
I actively listened to you throughout our interaction.		
Resolves conflict		
I showed an understanding of the principles of negotiation and conflict management.		

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Indicators	Went well	Could be improved
I recognized the implications of failure to resolve any conflicts.		
Delivers bad news effectively		
I was effective in delivering bad news.		
I communicated in an empathetic manner.		
Acts with integrity		
I focused my full attention on the patient.		
I was adhering to high moral and ethical standards.		
Fosters good relationships		
I established a good rapport with you.		
I respected your dignity and autonomy.		
I showed honesty, integrity and trustworthiness throughout our interaction.		
Maintains professional boundaries		
I kept my professional boundaries.		
You did not feel the impact of a doctor-patient power imbalance during our interaction.		
Reporting requirements		
I have shown my understanding of situations in which mandatory reporting may be required.		

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# APPENDIX B — OSCE CASE TEMPLATES

Category	Information to include in this category		
CASE INFORMATION	•		
Case Name	The condition and task of the candidate		
Case Type	Interactive		
Issue	The presenting complaint or the diagnosis of the problem		
Practice Areas	Identify the primary practice area with an asterisk		
	List other practice areas if they apply		
	Leave the practice areas in the same order (for consistency)		
Competencies Copy from the Blueprint			
	You need to put in the full wording of the competency, not just the number.		
Objective(s)	Write 2 or 3 objectives for the case that summarize what the candidate must achieve.		
Type of Encounter	New or returning patient		
Location	Where the interaction is taking place		
REFERENCES	•		
List the materials that y	ou consulted to write this case. Use standard referencing format.		
CASE SYNOPSIS			
A brief description of th	e case.		

INFORMATION FOR CANDIDATES			
Instructions to	Any assumptions that the candidate should make.		
Candidate	The setting of the interaction.		
	The patient's name, age and gender.		
	What the candidate should do (or not do) in this station.		
	There is a common statement about the time for the station.		
Equipment and Props Supplied	There are everyday items listed.		
	Add or revise if necessary.		
Summary of Patient	If some assessments have already been done, provide the relevant information.		
Examination Record			
Diagnosis	If appropriate, the diagnosis of the patient's condition.		

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# APPENDIX C - REFRACTIVE ERROR

Summary of Patient Exam Record

Patient Name			
Gender			
Age			
Race			
Occupation			
Hobbies			
Chief Complaint			
Additional History			
Ocular History			
Medical History			
Family History			
Clinical Data			
Current Spectacles	OD		
current spectacies	OS		
Unaided Visual Acuity	OD		
Official Visual Acuity	OS		
Subjective Refraction	OD		
Subjective Kerraction	OS		
Binocular Vision	Norm	al	
Colour Vision	OD		
Ishihara Plates	OS		
Tonometry	OD		
ronometry	OS		
Pupils			
Slit Lamp Examination			
<b>Fundus Examination</b>			
Diagnosis			

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# **R** - Prescriptions

Indicate the <u>most appropriate</u> prescription, and for the other three, explain why each is not.

R1						Explanations
		spy	cyl	axis	add	
	OD					
	os					
<b>R2</b>						
		sph	cyl	axis	add	
	OD					
	os					
R3						
		sph	cyl	axis	add	
	OD					
	os					
R4						
		sph	cyl	axis	add	
	OD					
	os					

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# APPENDIX D — SCORE SHEET TEMPLATE FOR OSCE PRACTICE

# CASE:

Indicator #	Checklist Item (use an indicator to inspire a case-specific measurable item)	Score
		<b>Y N</b>
		Y N
		<b>Y N</b>
		Ý (N)
		<b>Y N</b>
		<b>Y N</b>
		<b>Y N</b>
		Y (N)
		Y (N)
		Ŷ (N)
		<b>Y N</b>

Patient Interaction Rating Scale					
Empathy	1	2	3	4	(5)
Coherence	1	2	3	4	(5)
Verbal Expression	1	2	3	4	(5)
Non-Verbal Expression	1	2	3	4	(5)
Trust	1	2	3	4	(5)
Honesty and Integrity	1	2	3	4	(5)
Focus on the Patient	1	2	3	4	(5)
Respect	1	2	3	4	(5)

See Appendix B in the Blueprint for the scoring rubric.

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# APPENDIX E - USING LLM TO GENERATE PRACTICE CASES

Practicing cases and group simulations can be effective prep methods. You can create realistic cases like the exam format using tools like Copilot, ChatGPT, or Gemini, which use large language models (LLM).

Although Al-generated cases are helpful for exam preparation, LLMs rely on pattern matching rather than logical reasoning, so the outputs may need to be corrected. As optometrists, always verify Al-generated information and cross-check it with reliable sources before making any decisions or recommendations.

An exciting journal article, "Applications of ChatGPT in the diagnosis, management, education, and research of retinal diseases: a scoping review" concludes, "The issue of generating understandable outputs is particularly nuanced, often depending on how prompts are crafted and specified. Studies that have reported less understandable outputs may not have explicitly requested accessible responses, underscoring the importance of prompt engineering. Additionally, the consistent need for human supervision cannot be overstated. While AI can provide valuable support, it is crucial to ensure that the final decision-making remains in the hands of healthcare professionals."

The sections below give a sample prompt and the resulting practice case. To help you prepare, we have asked the prompt to provide more information you will receive on your exam cases.

If you develop more effective prompts than the draft prompt, please send them to <a href="mailto:exams@oebc.ca">exams@oebc.ca</a>. We will include improvements in future updates of this guide.

# GUIDELINES - HOW TO CREATE CASES

### 1. Select a Topic

- a) Choose a relevant topic for the case. Here are a few methods:
  - a. Select a topic from Appendix A Topic Matrix in the OEBC Blueprint: https://oebc.ca/resources/examblueprint/. Focus on subtopics where your response isn't automatic, as these need more attention.
  - b. Select a topic from an enabling competency in the OEBC Blueprint: https://oebc.ca/resources/examblueprint/. See Table 1 Case Selection by Prime Practice Area on page 1 for question distribution. Focus on areas requiring additional practice.
  - Identify a common condition or scenario that optometrists often encounter, such as Posterior Capsular
    Opacification or Laser Peripheral Iridotomy. This method is helpful for targeted follow-up on specific
    areas.

### 2. Varying the inputs

Adjust the prompt to introduce a different topic and alter the patient's demographics. Instead of using a topic state, say, "Draft a sample case for an optometry exam for a professional with an OD degree that necessitates using [identify competencies]. Include these elements . . ."

#### 3. Use a Sample OSCE or Written Case Prompt

Copy and paste the sample prompt into an LLM. Generate the output.

You can then ask the LLM to:

- recreate the case with specific inputs that would change your diagnosis
- create a similar case for a person half the age, opposite gender, and with various medical conditions (i.e. high blood pressure, diabetes, etc.)

The draft prompt asks six questions for each case for the written exam prompts, while only four are on the exam to give you extra practice.

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Many of the Written cases include digital media. LLMs could be better at selecting or creating realistic digital images of eyes. So, ask for a description and look up an image online.

For a study group, assign 4 or 5 topics to each member to create OSCE and written cases. Individually validate the information and then share the refined cases with your group. Score them together—a great way to get feedback.

# PROMPT FOR GENERATING A PRACTICE OSCE CASE

Tailor each sample case prompt by varying the topic, identifying tasks that can be done within 8 minutes, and noting the patient's gender, age, medical and ocular history, and setting. Print the first seven sections for the candidate practicing the case. Use the rest of the information to prepare the simulated patient and support the examiner's scoring. Review together after attempting the case.

Create a comprehensive and practical OSCE case regarding cataracts and include the following key elements:

- 1. Instructions to Candidate: Provide clear instructions on what the candidate is expected to do during the 8-minute encounter. This could include two specific tasks, e.g., Taking a detailed history from the patient, resolving the patient's chief complaint, explaining the diagnosis, explaining the treatment and management options, performing procedures
- 2. Time Limit: Indicate that the time limit for the encounter is 10 minutes, 2 minutes to read the instructions and 8 minutes to perform the tasks. This helps simulate real-life time constraints and assesses the candidate's ability to manage time effectively.
- **3. Type of Encounter**: Specify the type of encounter, such as a new patient visit, follow-up appointment, or emergency consultation. This helps the candidate understand the context and urgency of the situation.
- **4. Setting**: Describe the setting where the encounter occurs, such as a clinic, hospital, or community health center. This helps create a realistic scenario.
- **5. Patient Profile**: Include detailed information about the patient, such as name, age, gender, occupation, and chief complaint. This helps create a realistic and relatable scenario.
- 6. Case Background Information:
  - a) Ocular History: include relevant history
  - b) Medical History: include relevant history
  - c) Family Medical History: include relevant history
  - d) **Clinical Data**: Include any relevant clinical data such as Unaided Visual Acuity, Subjective Refraction, Tonometry, Pupils, Slit Lamp Examination, Fundas Examination, and OCT imaging results.
- **7. Equipment and Props**: List any equipment or props that will be provided or that the candidate is expected to use during the encounter. This ensures that the candidate is prepared and knows what resources are available.
- **8. Objective(s)**: Clearly state the objectives of the case. What specific skills or competencies are being assessed? For example, diagnosing a condition, formulating a treatment plan, or demonstrating practical communication skills. Identify the enabling competencies required for the case.
- **9.** Case Synopsis: Provide an overview of the case
- **10. Score Sheet**: Provide a Checklist showing 12-15 indicators of successfully performing a competency in a table with five columns: Indicator ## Yes ## No ## competency ## Notes. In the Yes column, show 🕥 centred in each row. Under No, show 🕦 centred in each row.

Reference the relevant enabling competency from <a href="https://oebc.ca/wp-content/uploads/2022/04/OEBC-Exam-Blueprint-2022.pdf">https://oebc.ca/wp-content/uploads/2022/04/OEBC-Exam-Blueprint-2022.pdf</a> corresponding to the knowledge or skills required to select the correct answer.

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- Ensure that for **every competency**, you provide:
  - Competency Code (e.g., 1.4.2): Copy the exact, verbatim text from the OEBC Blueprint to describe the competency required for the correct answer.
  - Competency Lookup: If the competency is not known, search the OEBC Exam Blueprint for relevant terms (e.g., "functional impact on daily activities" or "low vision aids") to find the most appropriate enabling competency. The indicators below an enabling competency have a letter code. The relevant term may be used as an indicator. Each enabling competency or related indicator should directly match the skill required for the case.
- Ensure the same process is followed for all six answers—i.e., the code and verbatim text must be consistently applied across all answers.
  - Place a Patient Interaction Scale table to the right of the Checklist: 3 columns and nine rows. The heading is Patient Interaction Item ## Score Per Rubric ### Notes The first column shows one of the following items per row: Empathy, Coherence, Non-verbal, Verbal, Trust, Honesty & Integrity, Focus on the Patient, Respect. The second column repeats ① ② ③ ④ ⑤ in each row.
- **11. Patient Questions:** Provide the six most likely questions an informed patient presenting these conditions would ask their optometrist, along with an appropriate answer.
- **12. Optometrist Questions:** Provide six questions the optometrist should ask a patient to help them confirm their diagnosis and explain why these questions may be relevant.
- **13. Patient Education**: Identify the areas that the Optometrist should educate the patient on so that the patient becomes a partner in their treatment.
- **14. Additional Information**: Provide the correct diagnosis and a detailed management plan, including necessary treatments, follow-up, risks, patient education, and possible ethical issues.
- **15. References**: Provide any relevant references or resources the candidate can use to prepare for the encounter. This could include textbooks, articles, or guidelines.

Note: The practice case that follows is the exact output from CoPilot based on the preceding prompt. It serves as an example of the case generated by the AI. Since large language models are constantly evolving, the content and formatting of the case may differ depending on the specific model used and the time of the entry. It is your responsibility to edit and verify the case for accuracy.

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# AI-GENERATED PRACTICE OSCE CASE — CATARACTS:

# **Instructions to Candidate**

You have 2 minutes to read the instructions and 8 minutes to perform the tasks. During the encounter, you are expected to:

- 1. Take a detailed history from the patient, focusing on their ocular and medical history.
- 2. Explain the diagnosis of cataracts and discuss the treatment and management options with the patient.

# **Time Limit**

- Total time: 10 minutes
  - 2 minutes to read instructions
  - 8 minutes to perform tasks

# **Type of Encounter**

New patient visit

# Setting

· Community health center

# **Patient Profile**

• Name: John Smith

Age: 68Gender: Male

• Occupation: Retired teacher

Chief Complaint: Gradual worsening of vision over the past year

# **Case Background Information**

- Ocular History:
  - o Gradual decrease in vision, more noticeable in the right eye
  - Difficulty reading and recognizing faces
  - o Increased glare and halos around lights, especially at night
- Medical History:
  - o Hypertension, well-controlled with medication
  - Type 2 diabetes, diagnosed 10 years ago, managed with diet and oral hypoglycemics
- Family Medical History:
  - o Father had cataracts, mother had glaucoma
- Clinical Data:
  - Unaided Visual Acuity: Right eye 20/60, Left eye 20/40
  - Subjective Refraction: Right eye -1.50 DS, Left eye -1.00 DS
  - o Tonometry: Right eye 15 mmHg, Left eye 14 mmHg
  - o Pupils: Equal and reactive to light, with no afferent pupillary defect

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- o Slit Lamp Examination: Nuclear sclerosis in both lenses, more pronounced in the right eye
- o Fundus Examination: Mild non-proliferative diabetic retinopathy, no macular edema
- o OCT Imaging: Normal macula, no signs of macular degeneration

# **Equipment and Props**

- Snellen chart
- Slit lamp
- Tonometer
- OCT machine
- Patient medical records

# **Objectives**

- Diagnose cataracts based on patient history and clinical findings
- Formulate a treatment plan, including discussing surgical options and postoperative care
- Demonstrate practical communication skills, including empathy and patient education

# **Case Synopsis**

John Smith, a 68-year-old retired teacher, presents with a gradual worsening of vision over the past year. He has difficulty reading and recognizing faces and experiences increased glare and halos around lights. His medical history includes hypertension and type 2 diabetes. Clinical examination reveals nuclear sclerosis in both lenses, more pronounced in the right eye, and mild non-proliferative diabetic retinopathy.

### **Score Sheet**

Indicator	Yes No Competency	Notes
Elicits chief complaint	<b>Y №</b> 1.1.1	
Takes comprehensive ocular history	★ ★ 1.1.1	
Takes comprehensive medical history	★ ② 1.1.1	
Inquires about family history	<b>★ ※ ※ ※ ※ * * * * * * * * * *</b>	
Performs visual acuity test	★ ② 1.2.1	
Performs slit lamp examination	<b>★ ※ ※ ※ ※ * * * * * * * * * *</b>	
Discusses diagnosis of cataracts	<b>★ ★ ★ ★ ★ ★ ★ ★ ★ ★</b>	
Explains treatment options		
Addresses patient concerns	★ ② ② 2.1.1	
Demonstrates empathy	<b>⑨ №</b> 2.1.2	
Provides clear instructions for follow-up	o <b>(</b> ) <b>(</b> ) 1.7.1	
Uses appropriate medical terminology	<b>⑨ №</b> 2.1.3	

# **Patient Interaction Scale**

Patient Interaction I	Notes	
Empathy	1 2 3 4 5	

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Patient Interaction Item Score Per Rubric

 Coherence
 1 2 3 4 5

 Non-verbal
 1 2 3 4 5

 Verbal
 1 2 3 4 5

 Trust
 1 2 3 4 5

 Honesty & Integrity
 1 2 3 4 5

 Focus on the Patient
 1 2 3 4 5

 Respect
 1 2 3 4 5

# **Patient Questions**

- 1. What are cataracts?
  - Cataracts are a clouding of the lens in the eye, leading to a decrease in vision.
- 2. What causes cataracts?
  - Cataracts can be caused by aging, diabetes, smoking, prolonged exposure to sunlight, and other factors.

Notes

- 3. How are cataracts treated?
  - The primary treatment for cataracts is surgical removal of the cloudy lens, replaced with an artificial lens.
- 4. Is cataract surgery safe?
  - Cataract surgery is generally safe and effective, with a high success rate.
- 5. How long is the recovery after cataract surgery?
  - Recovery typically takes a few weeks, with most patients experiencing significant improvement in vision within a few days.
- 6. Will I need glasses after cataract surgery?
  - Many patients still need glasses for reading or distance vision after surgery, depending on the type of lens implanted.

# **Optometrist Questions**

- 1. When did you first notice the decrease in your vision?
  - To determine the onset and progression of the condition.
- 2. Do you experience glare or halos around lights?
  - To assess the impact of cataracts on night vision.
- 3. Have you had any previous eye surgeries or treatments?
  - o To understand the patient's ocular history and any potential complications.
- 4. Do you have any other medical conditions, such as diabetes or hypertension?
  - o To identify systemic conditions that may affect ocular health.
- 5. Are you currently taking any medications?
  - To check for medications that may have ocular side effects.
- 6. Do you have a family history of eye diseases?
  - To assess genetic predisposition to ocular conditions.

# **Patient Education**

- Explain what cataracts are and how they affect vision.
- Discuss the importance of regular eye exams, especially for patients with diabetes.

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- Educate the patient on the benefits and risks of cataract surgery.
- Provide information on postoperative care and what to expect during recovery.
- Emphasize the importance of managing systemic conditions like diabetes and hypertension to maintain ocular health.

### **Additional Information**

- **Diagnosis**: Cataracts with mild non-proliferative diabetic retinopathy
- Management Plan:
  - Schedule cataract surgery for the right eye, followed by the left eye if needed.
  - o Preoperative assessment and counseling.
  - o Postoperative follow-up to monitor healing and visual acuity.
  - Manage diabetes and hypertension to prevent further ocular complications.
  - o Educate the patient on lifestyle modifications to support overall eye health.

# References

- Optometry textbooks and articles on cataracts and diabetic retinopathy.
- OEBC Exam Blueprint 2022[1].

[1]: OEBC Exam Blueprint 2022

# PROMPT FOR GENERATING A PRACTICE WRITTEN EXAM CASE

Design a comprehensive optometry case study for an individual specializing in Low Vision (OD degree). The case should be structured to simulate a clinical exam scenario and must include the following elements:

# 1. Demographics:

• Provide details for the patient, including name, age, gender, and occupation.

### 2. Chief Complaint:

Describe the patient's primary complaint or reason for visiting.

# 3. Ocular History:

• Include relevant ocular history, such as previous diagnoses, treatments, surgeries, and other significant eyerelated events.

### 4. Medical History:

• Provide relevant systemic medical history, including medications, past surgeries, family history, or chronic conditions affecting vision (e.g., diabetes, hypertension).

### 5. Clinical Data:

Include detailed clinical findings such as:

- Unaided Visual Acuity (VA).
- Subjective Refraction results.
- Tonometry readings (intraocular pressure).
- Pupils (reactions, defects).

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- Slit Lamp Examination findings.
- Fundus Examination results (e.g., optic nerve, macula).
- Optical Coherence Tomography (OCT) results.

# 6. Imaging:

• Describe in detail what each relevant clinical image (e.g., fundus photography, OCT scans) should show. Include how each image is obtained and what abnormalities or features are present.

# 7. Case Questions:

• Formulate **six** multiple-choice questions (with four answer options each) related to the case scenario. The questions should assess understanding of the diagnosis, treatments, and clinical reasoning.

# 8. Diagnosis and Management Plan:

- Provide the correct diagnosis, along with a detailed management plan. The plan should include:
  - Necessary treatments (e.g., medications, low vision aids).
  - Follow-up schedule.
  - Risks and complications.
  - Patient education.
  - Possible ethical issues (e.g., managing patient expectations, discussing prognosis).

# 9. Correct Answers with Competency Explanations

# For each of the six case-related questions:

- 1. **Identify the correct answer**.
- 2. **Provide a detailed explanation** of why this answer is correct based on clinical reasoning.
- 3. **Reference the relevant enabling competency** from <a href="https://oebc.ca/wp-content/uploads/2022/04/OEBC-Exam-Blueprint-2022.pdf">https://oebc.ca/wp-content/uploads/2022/04/OEBC-Exam-Blueprint-2022.pdf</a> corresponding to the knowledge or skills required to select the correct answer.
  - Ensure that for **every competency**, you provide:
    - Competency Code (e.g., 1.4.2): Copy the exact, verbatim text from the OEBC
       Blueprint to describe the competency required for the correct answer.
    - Competency Lookup: If the competency is not known, search the OEBC Exam Blueprint for relevant terms (e.g., "functional impact on daily activities" or "low vision aids") to find the most appropriate enabling competency. The indicators below an enabling competency have a letter code. The relevant term may be used as an indicator. Each enabling competency or related indicator should directly match the skill required for the case.
  - Ensure the same process is followed for all six answers—i.e., both the code and verbatim text must be consistently applied across all answers.

# 10. Patient-Informed Questions

Provide six likely questions an informed patient might ask their optometrist based on the given diagnosis. For each question, provide a clear, patient-friendly answer.

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# 11. Diagnostic Questions

List **six questions** you would ask the patient to help confirm the diagnosis and explain why these questions are relevant to the case scenario.

Note: The practice case that follows is the exact output from CoPilot based on the preceding prompt. It serves as an example of the case generated by the Al. Since large language models are constantly evolving, the content and formatting of the case may differ depending on the specific model used and the time of the entry. It is your responsibility to edit and verify the case for accuracy.

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# AI-GENERATED PRACTICE WRITTEN EXAM CASE — LOW VISION:

# **Demographics**

Patient Name: John Doe

Age: 65Gender: Male

• Occupation: Retired Engineer

# **Chief Complaint**

John Doe presents with a primary complaint of progressively worsening vision over the past year, making it difficult for him to read, recognize faces, and perform daily activities.

# **Ocular History**

- **Previous Diagnoses:** Age-related macular degeneration (AMD) was diagnosed 5 years ago.
- Treatments: Intravitreal injections of anti-VEGF (vascular endothelial growth factor) for AMD.
- Surgeries: Cataract surgery in both eyes 10 years ago.
- Other Significant Events: None.

# **Medical History**

- Systemic Medical History:
  - o Diabetes Mellitus Type 2 for 15 years, managed with oral hypoglycemic agents.
  - Hypertension for 10 years, managed with antihypertensive medications.
- Medications: Metformin, Amlodipine, Lisinopril.
- Past Surgeries: Appendectomy 20 years ago.
- Family History: Father had glaucoma, mother had AMD.
- Chronic Conditions Affecting Vision: Diabetes and hypertension.

## **Clinical Data**

- Unaided Visual Acuity (VA):
  - o Right Eye (OD): 20/200
  - o Left Eye (OS): 20/400
- Subjective Refraction Results:
  - o OD: +1.00 -1.25 x 90
  - o OS: +1.50 -1.50 x 85
- Tonometry Readings (Intraocular Pressure):
  - o OD: 15 mmHg
  - o OS: 16 mmHq
- Pupils:
  - Reactions: Normal
  - Defects: None
- Slit Lamp Examination Findings:
  - o Anterior segment: Clear cornea, well-centred intraocular lenses (IOLs), quiet anterior chamber.
- Fundus Examination Results:
  - o Optic Nerve: Normal cup-to-disc ratio (0.3)

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- o Macula: Drusen and geographic atrophy in both eyes.
- Optical Coherence Tomography (OCT) Results:
  - o OD: Thinning of the retinal layers with areas of atrophy.
  - o OS: Similar findings with more extensive atrophy.

# **Imaging**

- Fundus Photography: Shows drusen and areas of geographic atrophy in the macula of both eyes.
- **OCT Scans:** Detailed images showing thinning of the retinal layers and areas of atrophy. These images are obtained using a non-invasive imaging technique that provides cross-sectional views of the retina.

# **Case Questions**

- 1. What is the most likely diagnosis for John Doe's visual impairment?
  - o A. Glaucoma
  - B. Diabetic Retinopathy
  - o C. Age-related Macular Degeneration (AMD)
  - o D. Cataract
- 2. Which treatment is most appropriate for managing John Doe's condition?
  - o A. Laser photocoagulation
  - B. Intravitreal anti-VEGF injections
  - o C. Vitrectomy
  - o D. Oral steroids
- 3. What is the primary goal of low vision rehabilitation for John Doe?
  - A. To cure his AMD
  - o B. To improve his visual acuity to 20/20
  - o C. To enhance his remaining vision and improve his quality of life
  - o D. To prepare him for potential blindness
- 4. Which low vision aid would be most beneficial for John Doe?
  - A. Magnifying glasses
  - B. Contact lenses
  - C. Reading glasses
  - o D. Sunglasses
- 5. What is a potential complication of intravitreal anti-VEGF injections?
  - A. Retinal detachment
  - B. Cataract formation
  - o C. Increased intraocular pressure
  - D. Corneal abrasion
- 6. How often should John Doe follow up with his optometrist to monitor his condition?
  - o A. Every month
  - o B. Every 3 months
  - o C. Every 6 months
  - o D. Annually

# **Diagnosis and Management Plan**

- **Diagnosis:** Age-related Macular Degeneration (AMD)
- Management Plan:

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- o **Treatments:** Continue intravitreal anti-VEGF injections as needed.
- Low Vision Aids: Provide magnifying glasses and electronic reading aids.
- o **Follow-up Schedule:** Every 3 months to monitor progression and treatment efficacy.
- Risks and Complications: Discuss potential risks of injections, including retinal detachment and increased intraocular pressure.
- Patient Education: Educate John on controlling diabetes and hypertension to prevent further vision loss.
- Ethical Issues: Manage patient expectations regarding the prognosis and discuss the potential for further vision loss.

# **Correct Answers with Competency Explanations**

- 1. **Correct Answer:** C. Age-related Macular Degeneration (AMD)
  - Explanation: The clinical findings of drusen and geographic atrophy in the macula are characteristic of AMD.
  - Competency Code: 1.5.1 "Forms a final diagnosis"[1].
- 2. **Correct Answer:** B. Intravitreal anti-VEGF injections
  - Explanation: Anti-VEGF injections are the standard treatment for wet AMD to reduce neovascularization and prevent further vision loss.
  - o **Competency Code:** 1.6.1 "Form a treatment plan"[1].
- 3. Correct Answer: C. To enhance his remaining vision and improve his quality of life
  - Explanation: The goal of low vision rehabilitation is to maximize the use of remaining vision and improve the patient's ability to perform daily activities.
  - Competency Code: 1.8.3 "Educate the patient on the use of spectacles and the importance of follow-up"[1].
- 4. **Correct Answer:** A. Magnifying glasses
  - **Explanation:** Magnifying glasses can help John read and perform close-up tasks, which are challenging due to his low vision.
  - o **Competency Code:** 1.8.1 "Apply the patient's refraction, visual requirements and other findings to determine the spectacle and/or contact lens prescription and lens form/type"[1].
- 5. **Correct Answer:** A. Retinal detachment
  - o **Explanation:** Retinal detachment is a known complication of intravitreal injections.
  - Competency Code: 1.11.1 "Prescribe a pharmaceutical prescription for the treatment of ocular conditions or diagnosed diseases"[1].
- 6. Correct Answer: B. Every 3 months
  - **Explanation:** Regular follow-up every 3 months is necessary to monitor the progression of AMD and the effectiveness of treatment.
  - Competency Code: 1.11.7 "Educate the patient on the need for, and importance of, frequency of follow-up on certain conditions"[1].

# **Patient-Informed Questions**

- 1. **Question:** Will my vision improve with the treatment?
  - **Answer:** The treatment aims to prevent further vision loss and stabilize your condition but may not significantly improve your vision.
- 2. **Question:** Are there any side effects of the injections?
  - Answer: Possible side effects include eye pain, increased intraocular pressure, and, in rare cases, retinal detachment.

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- 3. **Question:** How can I manage my daily activities with low vision?
  - Answer: We can provide you with low vision aids such as magnifying glasses and electronic reading devices to help you with daily tasks.
- 4. **Question:** Can my condition lead to complete blindness?
  - Answer: While AMD can cause significant vision loss, complete blindness is rare. Regular monitoring and treatment can help manage the condition.
- 5. **Question:** What can I do to prevent further vision loss?
  - Answer: Controlling your diabetes and hypertension, eating a healthy diet, and avoiding smoking can help prevent further vision loss.
- 6. **Question:** How often should I visit the optometrist?
  - Answer: You should visit the optometrist every 3 months to monitor your condition and adjust the treatment plan as needed.

# **Diagnostic Questions**

- 1. **Question:** When did you first notice the vision changes?
  - **Relevance:** Helps determine the onset and progression of the condition.
- 2. **Question:** Do you have any difficulty seeing at night?
  - Relevance: Night vision difficulties can be associated with AMD.
- 3. **Question:** Have you noticed any changes in your central vision, such as distortion or blurriness?
  - Relevance: Central vision changes are common in AMD.
- 4. Question: Do you have any family history of eye diseases?
  - o **Relevance:** Family history can provide clues about genetic predisposition to AMD.
- 5. Question: Are you experiencing any new symptoms, such as flashes of light or floaters?
  - o Relevance: New symptoms could indicate complications like retinal detachment.
- 6. **Question:** How well are you managing your diabetes and hypertension?
  - Relevance: Poorly controlled systemic conditions can exacerbate AMD.

# References

[1]