

CANADAPREP . CLINICAL REFERENCE

NAC OSCE

A Comprehensive Review

SECOND EDITION

2026

GUIDELINE-ALIGNED

CANADAPREP PRESS

FOR IMGS & CANADIAN GRADUATES

2nd Edition

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FEEDBACK AND ERRATA

Please visit www.nacoscereview.com

PREFACE FROM THE EDITORS

The NAC OSCE represents a pivotal step in your journey toward practicing medicine in Canada, yet unlike other licensing examinations, it has lacked a dedicated, thorough preparation guide until now. Too many talented IMGs have navigated this examination without adequate resources, relying instead on fragmented materials and secondhand advice. CanadaPrep recognized there had to be a better way.

Drawing from multiple authoritative sources and the collective experience of successful examination candidates, CanadaPrep has developed this comprehensive review to cover NAC OSCE stations. This book provides a structured framework that complements your existing clinical skills and therapeutic knowledge, ensuring you approach each station with confidence and competence.

Written by medical graduates who have successfully navigated the NAC OSCE process, this guide offers practical, examination-focused content designed to give you a competitive edge. CanadaPrep has distilled complex clinical scenarios into actionable approaches, incorporated high-yield examination strategies, and organized the material to maximize your preparation efficiency.

This book is more than just a study aid. It represents CanadaPrep's commitment to supporting IMGs as they work toward their goal of practicing medicine in Canada. CanadaPrep is honored to accompany you on this journey.

This book is dedicated to all International Medical Graduates preparing for medical licensing examinations in Canada. Your perseverance inspires us.

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ABBREVIATIONS
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CHAPTER 1: INTRODUCTION

PURPOSE, AUDIENCE & HOW TO USE THIS BOOK

WHY THIS BOOK EXISTS

The National Assessment Collaboration Objective Structured Clinical Examination (NAC OSCE) is the gateway clinical assessment for International Medical Graduates (IMGs) and Canadian graduates seeking entry into Canadian residency programs. Success requires more than medical knowledge; it demands clinical reasoning, patient-centred communication, ethical decision-making, and adherence to Canadian practice standards. This book bridges the gap between textbook knowledge and exam-ready performance by providing structured, guideline-aligned stations that mirror the actual NAC OSCE blueprint.

WHO THIS BOOK IS FOR

- **IMGs** preparing for the NAC OSCE as part of the Canadian residency application pathway
- **Canadian medical graduates** seeking structured OSCE practice and framework reinforcement
- **Clinical skills educators & OSCE coaches** requiring standardized, guideline-vetted station templates
- **Residents in transition to practice** needing rapid refreshers on Canadian acute care, ethics, and population health standards

CORE DESIGN PRINCIPLES

Principle	Implementation
Guideline-Aligned	Every station integrates 2024–2025 Canadian recommendations (CFPC, CCS, CAEP, CUA, Diabetes Canada, Choosing Wisely Canada)
Exam-Focused Structure	Uniform station template: Overview → Candidate Instructions → Clinical Approach → History/Exam Framework → Differential → Investigations → Management → Counselling → Pearls → Common Mistakes
Communication & Ethics Integrated	Each station embeds Calgary-Cambridge, SPIKES, capacity assessment, shared decision-making, and cultural safety principles
High-Value Care Emphasis	Explicit Choosing Wisely Canada guidance to avoid low-value imaging, labs, and interventions
Active Learning Ready	Designed for spaced repetition, peer simulation, self-scoring, and targeted remediation

HOW TO USE THIS BOOK EFFECTIVELY

1. **Simulate Exam Conditions:** Time yourself strictly (10 minutes per station). Use a timer, read candidate instructions once, and perform without notes.
2. **Self-Score Using Checklists:** Compare your performance against the embedded examiner criteria. Note gaps in history, exam, safety-netting, or guideline alignment.
3. **Drill Communication Frameworks:** Practice SPIKES, NURSE statements, and shared decision-making aloud. Record yourself to identify pacing, jargon, or missed empathy cues.
4. **Map to MCC Objectives:** Cross-reference each station with the MCC Clinical Objectives (Medical Expert, Communicator, Professional, etc.) to ensure blueprint coverage.
5. **Flag & Verify:** When Warning VERIFY appears, consult the most recent provincial formulary, institutional protocol, or guideline update before clinical or exam application.

A NOTE ON CLINICAL VERIFICATION & EVOLVING STANDARDS

Canadian guidelines are updated regularly. Provincial formularies, scope-of-practice regulations, and imaging pathways may vary. This book reflects national consensus as of 2024–2025. Always verify dosing, screening intervals, and mandatory reporting requirements against:

- College of Family Physicians of Canada (CFPC) Clinical Practice Guidelines
- Canadian Cardiovascular Society (CCS) Guidelines
- Choosing Wisely Canada Recommendations
- Public Health Agency of Canada (PHAC) & Provincial Public Health Directives
- Medical Council of Canada (MCC) NAC OSCE Blueprint

CHAPTER 2: THE NAC OSCE EXAM: STRUCTURE, LOGISTICS & RECENT UPDATES

WHAT CANDIDATES MUST KNOW BEFORE TEST DAY

WHAT IS THE NAC OSCE?

The NAC OSCE is a nationally standardized clinical skills examination administered by the Medical Council of Canada (MCC). It assesses clinical competence across multiple domains using standardized patient (SP) encounters, examiner checklists, and global rating scales. The exam is criterion-referenced, meaning candidates are evaluated against a predefined standard of safe, entry-level practice, not against each other.

EXAM FORMAT & STATION DISTRIBUTION

Component	Details
Total Stations	12 stations total: 10 scored, 2 pilot; plus 2-3 wait stations.
Time per Station	11 minutes; at the 3-minute mark, the PE may ask 1 or more oral questions.
Station Types	History Taking, Physical Examination, Acute Management, Counselling/Communication, Ethics/Professionalism, Population Health/Prevention
Setting	In-person clinical skills centre with standardized patients, examiners, and simulated clinical environments
Language	English or French (candidate selects during registration; all materials provided accordingly)

Warning **VERIFY**: Exact station count and rest station allocation are confirmed by MCC for each exam administration. Review the official MCC NAC OSCE Candidate Guide prior to your exam date.

SCORING & STANDARD SETTING

Scoring Component	Description
Checklist Items	Binary (performed/not performed) or weighted actions based on clinical priority
Global Rating Scales (GRS)	Examiner-rated domains: Data Gathering, Clinical Reasoning, Communication, Professionalism, Organization, Safety
Passing Standard	Determined via Angoff method (panel of Canadian clinicians sets expected performance for a minimally competent candidate)
Result Reporting	Pass/Fail with performance feedback across domains (not numerical scores)

RECENT EVOLUTION (2024–2025 UPDATES)

- **Increased Emphasis on Communication & Ethics:** Stations now routinely integrate capacity assessment, truth-telling, advance care planning, and cultural safety.
- **Population Health Integration:** Mandatory reporting, Indigenous health considerations, health equity, and social determinants of health are explicitly tested.
- **High-Value Care Focus:** Examiners penalize routine low-value investigations (e.g., unnecessary imaging for uncomplicated low back pain, routine tox screens).
- **Standardized Patient Realism:** SPs are trained to present with nuanced emotional responses, health literacy barriers, and complex social contexts.

- **Virtual/Hybrid Preparedness:** While currently in-person, candidates are expected to demonstrate telehealth-ready communication (clear structure, safety-netting, remote assessment limitations).

TEST DAY LOGISTICS & PREPARATION STRATEGY

Phase	Action Items
4–8 Weeks Before	Complete timed station practice; drill frameworks; record communication; review guidelines
1 Week Before	Simulate full exam circuit (12 stations x 11min); review common mistakes; optimize sleep/nutrition
Test Day	Arrive early with ID; use transition minute to reset; read instructions carefully; pace history/exam; safety-net every station
Post-Exam	Request feedback if available; map performance gaps to targeted station review

COMMON PITFALLS & HOW TO AVOID THEM

Pitfall	Consequence	Mitigation Strategy
Rushing through history to save time	Misses red flags, damages rapport	Use structured mnemonics; prioritize chief complaint + 2 key domains
Over-explaining or using jargon	Confuses SPs, lowers communication GRS	Use plain language; teach-back; check understanding
Skipping safety-netting	Fails clinical safety checklist	End every station with clear return criteria & follow-up plan
Ignoring psychosocial context	Lowers population health/ethics score	Screen for stressors, literacy, cultural beliefs, support systems
Ordering routine investigations	Violates Choosing Wisely; wastes time	Justify every test; use risk-stratified algorithms

CHAPTER 3: CLINICAL FRAMEWORKS & CANADIAN GUIDELINE INTEGRATION

HOW THIS BOOK ALIGNS WITH MCC OBJECTIVES & NATIONAL STANDARDS

THE CANADIAN CLINICAL PRACTICE FRAMEWORK

Canadian medical education is anchored in the **CanMEDS 2015** roles and the **MCC Clinical Objectives**. Every NAC OSCE station assesses competence across these domains:

CanMEDS Role	NAC OSCE Application
Medical Expert	Integrates clinical knowledge, diagnostic reasoning, and evidence-based management
Communicator	Establishes rapport, elicits patient perspective, explains clearly, confirms understanding
Collaborator	Coordinates care, delegates appropriately, engages multidisciplinary teams
Leader	Prioritizes safely, manages time, advocates for resources, navigates system barriers
Health Advocate	Identifies social determinants, addresses health inequities, promotes prevention
Scholar	Applies guidelines, recognizes knowledge gaps, uses evidence appropriately
Professional	Maintains boundaries, demonstrates integrity, practices ethical decision-making

THE CLINICAL REASONING ENGINE (STEPWISE APPROACH)

Every station in this book follows a reproducible clinical pathway aligned with Canadian practice standards:

- 1. Symptom/Complaint Identification** → Chief concern + duration + severity
- 2. Focused History** → Red flags, risk factors, psychosocial context, medication review
- 3. Targeted Examination** → Vital signs, system-specific exam, special tests, neurovascular screen
- 4. Differential Diagnosis** → Life-threatening → Common → Alternative; structured by mechanism
- 5. Risk-Stratified Investigations** → First-line → Conditional → Deferred; Choosing Wisely aligned
- 6. Evidence-Based Management** → Immediate → Short-term → Long-term; referral criteria clear
- 7. Safety-Netting & Follow-Up** → Return precautions, monitoring plan, patient education

COMMUNICATION & COUNSELLING FRAMEWORKS

Framework	Application in NAC OSCE
Calgary-Cambridge Guide	Structure encounters, build relationship, gather information, provide structure, close session
SPIKES Protocol	Deliver bad news, discuss serious diagnoses, manage family requests for nondisclosure
NURSE Statements	Empathy: Name, Understand, Respect, Support, Explore emotions
Teach-Back Method	Confirm comprehension: "Can you explain back to me how you'll take this medication?"
Shared Decision-Making	Present options, elicit values, discuss risks/benefits, respect autonomy, document choice

MEDICAL ETHICS & DECISION-MAKING IN CANADA

Canadian clinical ethics are guided by the **Canadian Medical Association Code of Ethics & Professionalism** and provincial college standards. Core principles tested:

Principle	Exam Application
Autonomy	Respect competent refusals, obtain informed consent, honor advance directives
Beneficence	Act in patient's best interest, provide evidence-based care, prevent harm
Non-Maleficence	Avoid low-value care, prevent iatrogenic harm, de-escalate unnecessary interventions
Justice	Equitable access, culturally safe care, anti-racism, address social determinants
Confidentiality Limits	Mandatory reporting (child abuse, STIs, communicable diseases), duty to warn
Capacity Assessment	Decision-specific evaluation: Understand, Appreciate, Reason, Communicate choice

POPULATION HEALTH, EQUITY & CULTURAL SAFETY

The NAC OSCE explicitly tests population health competence aligned with the **Truth and Reconciliation Commission Calls to Action** and **Canadian Public Health Standards**:

Domain	Key Expectations
Social Determinants of Health	Screen for food/housing insecurity, transportation barriers, financial stress
Indigenous Cultural Safety	Acknowledge historical trauma, avoid stereotypes, partner with Indigenous-led services, use trauma-informed communication
Health Literacy	Use plain language, visual aids, avoid jargon, confirm understanding
Anti-Racism & Equity	Recognize systemic barriers, advocate for equitable care, address implicit bias
Mandatory Reporting	Know provincial thresholds for child protection, domestic violence, infectious diseases

CHOOSING WISELY CANADA & HIGH-VALUE CARE

Choosing Wisely Canada provides clinician-patient dialogues to reduce low-value care. This book integrates its recommendations explicitly:

Common Low-Value Practice	Canadian Guideline Alternative
Routine imaging for uncomplicated low back pain	Clinical diagnosis; image only with red flags or failed conservative care
Daily chest X-rays for postoperative fever	Target testing based on symptoms; remove unnecessary devices
Routine urine tox screens for altered mental status	Targeted testing based on clinical suspicion; empiric treatment first
Nasogastric lavage for GI bleeding	Unnecessary; delays endoscopy, low diagnostic yield
CT pan-scan for low-risk trauma	Use Canadian C-Spine Rule, Ottawa Knee/Ankle Rules; image selectively

HOW GUIDELINES ARE INTEGRATED INTO THIS BOOK

Guideline Source	Integration Method
CFPC Clinical Practice Guidelines	Primary care management, preventive care, chronic disease, mental health
Canadian Cardiovascular Society (CCS)	ACS, heart failure, arrhythmias, peripheral arterial disease, lipid management
CAEP & Canadian Resuscitation Council	Emergency algorithms, cardiac arrest, trauma, sepsis, anaphylaxis
Canadian Urological Association (CUA)	BPH, hematuria, urolithiasis, prostate cancer screening
Diabetes Canada	Glycemic targets, diabetic foot screening, cardiovascular risk reduction
Choosing Wisely Canada	Explicit callouts for de-implementation of low-value tests/interventions
Provincial Public Health	Mandatory reporting, STI management, immunization schedules, occupational health

Disclaimer: Educational resource only. Clinical verification with current Canadian guidelines required. Warning VERIFY all drug doses, screening intervals, reporting requirements, and referral criteria against College of Family Physicians of Canada, Canadian Cardiovascular Society, Canadian Association of Emergency Physicians, Canadian Medical Association, and provincial regulatory colleges before clinical application.

Internal Medicine

"The good physician treats the disease; the great physician treats the patient who has the disease."

WILLIAM OSLER

SECTION CASE MAP

01 CHEST PAIN	9	09 DIZZINESS / VERTIGO	53
02 HYPERTENSION	15	10 FATIGUE / THYROID DISEASE	59
03 DYSPNEA / SHORTNESS OF BREATH	21	11 PALPITATIONS	64
04 DIABETES: HYPERGLYCEMIA / HYPOGLYCEMIA	26	12 SYNCOPE / PRE-SYNCOPE	70
05 ANEMIA	30	13 RENAL FAILURE: AKI AND CKD	77
06 ABNORMAL LIVER FUNCTION / JAUNDICE	36	14 EDEMA	83
07 COPD	42	15 COUGH	90
08 ASTHMA	48		

STATION 1

HX	PX	MGMT	ETHICS
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CHEST PAIN

NAC OSCE STATION — INTERNAL MEDICINE

STATION OVERVIEW

Domain	Details
Station Type	History Taking + Counselling
Time Allowed	10 minutes
Setting	Emergency Department / Outpatient Clinic
Difficulty	★★★★☆ (High Yield — Tier 1)

“ **Why This Station Matters**

Chest pain is the single most tested presentation on the NAC OSCE. It demands rapid, systematic thinking because the differential spans immediately life-threatening emergencies (STEMI, aortic dissection, tension pneumothorax, massive PE) to benign causes (GERD, musculoskeletal). The examiner is watching for your ability to prioritize danger, not just recite questions.

CANDIDATE INSTRUCTIONS

“ Mr. James Harrington, a 58-year-old male, has presented to the Emergency Department with a 45-minute history of chest pain. His vitals are currently stable. Please take a focused history, establish your differential diagnosis, and outline your initial investigations and management plan. The examiner will ask you questions at the end.

CLINICAL APPROACH — BEFORE YOU KNOCK

Take 30 seconds to organize your mind around three questions:

- 1. Is this immediately life-threatening?** (STEMI, aortic dissection, tension pneumothorax, massive PE, cardiac tamponade)
- 2. What is the most likely diagnosis given the demographics?** (58-year-old male → CAD is your prior)
- 3. What will clinch or exclude the dangerous diagnoses?** (Character and radiation of pain, associated symptoms, risk factors)

"CAN'T MISS SIX" FOR CHEST PAIN

Diagnosis	Key Distinguishing Feature
Acute Coronary Syndrome (ACS)	Crushing/pressure, radiation to jaw/left arm, diaphoresis, nausea
Aortic Dissection	Tearing/ripping pain radiating to the back, BP differential between arms
Pulmonary Embolism	Pleuritic pain, dyspnea, risk factors (immobility, DVT, malignancy)
Tension Pneumothorax	Sudden onset, unilateral, deviated trachea, absent breath sounds
Pericarditis	Sharp, positional (worse supine, better leaning forward), friction rub
Cardiac Tamponade	Beck's triad: hypotension, JVD, muffled heart sounds