



# STUDY SMARTER: A STUDY GUIDE FOR THE MCCQE

Filipe Nadir Caparica Santos  
MD, PhD, MScCH(HPTE), FRCPC

In collaboration with the  
Medical Council of Canada



## PREFACE

When I first came to Canada in 2017, I had already completed my medical degree, a residency in anesthesiology, and a PhD in pharmacology in Brazil. Despite years of training, I quickly realized that travelling the path to independent licensure in Canada would require much more than credentials. It would demand persistence, adaptation, and clarity of purpose.

Like many internationally trained physicians (ITPs), I was told that I was unlikely to obtain an independent medical licence and become a Fellow of the Royal College of Physicians and Surgeons of Canada (FRCPC). I feared unemployment after my first year of fellowship. Fortunately, I secured a second year of training, which gave me time and hope. I later completed a master's degree in community health with a focus on medical education. In 2019, I became a staff anesthesiologist at St. Michael's Hospital and an assistant professor at the University of Toronto. I also took on the role of fellowship coordinator in the university's Department of Anesthesia. Through this role, I began working more closely with ITPs from across the globe.

In 2021, I wrote and passed the Medical Council of Canada Qualifying Examination (MCCQE) Part I and was granted Royal College eligibility through the Practice Eligibility Route. I completed the Royal College written exam in 2022 and the oral exam in 2023. That spring, I became an FRCPC, and I received full independent licensure in June 2023.

Throughout my life, I have approached studying with structure. I used spaced repetition, interleaving, flash cards, and active recall by using free recall, practice quiz and simulating teaching. I assumed this was how everyone studied. However, as I began mentoring ITPs more frequently, I realized that many capable physicians struggled not because of a lack of knowledge but because they did not know how to study effectively. They needed a road map. In response to this need, I created a study guide that helped many of them prepare more confidently. When I began consulting with the Medical Council of Canada (MCC) in 2025, I shifted my focus to developing resources that could reach and support a broader community of ITPs.

This eBook was created in collaboration with assessment experts at the MCC. Inside, you will find an overview of the MCCQE (formerly MCCQE Part I) structure and objectives, study techniques that are grounded in educational research, and a sample plan that can be adapted to support your own preparation.

This guide reflects one of the ways the MCC and I are working together to support ITPs more meaningfully and more practically.

## PURPOSE AND DEVELOPMENT OF THIS GUIDE

This resource was developed from my original concept of identifying and organizing effective learning techniques for international medical graduates (IMGs) preparing for exams. I designed the structure—introducing each technique, explaining its application, and illustrating it with examples—to create a clear, evidence-informed approach to efficient and strategic study.

The techniques were inspired by Marty Lobdell’s lecture *Study Less, Study Smart* (Lobdell, 2007), which promotes active and intentional learning. Artificial intelligence tools were used selectively to locate additional references, identify new techniques, refine the text, and ensure accurate citation. All content was reviewed and validated by human subject matter experts and editors to meet the MCC’s rigorous standards.

**Dr. Filipe Nadir Caparica Santos**, MD, PhD, MScCH(HPTE), FRCPC

Assistant Professor, University of Toronto

International Medical Graduate Consultant to the Medical Council of Canada

Published: April 1, 2026

Ottawa, Ontario

# TABLE OF CONTENT

<b>SECTION 1</b>	
<b>STUDYING SMARTER / UNDERSTANDING THE MCCQE</b> .....	<b>5</b>
A – EXAM OVERVIEW .....	5
MCC blueprint and MCC Examination Objectives .....	5
Blueprint .....	5
MCC Examination Objectives .....	6
How to map the MCC Examination Objectives to the MCC blueprint .....	6
B – THE MCC EXAMINATION OBJECTIVES PER DISCIPLINE .....	7
Medicine .....	7
Obstetrics and Gynecology .....	8
Psychiatry .....	8
Pediatrics .....	8
Surgery .....	9
Population Health, Ethical, Legal and Organizational Aspects of Medicine (PHELO) .....	10
<b>SECTION 2</b>	
<b>BUILDING YOUR PREPARATION STRATEGY</b> .....	<b>11</b>
A – TECHNIQUES FOR EFFECTIVE STUDY .....	11
Chunking .....	12
Pomodoro technique .....	12
Reward-based learning .....	13
Optimize your study area .....	13
Active studying with flashcards (active recall and spaced repetition) .....	13
Memorization techniques .....	14
Understanding-based techniques .....	15
Teaching (Feynman technique) .....	16
Interleaved practice .....	16
B – STUDY STRATEGY .....	18
Sample study plan: Applying the techniques .....	18
Topics by discipline .....	19
Sample study plan .....	22
<b>IN CONCLUSION</b> .....	<b>28</b>
<b>REFERENCES</b> .....	<b>29</b>
OTHER RESOURCES.....	31

# SECTION 1

## STUDYING SMARTER / UNDERSTANDING THE MCCQE

### A – EXAM OVERVIEW

#### MCC blueprint and MCC Examination Objectives

The Medical Council of Canada Qualifying Examination (MCCQE) (formerly MCCQE Part I) content is based on the MCC blueprint and MCC Examination Objectives. You can think of the blueprint as the framework for how the examination is assembled, including content weightings, while the objectives are the bank of topics that could be on the exam. Using these two resources, available on [mcc.ca](http://mcc.ca), as tools to structure your studies is one effective approach to preparing for the MCCQE.

#### Blueprint

The blueprint outlines two broad categories on which performance is assessed on the MCCQE:

**Dimensions of care**, covering the spectrum of medical care

**Physician activities**, reflecting a physician’s scope of practice and behaviours

The table below outlines the content weightings of the MCCQE under these two broad categories. It shows that while you will be tested on all the dimensions of care and physician activities, you can expect to see more questions on acute and chronic care than on health promotion and illness prevention or on psychosocial aspects. Similarly, you can expect to see more questions on assessment/diagnosis and management than on communication and professional behaviours.

		Dimensions of care				
		Health Promotion & Illness Prevention	Acute	Chronic	Psychosocial Aspects	Row %
Physician activities	Assessment/ Diagnosis					45:5
	Management					35:5
	Communication					10:5
	Professional Behaviours					10:5
Column %		20:5	35:5	30:5	15:5	100

## MCC Examination Objectives

The objectives, on the other hand, describe the areas of proficiency expected of a medical graduate entering residency in Canada. Based on the CanMEDS framework, the objectives are organized into physician roles. The seven roles are medical expert, collaborator, communicator, health advocate, leader/manager, professional, and scholar. Questions relating to each of the objectives listed under each role can be asked on the MCCQE. Reviewing them and mapping them to the blueprint will help you cover the possible topics within the dimensions of care and physician activities that could be tested.

The medical expert role is associated with the largest number of objectives. It is broadly outlined as the application of medical knowledge, clinical skills, and professional behaviours when providing patient-centred care. It also covers clinical presentation and diagnosis; population health and its determinants; and legal, ethical, and organizational aspects of medicine. In contrast, each of the other CanMEDS roles (collaborator, communicator, health advocate, leader/manager, professional, and scholar) are represented by a single objective. When planning your studies, you will need to allow for significant time to cover the medical expert objectives.

## How to map the MCC Examination Objectives to the MCC blueprint

As mentioned above, one effective strategy to prepare for the MCCQE is to map each objective to the blueprint. You can support this approach with notes from your medical courses, reference material, and/or trusted, peer-reviewed sources such as textbooks and articles.

Let us look at an example of how the hyperglycemia objective under the medical expert role could be mapped to the blueprint:

### ***What are some of the types of questions you could be asked about a patient with diabetes?***

- Under assessment / diagnosis in health promotion & illness prevention, a question could focus on screening for diabetes.
- Under management and acute care, a question could focus on the initial management of a patient presenting with diabetic ketoacidosis.
- Under communication and psychosocial aspects, a question could focus on counselling a patient who is unable to afford their medications and testing supplies.

		Dimensions of care				
		Health Promotion & Illness Prevention	Acute	Chronic	Psychosocial Aspects	Row %
Physician activities	Assessment/ Diagnosis	●				45:5
	Management		●			35:5
	Communication				●	10:5
	Professional Behaviours					10:5
Column %		20:5	35:5	30:5	15:5	<b>100</b>

You can repeat this exercise for all the objectives. As you progress, you will find that not every objective will map to all categories of the blueprint.

## B – THE MCC EXAMINATION OBJECTIVES PER DISCIPLINE

It may be helpful to understand which MCC Examination Objectives may be represented in which discipline on the MCCQE. The MCC Examination Objectives may also overlap across multiple disciplines, and the categorization below is not exhaustive, nor are all objectives represented.

The six disciplines are represented more or less equally on the MCCQE. About 1/6 of the exam is Medicine and about 1/6 is OBGYN, even though there are many more objectives classified in the Medicine category as compared to OBGYN.

Also importantly, non-medical expert roles map to all disciplines. The non-medical expert roles are Collaborator, Communicator, Health advocate, Leader/manager, Professional and Scholar.

Objectives are listed alphabetically below each discipline, and each objective is followed by its Legacy ID number, to facilitate searching on [mcc.ca/objectives](http://mcc.ca/objectives).

### Medicine

---

Abnormal heart sounds and murmurs, 62	Eye redness, 30
Abnormal lipids, 51	Fatigue, 33
Abnormal liver function tests, 52	Falls, 32
Acid-base abnormalities, 45	Frailty in older adults, 31
Acute abdominal pain, 3	Generalized edema, 29
Acute diarrhea, 22	Generalized pain disorders, 67
Acute kidney injury (anuria or oliguria), 89	Headache, 39
Acute visual disturbance / loss, 115	Hearing loss, 40
Adult constipation, 16	Hematuria, 8
Allergic reactions and atopy, 4	Hyperglycemia, 130
Anemia, 42	Hyperkalemia, 79
Ataxia (gait), 35	Hypoglycemia, 129
Back pain and related symptoms (e.g., sciatica), 50	Hypokalemia, 79
Bleeding, bruising, 15	Hypertension, 9
Blood in sputum (hemoptysis), 7	Hyponatremia, 99
Breast masses and enlargement, 10	Shock, 9
Calcium disorders, 12	Jaundice, 49
Cardiac arrest, 13	Localized edema, 29
Cerebrovascular accident and transient ischemic attack (stroke), 41	Neck masses and thyroid disease, 63
Chest pain, 14	Nonarticular musculoskeletal pain, 50
Chronic kidney disease, 89	Numbness / tingling / altered sensation, 66
Chronic diarrhea, 22	Oligoarthritis (pain in one to four joints), 50
Coma, 58	Palpitations, 68
Cough, 18	Pleural effusion, 76
Delirium, 58	Poisoning, 77
Diplopia, 23	Polyarthralgia (pain in more than four joints), 50
Dizziness and vertigo, 24	Prevention of venous thrombosis, 15
Dyspnea, 27	Sexual dysfunctions and disorders, 94
Dysphagia, 26	Skin and integument conditions, 38
Dying patients, 25	Skin wounds, 109
	Sore throat and/or rhinorrhea, 100

Syncope and pre-syncope, 106  
Upper gastrointestinal bleeding, 6  
Vomiting and/or nausea, 116

Weakness (not caused by  
cerebrovascular accident), 117  
White blood cells, abnormalities of, 120

## Obstetrics and Gynecology

---

Abdominal masses and pelvic masses, 2  
Abnormal liver function tests, 52  
Adult abuse, 114  
Amenorrhea, oligomenorrhea, 56  
Breast discharge, 10  
Congenital anomalies, dysmorphic features, 36  
Contraception, 17  
Dysmenorrhea, 56  
Dysuria, urinary frequency and urgency,  
and/or pyuria, 110  
Early pregnancy loss / spontaneous abortion, 81  
Gender and sexuality, 94  
Genetic concerns, 36  
Hypertension, 9  
Shock, 9

Incontinence, urine, adult, 47  
Intrapartum and postpartum care, 80  
Intrauterine growth restriction, 118  
Menopause, 57  
Pelvic pain, 73  
Preterm labour, 82  
Premenstrual dysphoric disorder  
(premenstrual syndrome, PMS), 56  
Prenatal care, 80  
Skin and integument conditions, 38  
Uterine prolapse, pelvic relaxation, 83  
Vaginal bleeding,  
excessive / irregular / abnormal, 112  
Vaginal discharge / vulvar pruritus, 113

## Psychiatry

---

Abuse of older adults, 114  
Adult abuse, 114  
Anxiety, 69  
Attention, learning, and school problems, 5  
Child abuse, 114  
Chronic abdominal pain, 3  
Delirium, 58  
Depressed mood, 59  
Developmental delay, 21  
Falls, 32  
Fatigue, 33  
Fever and hyperthermia, 107  
Frailty in older adults, 31  
Gender and sexuality, 94  
Generalized pain disorders, 67  
Major or mild neurocognitive disorders  
(dementia), 58

Mania / hypomania, 59  
Movement disorders, involuntary / tic disorders, 61  
Obsessive-compulsive (OCD) and  
related disorders, 123  
Personality disorders, 75  
Premenstrual dysphoric disorder  
(premenstrual syndrome, PMS), 56  
Prescribing practices, 125  
Psychosis, 86  
Sexual dysfunctions and disorders, 94  
Sleep-wake disorders, 98  
Somatic symptoms and related disorders, 124  
Substance use or addictive disorders, 103  
Substance withdrawal, 103  
Suicidal behaviour, 105  
The well child and adolescent, 74  
Weight loss / eating disorders / anorexia, 118

## Pediatrics

---

Abdominal masses and pelvic masses, 2  
Abdominal pain (children), 3  
Acute diarrhea, 22  
Allergic reactions and atopy, 4  
Anemia, 42

Ataxia (gait), 35  
Attention, learning, and school problems, 5  
Bleeding, bruising, 15  
Bone or joint injury, 109  
Burns, 11

Cardiac arrest, 13  
 Child abuse, 114  
 Chronic diarrhea, 22  
 Cough, 18  
 Crying or fussing child, 71  
 Cyanosis and hypoxia, 19  
 Developmental delay, 21  
 Drowning/submersion injuries, 109  
 Dysmenorrhea, 56  
 Dysuria, urinary frequency and urgency, and/or pyuria, 110  
 Dyspnea, 27  
 Ear pain, 28  
 Environment, 78  
 Eye redness, 30  
 Failure to thrive (infant, child), 31  
 Fever and hyperthermia, 107  
 Fever in the immune compromised host / recurrent fever, 107  
 Gender and sexuality, 94  
 Generalized edema, 29  
 Genetic concerns, 36  
 Headache, 39  
 Hearing loss, 40  
 Hematuria, 8  
 Hyperkalemia, 79  
 Hypertension, 9  
 Hypothermia and cold-related injury, 107  
 Shock, 9  
 Hypotonic infant, 71  
 Immunization, 74  
 Jaundice, 49  
 Limp in children, 20  
 Lower gastrointestinal bleeding, 6  
 Lymphadenopathy, 54  
 Movement disorders, involuntary / tic disorders, 61  
 Neonatal distress, 64  
 Neonatal jaundice, 49  
 Newborn assessment, 74  
 Chronic kidney disease, 89  
 Coma, 58  
 Congenital anomalies, dysmorphic features, 36  
 Nonarticular musculoskeletal pain, 50  
 Oligoarthritis (pain in one to four joints), 50  
 Oral conditions, 60  
 Palpitations, 68  
 Pediatric constipation, 16  
 Pediatric diarrhea, 22  
 Pediatric enuresis, 47  
 Pediatric respiratory distress, 27  
 Periodic health encounter / preventive health advice, 74  
 Pelvic pain, 73  
 Poisoning, 77  
 Polyuria, 110  
 Pre-operative medical evaluation, 74  
 Proteinuria, 84  
 Pruritus, 85  
 Scrotal mass, 90  
 Scrotal pain, 91  
 Seizures / epilepsy, 92  
 Skin and integument conditions, 38  
 Skin wounds, 109  
 Sore throat and/or rhinorrhea, 100  
 Strabismus and/or amblyopia, 102  
 Sudden infant death syndrome (SIDS), 104  
 Syncope and pre-syncope, 106  
 Sleep-wake disorders, 98  
 Substance withdrawal, 103  
 Tinnitus, 108  
 The well child and adolescent, 74  
 Urticaria, angioedema, 97  
 Vomiting and/or nausea, 116  
 Weakness (not caused by cerebrovascular accident), 117  
 Obesity, 118  
 Weight loss / eating disorders / anorexia, 118

## Surgery

---

Abdominal distension, 1  
 Abdominal masses and pelvic masses, 2  
 Abdominal pain (children), 3  
 Acute abdominal pain, 3  
 Anorectal pain, 3  
 Back pain and related symptoms (e.g., sciatica), 50  
 Bleeding, bruising, 15  
 Blood in sputum (hemoptysis), 7  
 Breast discharge, 10  
 Breast masses and enlargement, 10  
 Burns, 11  
 Cerebrovascular accident and transient ischemic attack (stroke), 41  
 Chest injuries, 109  
 Chronic abdominal pain, 3  
 Chronic diarrhea, 22

Chronic visual disturbance / loss, 115  
 Cough, 18  
 Drowning/submersion injuries, 109  
 Dying patients, 25  
 Dysphagia, 26  
 Dysuria, urinary frequency and urgency,  
 and/or pyuria, 110  
 Dyspnea, 27  
 Ear pain, 28  
 Eye redness, 30  
 Falls, 32  
 Fatigue, 33  
 Fecal incontinence, 47  
 Fever and hyperthermia, 107  
 Traumatic brain injury, 109  
 Headache, 39  
 Hearing loss, 40  
 Hematuria, 8  
 Hernia (abdominal wall and groin), 2  
 Shock, 9  
 Language and speech disorders, 44  
 Lower gastrointestinal bleeding, 6  
 Lower urinary tract symptoms, 111  
 Mediastinal mass, 54  
 Neck masses and thyroid disease, 63  
 Neck pain, 50  
 Nerve injury, 109  
 Nonarticular musculoskeletal pain, 50  
 Numbness / tingling / altered sensation, 66  
 Oligoarthritis (pain in one to four joints), 50  
 Palpitations, 68  
 Pediatric respiratory distress, 27  
 Poisoning, 77  
 Scrotal mass, 90  
 Scrotal pain, 91  
 Sexual dysfunctions and disorders, 94  
 Skin and integument conditions, 38  
 Skin wounds, 109  
 Sore throat and/or rhinorrhea, 100  
 Spinal trauma, 109  
 Strabismus and/or amblyopia, 102  
 Sudden infant death syndrome (SIDS), 104  
 Syncope and pre-syncope, 106  
 Trauma, 109  
 Upper gastrointestinal bleeding, 6  
 Urinary tract injuries, 109  
 Vascular injury, 109  
 Vomiting and/or nausea, 116  
 Weakness (not caused by cerebrovascular  
 accident), 117 118

## **Population Health, Ethical, Legal and Organizational Aspects of Medicine (PHELO)**

---

Abuse of older adults, 114  
 Administration of effective health programs at  
 the population level, 78  
 Assessing and measuring health status at  
 the population level, 78  
 Brief resolved unexplained event (BRUE)  
 (previously known as apparent life-threatening  
 event [ALTE]), 104  
 Child abuse, 114  
 Clinical informatics, 126  
 Concepts of health and its determinants, 78  
 Consent, 121  
 Disaster preparedness, emergency response,  
 and recovery, 78  
 Dying patients, 25  
 Environment, 78  
 Health and the climate crisis, 78  
 Indigenous health, 78  
 Immunization, 74  
 Interventions at the population level, 78  
 Legal system, 121  
 Negligence, 121  
 Outbreak management, 78  
 Periodic health encounter/preventive  
 health advice, 74  
 Prescribing practices, 125  
 Providing anti-oppressive health care, 127  
 Truth telling, 121  
 Work-related health issues, 78

## SECTION 2

---

# BUILDING YOUR PREPARATION STRATEGY

Preparing for the MCCQE (formerly MCCQE Part I) requires more than time and motivation. It requires intention, structure, and the right methods. This section offers two key resources to support your preparation: a practical, evidence-informed overview of study techniques, followed by a sample study plan that shows how those techniques can be applied to a real study schedule.

The sample study plan demonstrates how you could choose to organize your preparation over time. This example assumes an even distribution of knowledge across disciplines but can and should be adapted to suit your background and needs. A physician trained in psychiatry, for example, may allocate less time to that subject and more to areas outside their specialty. Similarly, a recent graduate may require less review than someone who has been out of clinical practice for several years.

This section is designed to help you prepare in a focused and flexible way. Begin by reviewing the study techniques and experimenting with one or two methods that feel manageable. Then, use the sample study plan as a guide to structure your own timeline and priorities. The goal is to support your learning, reduce unnecessary stress, and help you move forward with clarity and confidence.

## A – TECHNIQUES FOR EFFECTIVE STUDY

This section presents a concise, evidence-informed toolkit of study techniques to help internationally trained physicians prepare efficiently and effectively for the MCCQE. The conceptual framework and selection of strategies were inspired by Marty Lobdell's recorded presentation *Study Less Study Smart* (Lobdell, 2007).

Drawing from robust cognitive science research, each technique in this document has been selected for its demonstrated ability to enhance learning, retention, and exam performance in high-stakes contexts. Unlike generic advice, these strategies have been validated through peer-reviewed studies and refined for the medical licensure environment.

The document is structured to be practical and easy to navigate. Each technique—such as spaced repetition, active recall, chunking, interleaved practice, and the Feynman technique—is introduced with a short explanation, step-by-step implementation guide, and medical examples relevant to the MCCQE. Together, these tools support both surface-level recall (e.g., lab values, diagnostic criteria) and deeper understanding (e.g., clinical decision-making pathways, disease mechanisms).

The return on investment of using these strategies is high. Spacing and retrieval alone can double retention. Teaching and visualization reveal knowledge gaps early. Interleaving builds clinical flexibility, critical for the integrated scenario-based nature of the MCCQE.

To use this section most effectively, review each technique in sequence. Then, incorporate one or two techniques each week into your current study schedule. Reinforce these new habits by keeping this guide readily available and refer back to it if your learning slows down or stops progressing. This

guide is not just a set of tips, but rather a blueprint for sustainable and high-impact study practices that can meaningfully improve your score and long-term competence if used correctly.

## Chunking

---

**What it is:** Chunking means breaking down large amounts of information into smaller, meaningful units or “chunks.” This leverages our limited short-term memory capacity by grouping related items, thereby reducing the cognitive load. Chunking makes memorization easier by using prior knowledge to give context to new information (Miller, 1956; Cowan, 2001; Gobet et al., 2001).

**How to implement:** Identify logical groupings in the material. For example, if studying a list of clinical features, group them by organ system or severity. Use headings, categories, or patterns to cluster facts. Each chunk should represent a concept or category that is easier to remember as a whole than as isolated bits.

---

**Example:** A classic illustration is remembering this hypothetical string “IBMCIAFBI.” Instead of nine random letters, recognize the familiar initialisms I.B.M., C.I.A., F.B.I. – three chunks representing known organizations. By grouping the letters into these meaningful units, recall is vastly improved. In medical study, you might chunk drug names by class (e.g., grouping all beta-blockers together) or chunk a patient history into SOAP (subjective, objective, assessment, plan) components. This technique condenses information and makes retrieval more efficient (Miller, 1956).

## Pomodoro technique

---

**What it is:** The Pomodoro technique is a time-management technique that alternates focused study intervals with short breaks. A typical Pomodoro cycle is 25 minutes of intense, distraction-free study followed by a five-minute break, with a longer break after four cycles. This approach helps maintain high concentration and prevents mental fatigue by allowing regular recovery periods.

**How to implement:** Choose a task (e.g., reviewing cardiology notes) and set a timer for 25 minutes. Work with full focus until the timer rings. Avoid checking phones or multitasking. After 25 minutes, take a five-minute break to stand, stretch, or grab water. After four cycles, take a longer break (15–30 minutes) to recharge. During breaks, step away from study material to let your mind rest.

---

**Example:** If you plan a two-hour study session, you could divide it into four Pomodoro cycles of 25 minutes each, separated by five-minute breaks. Research indicates that using fixed break intervals like this can improve mood and efficiency during studying. In one study, students who took regular prescheduled breaks (akin to Pomodoro) reported less fatigue and distraction and better concentration than those who took breaks whenever they felt like it (Biwer, 2023). By sticking to the timer, you create a sense of urgency that can boost productivity, and the promise of a break serves as a small reward to keep you motivated.

## Reward-based learning

---

**What it is:** Reward-based learning involves using positive reinforcement to motivate studying. By rewarding yourself after completing study goals, you tap into the brain's reward system (dopamine release), which can strengthen habits and make studying more enjoyable. In essence, you condition yourself to associate study sessions with positive outcomes (Murayama & Kitagami, 2014).

**How to implement:** Set clear and realistic goals, then tie each one to a reward you actually care about. It can be small, such as a piece of chocolate, a short walk, a coffee, or an episode of a show. The key is that the reward only comes after the goal is done. That is what builds the habit loop of cue, routine, and reward. Research shows this kind of reinforcement helps routines stick and makes studying feel less like a grind (Hidi & Harackiewicz, 2000; Murayama & Kitagami, 2014).

---

**Example:** After completing a full-length practice exam, reward yourself with an hour of relaxation or a fun activity. Or, after finishing a block of 20 flashcards, grab that coffee. Just keep rewards moderate to stay motivated without relying solely on external incentives. Tip: this technique integrates well with the Pomodoro technique.

## Optimize your study area

---

**What it is:** An optimized study area is one that minimizes distractions and is comfortable, organized, and equipped for focus and learning. Key factors include minimizing noise levels and optimizing lighting, ergonomics, and organization. Studying in an environment that is quiet, well lit, and comfortable helps you stay engaged and absorb information, whereas studying in an environment that is noisy or uncomfortable can undermine your efforts. Research has shown that background speech disrupts focus (Sörqvist et al., 2012) and that classroom and workspace design, including lighting and seating, can significantly affect learning outcomes (Barrett et al., 2015).

**How to implement:** Choose a quiet, dedicated study space, like a library cubicle or a desk at home, where interruptions are minimal. Use natural or bright diffuse lighting to reduce eye strain, and keep your desk clear to support focus. Sit in a comfortable ergonomic chair, and silence digital distractions (e.g., put your phone in “do not disturb” mode or in another room). Some learners benefit from soft background noise or white noise but avoid music with lyrics.

---

**Example:** One medical trainee created a focused “study zone” by decluttering, using noise-cancelling headphones, and posting a “Do Not Disturb” sign. A well-prepared environment is a simple but powerful boost to productivity.

## Active studying with flashcards (active recall and spaced repetition)

---

**What it is:** Active studying means engaging with the material through retrieval and application, rather than passive reading. One of the most powerful active techniques is using flashcards (physical flashcards or digital apps like Anki or Quizlet) to employ active recall (testing yourself) and spaced repetition (reviewing information at increasing intervals). Research consistently shows that retrieval practice (actively recalling information from memory) produces stronger learning and

retention than passive review. Likewise, spaced practice (spacing study sessions apart instead of cramming) dramatically improves long-term memory and reduces forgetting (Cepeda et al., 2006).

**How to implement:** After learning new content (e.g., cardiac pharmacology), create flashcards with a prompt on one side (e.g. “What are the adverse effects of beta-blockers?”) and the answer on the other. Use an app like Anki to apply spaced repetition. Cards you know well appear less often, while those you miss show up sooner. Always try to recall the answer before flipping the card. If you answer incorrectly or flip the card without trying, that signals a need for more review (Karpicke & Roediger, 2008).

---

**Example:** Suppose you’re studying endocrinology. Instead of rereading the diabetes mellitus chapter, create 30 flashcards on definitions, symptoms, diagnostics, and treatments. Each day, test yourself: mark easy cards to be shown less often and difficult ones for frequent review. Over time, well-known cards might reappear every 10 or 30 days, while less known ones are repeated daily.

## Memorization techniques

---

**What it is:** Memorization techniques include mnemonics, acronyms, sayings, and imagery. These help encode and retrieve information by linking new material to **familiar, structured, or vivid cues**. They transform abstract or hard-to-remember content into something more concrete, engaging, or story-like, leveraging the brain’s natural preference for **patterns, images, and narratives**. These methods have been widely studied. Evidence supports that imagery and drawing strengthen recall (Wammes et al., 2016). Additionally, studies have outlined the different types of mnemonic strategies and their features (Bellezza, 1981). Finally, the keyword method has been experimentally validated for vocabulary learning (Atkinson & Raugh, 1975).

Common techniques include:

- **Acronyms:** Use the first letter of each item to form a memorable word (e.g., CHAPS for calcium, hormones, alkalosis, protein, stone—causes of kidney stones).
- **Acrostics or sayings:** Create a quirky, vivid, or emotional sentence where each word cues an item from the list. They are especially useful for lists that are long and abstract. A classic example is learning the functions of the 12 cranial nerves. Instead of memorizing which are sensory, motor, or both, you can use the sentence “Some Say Marry Money But My Brother Says Big Brains Matter Most.” Each word cues the function of one cranial nerve in order: I Sensory, II Sensory, III Motor, IV Motor, V Both, VI Motor, VII Both, VIII Sensory, IX Both, X Both, XI Motor, XII Motor.
- **Rhymes and rhythms:** Use poetic or musical patterns to aid memorization.
- **Image association:** Convert details and abstract facts into vivid and exaggerated or humorous mental pictures or stories.
- **Keyword mnemonics:** Use when learning unfamiliar vocabulary. Associate unfamiliar terms with a familiar-sounding keyword and an image or scenario that links the two.

These techniques boost memory by engaging multiple forms of recall—visual, verbal, spatial—and organizing information meaningfully, which supports both short- and long-term retention. They are most effective when you create them yourself. Personalized images and stories are easier to recall

than premade ones. Use them selectively for lists, abstract terms, or information you've struggled to retain through other methods.

**How to implement:** When faced with a list, definition, or complex process, select the mnemonic technique best suited to the content.

---

**Example:**

- To memorize clinical features of hyperthyroidism, invent a story. For example, imagine “Hyper Harry,” a man losing weight while running under the hot sun, sweating, and talking fast: all cues for weight loss, heat intolerance, tachycardia, and hyperreflexia.
- To memorize *glomerulus*, choose a keyword, for example, “glow-merry-less” (sounds similar). Picture a sad glowing kidney filter: this image links the word’s sound and its function in the nephron, helping you remember both the name and role.

---

## Understanding-based techniques

**What it is:** Understanding-based techniques focus on deepening comprehension and seeing the “big picture” rather than relying solely on memorization. These strategies strengthen your ability to organize and integrate complex topics, which supports problem-solving and clinical reasoning, which are both essential for MCCQE case scenarios. Common techniques include:

- **Brainstorming and brain dumping:** Actively recalling and writing down everything you know about a topic as a starting point.
- **Concept mapping:** Drawing diagrams that display key concepts and their relationships, such as linking diseases with risk factors, symptoms, and treatments.
- **Process visualization:** Creating flowcharts, timelines, or algorithms to map out sequences or decision trees (e.g., metabolic pathways or clinical algorithms).
- **Drawing diagrams or images:** Sketching anatomical structures or mechanisms (e.g., kidney filtration) to create visual representations that support recall.

Research shows that concept mapping and other generative visual strategies significantly enhance learning and recall by encouraging active organization of knowledge and the use of both visual and verbal pathways (Nesbit & Adesope, 2006; Fiorella & Mayer, 2016).

**How to implement:** After studying a topic, take a blank page and brain dump everything you can remember without looking at your notes, such as key facts, formulas, or concepts. This acts as both retrieval practice and a self-check. Then, organize the material visually using a concept map, flowchart, or diagram. Even simple sketches can clarify and connect ideas, especially for visual learners. Explaining the diagram aloud reinforces understanding through active learning.

---

**Example:** Suppose you are studying *hepatic encephalopathy*.

- Brain dump what you recall: “Cirrhosis leads to ammonia buildup, causing confusion and asterixis; treatment includes lactulose and rifaximin.”
- Create a concept map with “Hepatic encephalopathy” at the centre.

- Branch out into key categories:
  - Causes (e.g., cirrhosis)
  - Pathogenesis (e.g., ammonia accumulation causes neurotoxicity)
  - Signs and symptoms (e.g., asterixis, confusion)
  - Treatment (e.g., lactulose, antibiotics)
- Show connections (e.g., lactulose traps ammonia in the gut, reducing absorption).

This layout helps organize complex information, exposes gaps, and reinforces understanding through multiple modalities.

## Teaching (Feynman technique)

---

**What it is:** Teaching what you've learned — whether to others or to yourself — is a powerful way to reinforce knowledge and uncover gaps. This approach, often called the Feynman technique, strengthens understanding by forcing you to organize, simplify, and explain material clearly. Research shows that preparing to teach enhances learning and retention, even if the teaching happens only in your mind (Nestojko et al., 2014). Explaining concepts to yourself, sometimes called self-explanation, also deepens comprehension by making you articulate connections and reasoning steps (Chi et al., 1989).

**How to implement:** Pick a topic, such as the coagulation cascade or depression criteria, and explain it aloud as if you were teaching someone with no prior knowledge. This can be done in a study group, with a friend, or on your own. Use simple language and analogies. If you get stuck, that indicates a gap to review.

You can also write or record a short lesson and then listen to it or read it back to identify unclear explanations. Teaching combines retrieval practice and active processing, two of the most effective techniques for durable learning.

---

**Example:** Suppose you're reviewing type 1 versus type 2 diabetes with a study partner. You explain that type 1 is autoimmune, begins early, and requires insulin, while type 2 involves insulin resistance, is often linked to obesity, and is treated with lifestyle modification and medication. As you teach, you realize you can't fully explain insulin resistance, revealing a gap to revisit.

## Interleaved practice

---

**What it is:** Interleaving means mixing different topics, problem types, or subjects within a single study session, rather than studying one topic in large uninterrupted blocks (known as blocked practice). For example, instead of completing all of cardiology before starting neurology, interleaving alternates between topics so your brain must continually switch contexts. This improves discrimination, long-term retention, and adaptability, which are crucial for complex decision-making tasks on the MCCQE. Research has shown that interleaved practice produces stronger learning outcomes than blocked practice, particularly for tasks that require conceptual understanding and problem-solving (Rohrer & Taylor, 2007; Rohrer et al., 2015).

**How to implement:** Rather than reviewing a single system or discipline for an entire session, plan your study blocks to alternate between distinct topics. For example, you might start with endocrine flashcards, then work through psychiatry cases, then shift to infectious disease algorithms. You can revisit the same topic later in the day or week; just avoid long stretches focused exclusively on one area.

---

**Examples** of interleaving your study schedule.

- If you plan to study **two hours per day for five days**, avoid spending all five days on a single discipline like pediatrics. Instead, vary your focus throughout the week. For example:
  - Day 1: Pediatrics
  - Day 2: Internal medicine
  - Day 3: Psychiatry
  - Day 4: Obstetrics
  - Day 5: Public health
- If you're planning a **3-hour study session in one day**, don't dedicate the entire block to one subject. Instead, interleave topics like this:
  - First hour: Nephrology (e.g., distinguishing acute vs. chronic kidney disease)
  - Second hour: Psychiatry (e.g., mood disorders)
  - Third hour: Infectious diseases (e.g., antibiotic stewardship)

This variation forces you to retrieve and apply different problem-solving strategies, making your learning more flexible and durable.

## B – STUDY STRATEGY

### Sample study plan: Applying the techniques

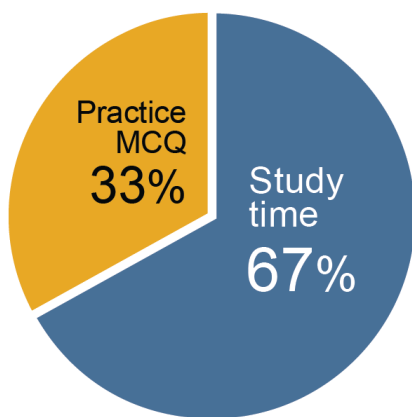
To help you visualize how you can integrate evidence-based study into your exam preparation, this section includes an example of a study plan designed specifically for the MCCQE. The plan consists of 180 study sessions and was built to reflect both the MCC blueprint and the MCC Examination Objectives. It distributes time equally across six major content areas: medicine; surgery; pediatrics; psychiatry; obstetrics and gynecology; and population health, ethical, legal, and organizational aspects of medicine (PHELO).

This structure assumes that the candidate begins with a similar level of baseline knowledge in all disciplines and has a moderate amount of time to prepare. However, the plan is flexible and you should adjust it to match your clinical background, your areas of strength or weakness, and the time you have available. For example, a candidate who trained in general surgery may choose to dedicate less time to surgical content and more to public health or psychiatry. Similarly, someone who completed medical school recently may need less time overall than someone returning to clinical work after an extended break.

The sample plan also balances content review with practice-based learning, allocating approximately two-thirds of the time to studying and one-third to practising multiple-choice questions (MCQs). This approach is designed to build knowledge and exam readiness in parallel.

While this plan provides a solid starting point, the ultimate goal is to help you develop your own personalized strategy. You are encouraged to modify it on the basis of your own progress, priorities, and performance.

Time allocation  
for practising MCQ



Discipline  
distribution



*Equal distribution of disciplines*

## Topics by discipline

---

The general topics for each of 180 suggested study sessions are listed below, under the discipline to which objectives under those topics are listed. The topics are used only in this document, to group similar objective content together, for the purposes of focused studying.

Each discipline includes 20 study sessions in this sample plan. This represents an *example* of how one might divide their time to topics when studying. Your own study guide should be tailored to your own individual needs and the MCC does not endorse a one-size-fits-all approach for all candidates. What constitutes a “study session” may also be different for each person using this guide; you could determine that one session of studying represents a time block of an entire day, or a few hours.

You will notice that some topics are listed more than once. This is intentional. Topics that have multiple study sessions devoted to them, represent areas that have more exam objectives, and which may be more heavily tested on the MCCQE. The number of sessions assigned to each topic is meant as an example of how you could distribute your study time, and therefore to help you prioritize your time. Again, the time required for a given topic will vary based on your individual needs.

<b>Session</b>	<b>Psychiatry</b>
1	Eating and Weight-Related Disorders
2	Eating and Weight-Related Disorders
3	Eating and Weight-Related Disorders
4	Mood and Anxiety Disorders
5	Mood and Anxiety Disorders
6	Mood and Anxiety Disorders
7	Mood and Anxiety Disorders
8	Mood and Anxiety Disorders
9	Mood and Anxiety Disorders
10	Mood and Anxiety Disorders
11	Personality and Obsessive-Compulsive Disorders
12	Personality and Obsessive-Compulsive Disorders
13	Personality and Obsessive-Compulsive Disorders
14	Psychotic Disorders
15	Psychotic Disorders
16	Sleep and Neurocognitive Disorders
17	Sleep and Neurocognitive Disorders
18	Substance Use and Related Disorders
19	Substance Use and Related Disorders
20	Substance Use and Related Disorders

<b>Session</b>	<b>Surgery</b>
1	Common Presentations of Surgical Conditions
2	Common Presentations of Surgical Conditions
3	Common Presentations of Surgical Conditions
4	Common Presentations of Surgical Conditions
5	Trauma
6	Trauma
7	Trauma & Cardiovascular & Thoracic Surgery
8	Colorectal Surgery
9	Colorectal Surgery

10	General Surgery
11	General Surgery
12	Neurosurgery and Spine Surgery
13	Neurosurgery and Spine Surgery & Ophthalmology
14	Oncological Surgery
15	Oncological Surgery & Head and Neck Surgery & ENT
16	Urology
17	Urology & Orthopedic Surgery
18	Preoperative Evaluation of the Surgical Patient
19	Intensive Care Medicine of the Surgical Patient
20	Surgical Complications

### **Session PHELO**

1	Communication & Collaboration
2	Communication & Collaboration
3	Ethics & Professionalism
4	Ethics & Professionalism
5	Evidence-Based Practice & Informatics
6	Health Systems & Policy
7	Health Systems & Policy
8	Legal & Regulatory Responsibilities
9	Legal & Regulatory Responsibilities
10	Legal & Regulatory Responsibilities
11	Public Health & Preventive Medicine
12	Public Health & Preventive Medicine
13	Public Health & Preventive Medicine
14	Public Health & Preventive Medicine
15	Public Health & Preventive Medicine
16	Public Health & Preventive Medicine
17	Structurally marginalized groups & Social Determinants of Health
18	Structurally marginalized groups & Social Determinants of Health
19	Structurally marginalized groups & Social Determinants of Health
20	Structurally marginalized groups & Social Determinants of Health

### **Session Obstetrics & Gynecology**

1	Gynecology – Common Presentations
2	Gynecology – Common Presentations
3	Gynecology – Abnormal Bleeding
4	Gynecology – Infections
5	Gynecology – Contraception
6	Gynecology – Endocrine & Fertility
7	Gynecology – Menstruation & Menopause
8	Gynecology – Menstruation & Menopause
9	Gynecology – Oncology
10	Gynecology – Oncology
11	Gynecology – Oncology
12	Obstetrics – Prenatal
13	Obstetrics – Prenatal
14	Obstetrics – Prenatal
15	Obstetrics – Intrapartum and Postpartum
16	Obstetrics – Intrapartum and Postpartum
17	Obstetrics – Preterm Labour and Obstetrical Complications

18	Obstetrics – Preterm Labour and Obstetrical Complications
19	Gynecology – Urogynecology
20	Gynecology – Urogynecology & Sexual / Adult Abuse

### **Session Medicine**

1	Neurology
2	Neurology
3	Emergency Medicine
4	Emergency Medicine
5	Primary Care
6	Primary Care
7	Gastroenterology
8	Gastroenterology & Nephrology
9	Endocrinology
10	Endocrinology & Genetics
11	Cardiology
12	Infectious Diseases
13	Hematology
14	Rheumatology
15	Electrolytes, Fluid Balance and Acid Base Disorders
16	Oncology
17	Nephrology
18	Palliative Medicine and Respiriology
19	Dermatology and Immunology
20	Geriatrics

### **Session Pediatrics**

1	Pediatric Emergencies
2	Pediatric Emergencies
3	Neonatology and Early Childhood
4	Pediatric - Musculoskeletal System
5	Pediatric - Musculoskeletal System
6	Pediatric - Genetics, Congenital Disorders and Cardiology
7	Growth, Development and Neurodevelopment
8	Growth, Development and Neurodevelopment
9	Growth, Development and Neurodevelopment
10	Pediatric - Temperature Disorders and Common Complaints in Pediatrics
11	Pediatric - Respiriology
12	Pediatric - Genitourinary System
13	Pediatric - Genitourinary System
14	Pediatric - Gastrointestinal System
15	Pediatric - Infectious Diseases and Hematology
16	Pediatric - Neurology, Pain Medicine and Oncology
17	Pediatric - Electrolytes and Acid Base Disorders
18	Pediatric - Immunology and Common Complaints in Pediatrics
19	Pediatric - Endocrinology
20	Pediatric - Neurology, Pain Medicine and Oncology

## Sample study plan

---

Below is the sample study plan, outlining 180 sessions.

Importantly, some MCC Examination Objectives are representative of multiple disciplines when questions appear on the exam. Breast masses and enlargement as well as breast discharge, for example, may appear in questions related to Surgery, Medicine, Pediatrics, or Obstetrics and Gynecology (OBGYN). In order to ensure a well-rounded study strategy that helps you to cover the listed objectives, these are grouped under the Surgery discipline below.

### How to use it

1. Determine the length of your study sessions. This does not need to be perfect. Think about the typical duration of your study time. Some candidates study in two-hour blocks, others in three-hour blocks. Two or three hours are the most commonly used session lengths among candidates preparing for the MCCQE.
2. Use one primary resource (for example, a textbook) to study the content, and a separate resource to practise multiple-choice questions. The goal is to minimize time lost switching between multiple resources or searching for where to study each topic.
3. A “study session” does not necessarily correspond to “one day.” If you decide that your sessions are two hours long and you only have two hours available on a given day, that day will include one study session. If you have four hours available, you may be able to complete two study sessions in the same day. What matters is that each study session has the same duration. This ensures that your study time is distributed in proportion to how the disciplines are represented on the MCCQE.
4. Keep track of your progress. Consistency is essential. Seeing your session number increase over time reinforces momentum and helps you stay motivated and on track until the end of your study plan.

---

### Topics legend for the following table

Obstetrics & Gynecology / OBGYN	Practice sessions
Medicine	Psychiatry / Psych
Pediatrics / Peds	Surgery
Population health, ethical, legal, and organizational aspects of medicine / PHELO	

## SAMPLE STUDY PLAN

STUDY SESSION	DISCIPLINE	SUGGESTED TOPICS
1	Peds	Dermatology in Pediatrics
2	OBGYN	Pelvic Pain
3	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
4	Surgery	Colorectal Surgery
5	Surgery	Dysphagia, Vomiting and Nausea
6	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
7	Psych	Feeding and Eating Disorders
8	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
9	Peds	Dermatology in Pediatrics (0.5 session) / Vision & Hearing Abnormalities; Ear Pain; Tinnitus (0.5 session)
10	Peds	Crying or Fussing Child (0.5 session)/ Pre-operative Medical Evaluation in Pediatrics (0.5 session)
11	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
12	Psych	Sleep-wake Disorders and Generalized Pain Disorders
13	OBGYN	Skin and Integument Conditions in Gynecology (0.5 session) / Abdominal and Pelvic Masses in Gynecology (0.5 session)
14	PHELO	Communication & Collaboration – Session 1
15	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
16	Peds	Neonatology & Clinical Genetics – Session 1
17	PHELO	Communication & Collaboration – Session 2
18	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
19	Medicine	Cardiology – Session 1
20	Psych	Geriatric Psych
21	OBGYN	Shock and Hypertension (0.5 session) / Sexual and Adult Abuse (0.5 session)
22	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
23	Surgery	Skin Wounds and other Skin Conditions
24	PHELO	Ethics & Professionalism – Session 1
25	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
26	OBGYN	Gynecology – Abnormal Bleeding – Session 1
27	Peds	Neonatology & Clinical Genetics – Session 2
28	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
29	Surgery	Rhinorrhea, Sore Throat, Cough, Dyspnea and Hemoptysis (0.5 session) / Eye Redness, Visual Loss and Hearing Loss (0.5 session)
30	Psych	Depressed Mood
31	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
32	OBGYN	Gynecology – Abnormal Bleeding – Session 2
33	Peds	Pediatric Emergency Medicine & Critical Care – Session 1
34	PHELO	Ethics & Professionalism – Session 2
35	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
36	OBGYN	Gynecology – Endocrine & Fertility – Session 1
37	Psych	Mania and Hypomania
38	PHELO	Evidence-Based Practice & Informatics

STUDY SESSION	DISCIPLINE	SUGGESTED TOPICS
39	Peds	Pediatric Emergency Medicine & Critical Care – Session 2
40	Surgery	Headache, Altered Sensation, Language/Speech Disorders (0.5 session) / Oligoarthritis, Lump or Mass (MSK) and Falls (0.5 session)
<b>41</b>	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
42	Medicine	Cardiology – Session 2
43	Surgery	Acute Abdominal Pain and Abdominal Injuries in Trauma – Session 1
44	OBGYN	Gynecology – Endocrine & Fertility – Session 2
45	Medicine	Emergency Medicine – Session 1
46	Psych	Anxiety
<b>47</b>	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
<b>48</b>	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
49	Psych	Fatigue, Somatic Symptoms and Related Disorders
50	PHELO	Evidence-Based Practice & Informatics (0.5 session) / Health Systems & Policy (0.5 session)
<b>51</b>	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
52	PHELO	Health Systems & Policy
53	Medicine	Emergency Medicine – Session 2
<b>54</b>	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
55	Surgery	Acute Abdominal Pain and Abdominal Injuries in Trauma – Session 2
56	Psych	PTSD and other Stress-related Disorders
57	Peds	Pediatric Emergency Medicine & Critical Care – Session 3
<b>58</b>	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
59	Medicine	Emergency Medicine – Session 3 & Endocrinology & Metabolism – Session 1
<b>60</b>	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
61	PHELO	Legal Systems
62	OBGYN	Gynecology – Menstruation & Menopause – Session 1
63	Psych	Neurodevelopmental and Learning Disorders
<b>64</b>	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
65	OBGYN	Gynecology – Menstruation & Menopause – Session 2
66	PHELO	Legal Systems
<b>67</b>	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
68	Peds	Weight Loss, Anorexia, Eating Disorders, Obesity
<b>69</b>	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
70	OBGYN	Obstetrics – Prenatal – Session 1
71	Surgery	Chronic Abdominal Pain and Abdominal Pain in Children
<b>72</b>	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
73	Medicine	Endocrinology & Metabolism – Session 2
74	Peds	Vomiting and Nausea; Abdominal Pain (0.5 session) / Lower GI Bleed; Abdominal and Pelvic Mass (0.5 session)
75	PHELO	Negligence
<b>76</b>	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
77	Surgery	Hernias, Abdominal/Pelvic Masses and Upper GI Bleed
78	Medicine	Endocrinology & Metabolism – Session 3

STUDY SESSION	DISCIPLINE	SUGGESTED TOPICS
79	Psych	Movement Disorders (0.5 session) / Mental Health in Children and Adolescents (0.5 session)
80	PHELO	Epidemiology and Statistics
81	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
82	OBGYN	Obstetrics – Prenatal – Session 2
83	Peds	Fever and Hyperthermia
84	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
85	Medicine	Gastroenterology & Hepatology – Session 1
86	Surgery	Abdominal Distension
87	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
88	Surgery	Critical Care Principles in Surgical Patients
89	Medicine	Gastroenterology & Hepatology – Session 2 & Infectious Diseases & Immunology – Session 1
90	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
91	Surgery	Neurosurgery and Spine Surgery
92	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
93	Surgery	Breast Masses, Enlargement and Discharge – Session 1
94	Medicine	Infectious Diseases & Immunology – Session 2
95	PHELO	Work-related Health Issues
96	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
97	Peds	Lymphadenopathy (0.5 session) / Eye Redness; Oral Conditions (0.5 session)
98	OBGYN	Obstetrics – Prenatal – Session 3
99	Medicine	Geriatric Medicine
100	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
101	Medicine	Hematology & Oncology – Session 1
102	Medicine	Hematology & Oncology – Session 2
103	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
104	Psych	Gender, Sexuality and Sexual Health
105	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
106	Peds	Cough, Sore Throat and Rhinorrhea (0.5 session) / Constipation; Acute and Chronic Diarrhea (0.5 session)
107	Surgery	Breast Masses, Enlargement and Discharge – Session 2
108	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
109	Peds	Pediatric Nephrology & Urology
110	Surgery	Mediastinal Mass, Neck masses and thyroid disease
111	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
112	Psych	Personality Disorder
113	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
114	Psych	OCD and Related Disorders
115	Peds	Allergic Reactions, Atopy, Urticaria and Angioedema (0.5 session) / Bone or Joint Injury and Nonarticular musculoskeletal pain (0.5 session)
116	PHELO	Immunization
117	OBGYN	Vaginal and Vulvar Disorders (0.5 session) / Gynecology – Preventive Care (0.5 session)

STUDY SESSION	DISCIPLINE	SUGGESTED TOPICS
118	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
119	Medicine	Nephrology & Electrolytes – Session 1
120	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
121	PHELO	Environment and Outbreak Management
122	Psych	Trauma, Abuse, and Forensic Psych
123	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
124	Peds	Gender and Sexuality (0.5 session) / Anemia, Bleeding and Bruising in Pediatrics (0.5 session)
125	Surgery	Pediatric Surgery & Orthopedic Surgery
126	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
127	Peds	Pediatric Neurology
128	Surgery	Preoperative Evaluation of the Surgical Patient & Surgical Complications
129	OBGYN	Obstetrics – Intrapartum and Postpartum – Session 1
130	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
131	PHELO	Intervention and Health Programs at Population Level
132	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
133	Psych	Neurocognitive Disorders (Dementia)
134	Medicine	Nephrology & Electrolytes – Session 2
135	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
136	PHELO	Preventive Health Advice & Disaster Preparedness and Emergency Response
137	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
138	Peds	Development Delay & Attention, Learning and School Problems (0.5 session) / Failure to thrive (0.5 session)
139	PHELO	Indigenous Health
140	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
141	Medicine	Neurology – Session 1
142	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
143	Peds	Periodic Health Encounter and Preventive Health Advice (0.5 session) / Abnormal Pubertal Development and Abnormal Stature (0.5 session)
144	OBGYN	Obstetrics – Intrapartum and Postpartum – Session 2
145	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
146	Medicine	Neurology – Session 2
147	Peds	Pediatric Cardiology
148	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
149	PHELO	Child and Elderly Abuse
150	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
151	OBGYN	Obstetrics – Intrapartum and Postpartum – Session 3
152	OBGYN	Gynecology – Uterine Prolapse and Pelvic Relaxation (0.5 session) / Preterm Labour (0.5 session)
153	Medicine	Neurology – Session 3 (0.5 session)/ Pain Medicine (0.5 session)
154	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
155	Psych	Neurocognitive Disorders (Dementia)
156	Medicine	Rheumatology
157	Medicine	Respirology/Pulmonology

STUDY SESSION	DISCIPLINE	SUGGESTED TOPICS
<b>158</b>	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
159	OBGYN	Early Pregnancy Loss and Spontaneous Abortion (1 session)
160	Peds	Oligoarthritis and Limp in Children (1 session)
161	Surgery	Urology
162	OBGYN	Gynecology – Urogynecology & Gynecology – Oncology
163	Psych	Neurocognitive Disorders (Dementia) (0.5 session) / Psychosis (0.5 session)
<b>164</b>	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
165	PHELO	Adults with Developmental Disabilities and Genetic Concerns
166	PHELO	Social Determinants of Health (0.5 session) / Drowning and Submersion Injuries (0.5 session)
<b>167</b>	<b>Medicine</b>	<b>Practice sessions with multiple-choice questions</b>
168	Surgery	Bone and Joint Injury
169	Surgery	Trauma, Traumatic brain injury
<b>170</b>	<b>Peds</b>	<b>Practice sessions with multiple-choice questions</b>
<b>171</b>	<b>PHELO</b>	<b>Practice sessions with multiple-choice questions</b>
172	Surgery	Chest Injuries and Burns
<b>173</b>	<b>Surgery</b>	<b>Practice sessions with multiple-choice questions</b>
174	OBGYN	Gynecology – Contraception
<b>175</b>	<b>OBGYN</b>	<b>Practice sessions with multiple-choice questions</b>
176	Psych	Psychosis
177	Psych	Delirium
<b>178</b>	<b>Psych</b>	<b>Practice sessions with multiple-choice questions</b>
179	Psych	Substance Use, Addictions and Substance Withdrawal
180	Psych	Prescribing Practices and Drug Reactions

## IN CONCLUSION

Please remember that this document is meant as a guide to demonstrate how you could prepare in a focused and flexible way, by incorporating proven study techniques and the MCC blueprint and objectives. It is not exhaustive of all content that may be tested on the MCCQE and should be adjusted to your unique learning priorities and timelines. There is no expectation that using this study guide will translate to a higher score on the examination.

However, we believe that this study guide provides a strong starting point for candidates at the beginning of their preparation for the MCCQE. By staying organized and distributing your study time according to how disciplines are represented on the examination, you place yourself in a strong position for success.

## REFERENCES

- Atkinson, R. C., & Raugh, M. R. (1975). *An application of the mnemonic keyword method to the acquisition of a Russian vocabulary*. *Journal of Experimental Psychology: Human Learning and Memory*, 1(2), 126–133.
- Barrett, P., Zhang, Y., Davies, F., & Barrett, L. (2015). *The impact of classroom design on pupils' learning: Final results of a holistic, multi-level analysis*. *Building and Environment*, 89, 118–133.
- Bellezza, F. S. (1981). *Mnemonic devices: Classification, characteristics, and criteria*. *Review of Educational Research*, 51(2), 247–275.
- Biwer, F., Wiradhany, W., Oude Egbrink, M. G. A., & de Bruin, A. B. H. (2023). *Understanding effort regulation: Comparing “Pomodoro” breaks and self-regulated breaks*. *British Journal of Educational Psychology*, 93(Suppl. 2), 353–367.
- Cepeda, N. J., Pashler, H., Vul, E., Wixted, J. T., & Rohrer, D. (2006). *Distributed practice in verbal recall tasks: A review and quantitative synthesis*. *Psychological Bulletin*, 132(3), 354–380.
- Chi, M. T. H., Bassok, M., Lewis, M. W., Reimann, P., & Glaser, R. (1989). *Self-explanations: How students study and use examples in learning to solve problems*. *Cognitive Science*, 13(2), 145–182.
- Cowan, N. (2001). *The magical number 4 in short-term memory: A reconsideration of mental storage capacity*. *Behavioral and Brain Sciences*, 24(1), 87–185.
- Fiorella, L., & Mayer, R. E. (2016). *Eight ways to promote generative learning*. *Educational Psychology Review*, 28(4), 717–741.
- Gobet, F., Lane, P. C., Croker, S., Cheng, P. C., Jones, G., Oliver, I., & Pine, J. M. (2001). *Chunking mechanisms in human learning*. *Trends in Cognitive Sciences*, 5(6), 236–243.
- Hidi, S., & Harackiewicz, J. M. (2000). *Motivating the academically unmotivated: A critical issue for the 21st century*. *Review of Educational Research*, 70(2), 151–179.
- Karpicke, J. D., & Roediger, H. L., III. (2008). *The critical importance of retrieval for learning*. *Science*, 319(5865), 966–968.
- Lobdell, M. (2007). *Study less, study smart* [Video]. Pierce College.
- Miller, G. A. (1956). *The magical number seven, plus or minus two: Some limits on our capacity for processing information*. *Psychological Review*, 63(2), 81–97.

- Murayama, K., & Kitagami, S. (2014). Consolidation power of extrinsic rewards: Reward cues enhance long-term memory for irrelevant past events. *Journal of Experimental Psychology: General*, 143(1), 15–20.
- Nesbit, J. C., & Adesope, O. O. (2006). Learning with concept and knowledge maps: A meta-analysis. *Review of Educational Research*, 76(3), 413–448.
- Nestojko, J. F., Bui, D. C., Kornell, N., & Bjork, E. L. (2014). Expecting to teach enhances learning and organization of knowledge in free recall of text passages. *Memory & Cognition*, 42(7), 1038–1048.
- Rohrer, D., & Taylor, K. (2007). The shuffling of mathematics problems improves learning. *Instructional Science*, 35, 481–498.
- Rohrer, D., Dedrick, R. F., & Stershic, S. (2015). Interleaved practice improves mathematics learning. *Instructional Science*, 43(5), 615–633.
- Sörqvist, P., Nösth, A., & Halin, N. (2012). Disruption of writing processes by the semanticity of background speech. *Scandinavian Journal of Psychology*, 53(2), 97–102.
- Wammes, J. D., Meade, M. E., & Fernandes, M. A. (2016). The drawing effect: Evidence for reliable and robust memory benefits in free recall. *Quarterly Journal of Experimental Psychology*, 69(9), 1752–1776.

## OTHER RESOURCES

For more in-depth tips and guidance on effective studying and exam preparation, consider these resources:

### **1. *Make It Stick: The Science of Successful Learning.***

A widely regarded book that distills cognitive science research on learning and memory into practical study strategies. The explanations of retrieval practice, spacing, and elaboration are directly applicable to medical exam preparation.

Brown, P. C., Roediger, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Harvard University Press.

### **2. *A Mind for Numbers: How to Excel at Math and Science (Even If You Flunked Algebra)***

This accessible book and the accompanying Coursera course “Learning How to Learn” cover techniques such as chunking, the Pomodoro method, and the use of metaphors to master difficult subjects. It includes many relevant examples for science and medical learning.

Oakley, B. (2014). *A mind for numbers: How to excel at math and science (even if you flunked algebra)*. TarcherPerigee.

### **3. *The Learning Scientists***

Offers blog articles, free downloadable guides, and podcast episodes on six effective learning strategies (e.g., spaced practice, retrieval practice, elaboration), all backed by research explained in student-friendly terms.

Weinstein, Y., & Sumeracki, M. (n.d.). *The learning scientists* [Website and podcast].

### **4. *Exam Study Expert***

Hosted by a memory psychologist, this podcast (*Ace Your Exams with the Science of Learning*) and its companion blog provide practical study tips, memory techniques, and motivational strategies specifically aimed at excelling in exams, grounded in scientific evidence and expert interviews.

Wadsworth, W. (n.d.). *Exam Study Expert* [Podcast and blog].

### **5. *How to Become a Straight-A Student: The Unconventional Strategies Real College Students Use to Score High While Studying Less.***

A book that, while not strictly an academic journal, compiles effective study habits of top students. It provides insight into time management, note taking, and exam prep strategies that complement the techniques above (like scheduling and environment optimization), useful for practical implementation.

Newport, C. (2006). *How to become a straight-A student: The unconventional strategies real college students use to score high while studying less*. Three Rivers Press.