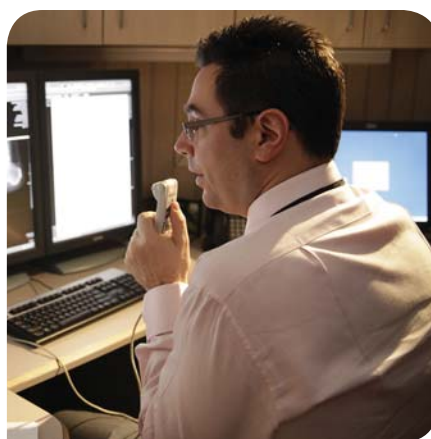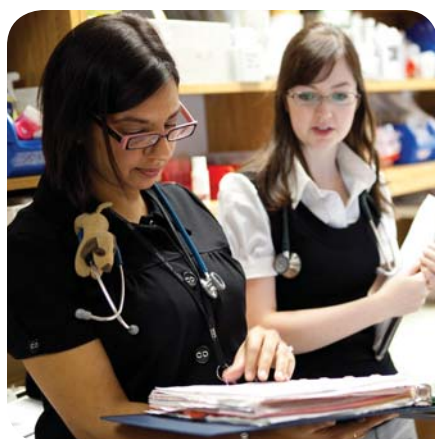**ROYAL COLLEGE**
OF PHYSICIANS AND SURGEONS OF CANADA | **MOC** PROGRAM
enhancing learning, advancing care

A continuing commitment
to lifelong learning

The Royal College of Physicians and Surgeons of Canada
Guide to Maintenance of Certification

Contents

A Message from the Office of Professional Affairs

"The Maintenance of Certification Program promotes a learning culture that includes reflection, inquiry, peer review and assessment of knowledge, competence and performance across the entire spectrum of roles and competencies of the CanMEDS framework."

Welcome to the Royal College of Physicians and Surgeons of Canada's Maintenance of Certification (MOC) Program. It is with great pleasure that we offer you a revised and revitalized MOC Program and a redesigned MAINPORT web application.

We have developed the new MOC Program following an extensive period of study that included a comprehensive survey of Fellows and a thorough review of the continuing professional development research literature. As such, the revised program is responsive to the needs, views and opinions of our members and reflects the best evidence available in continuing professional development.

The result is a streamlined, more flexible MOC Program to support the lifelong learning strategies relevant to every specialist practice. We have simplified MOC's learning sections from the former six to just three for ease of use. With greater emphasis on the use of multiple learning strategies, the new MOC learning framework provides you with more choice of learning activities, more control to plan your professional development and greater incentives to participate in self-learning and assessment activities.

The significantly revised MAINPORT web application is no longer just a tool to document learning activities. MAINPORT now provides you with a more personalized learning experience that includes access to a wide variety of learning resources and programs.

To support the transition to the new MOC Program and MAINPORT we have recruited a group of continuing professional development educators that practice in each region of Canada. They are committed to helping you.

It is no exaggeration that the revised MOC Program represents a transformative change in continuing professional development to enhance the learning of the profession and advance the care of the public. As always, we are open to your comments and suggestions for continually improving this evolving professional development system.

C. Campbell

Craig Campbell, MD, FRCPC
Director, Office of Professional Affairs

What is Maintenance of Certification (MOC)?

The MOC Program is an evidence-informed educational initiative designed to support, enhance and promote the continuing professional development activities of MOC Program participants.

As a MOC Program participant, you are responsible for designing and implementing a personal continuing professional development (CPD) plan that is relevant to your professional roles and responsibilities. To support this lifelong learning strategy the Royal College implemented the MOC Program in 2001 in partnership with faculties of medicine, the national specialty societies across Canada and the Federation of Medical Specialists in Quebec.

You likely already engage in many of the learning activities outlined in the MOC Program's learning framework. The MOC Program provides strategies and tools to document the learning activities and outcomes that enhance your practice and helps you develop a learning plan for the future. A central purpose of the MOC Program is to enable specialists to build evidence-informed practices that enhance the quality of specialty care. As well, the MOC Program helps enable the identification, documentation and validation of learning outcomes and practice enhancements for purposes such as re-licensure or privileges to practice.

A self-regulating system

As a specialist practising in Canada, you are a member of an entrusted profession that has been privileged with the responsibility of self-regulation. Physician revalidation requires you to demonstrate your commitment to continued competent performance in practice through participating in a recognized system of continuing professional development. The MOC Program is one of the recognized systems of continuing professional development for specialists that delivers multiple strategies to ensure your learning enhances the knowledge, competencies and performance you require for your professional practice and to meet your lifelong learning goals.

An evolving MOC Program

The revised MOC Program is streamlined and more flexible than the original program, offering a wider range of learning activities for managing your continuing professional development.

Expanded

The new MOC Program focuses more closely on self-assessment and performance-assessment activities, including the use of simulation as important learning strategies for physicians and health care teams. Assessment is an important learning strategy because it enables specialists to recognize opportunities for further learning in areas relevant to their practice.

Evidence-informed

The revised MOC Program is informed by two streams of evidence: a survey of 3,000 Fellows that summarized their views and opinions based on their experience with MOC, and a thorough review of the CPD research literature. Collectively, the data from these two streams identified five distinct themes for improvement, which included a call for a greater emphasis on outcomes and greater support for learning in practice. Read more about the five themes **here**.

Flexible

The new MOC Program balances a time-based credit system with a system in which some credits are based on completion of an activity. The new MOC also provides credits for a wider range of learning activities than under the original program, providing greater flexibility for learning. Specialists have the autonomy to plan their CPD to meet MOC Program requirements.

Supportive

Germane to the revised MOC Program is an interactive MAINPORT web application that is more user-friendly and graphically appealing than the former version. The new MAINPORT moves beyond being a process-oriented recording tool toward a more streamlined documentation and planning system that focuses on important learning outcomes. An expanded education support program enables you to receive support from a **CPD educator** in your region or province.

Simplified

The new MOC Program includes an updated learning framework that reduces the number of learning sections from six to three. The new learning sections are: group learning, self-learning and assessment. The self-learning and assessment sections offer greater incentives for specialists to pursue activities within these learning sections.

Read about the MOC Program's mission, vision and learning principles **here.**

"The practice of medicine continues to evolve: it is therefore fitting that the spectrum of activities related to the roles that physicians play is increasingly recognized in the new MOC Program."

Shubhayan Sanatani
MD, FRCPC, Pediatric Cardiology, Vancouver, B.C.

Continuing professional development is vital to lifelong learning

Continuing professional development (CPD) is a holistic approach to learning that focuses on the broad range of competencies required for your professional practice.

In CPD, your professional practice is at the centre of your learning. Although continuing medical education (CME) plays a significant part in your ongoing medical expert role, CPD involves a more holistic approach to learning.

CPD spans a wide range of learning including clinical education, practice management, risk management, professionalism, quality of care and patient safety, communication and collaboration skills, ethics and evidence-based care. Unlike traditional CME, CPD includes a variety of learning formats such as small-group and self-directed learning, and focuses on a broad range of outcomes. Therefore, CPD includes any learning activity that enhances the knowledge, skills and competencies you require for your professional practice.

Lifelong learning as a goal
Specialist practice is complex and multifaceted. Thus, you need tools and strategies to manage your professional development over time and ensure competence throughout your career. As you identify your lifelong learning needs, you may find it helpful to ask yourself a few key questions:

- *What are my current professional roles and responsibilities?*

- *What areas of expertise are essential to my practice and what new areas of expertise would I like to acquire?*

- *How will I scan my environment to identify new developments or skills that I can apply to my practice?*

- *What questions or issues do I need answered?*

- *What areas of practice should I assess? How am I going to compare my practice with an ideal practice?*

- *How can I evaluate the degree to which my practice reflects the CanMEDS competencies?*

Lifelong learning for practice

Planning for defined outcomes

Planned learning is one way to reach the defined outcomes you intend to achieve through your continuing professional development (CPD). One component of an effective lifelong learning plan identifies questions, issues or problems in your practice, incorporates learning activities that address these issues and assesses what you have achieved to attain your learning goals.

Any lifelong learning plan should be relevant to your professional roles and responsibilities (i.e., the scope of your practice), your professional needs — including those you currently recognize and those you can identify only through assessment — and the competencies you require to practise exemplary specialty medicine.

The MOC Program's new MAINPORT web application incorporates a professional development planning tool that assists you in your efforts to identify learning activities best suited to achieve the learning goals unique to your practice.

Learning across multiple professional practice contexts

In the MOC Program, your professional practice is at the centre of a lifelong learning plan, providing a key driver for your continuing education as well as providing the practical situations that make such learning possible.

Learning can happen in an office or operating room, during a teaching session or administrative meeting, when you attend formal courses or rounds, or when you read a journal article. Daily work routines provide you with a wide range of learning opportunities as you update your skills, gain new information and improve your ability to communicate with patients and collaborate with other members of inter-professional health teams. As such, learning is no longer viewed as an obstacle or interruption to your practice. By linking learning to practice, you embrace a commitment to improve the quality of care you provide and to enhance your professional practice.

The MOC Program's three learning sections provide ample opportunities to customize your learning plan according to the activities that best suit your learning style and the learning needs of your professional practice.

Lifelong learning in professional practice includes planning, learning, recording and reflecting.

Recording as a part of learning

Although physicians have always embraced lifelong learning as a central professional ethic, documenting what they have learned is a new professional expectation.

Why should you document your learning?

Documentation is part of the learning process. When you document your learning process and the outcomes or improvements you have achieved, you have an opportunity to review and enhance the effectiveness and efficiency of future learning.

Documentation is also central to validation and demonstrating your accountability to your peers, patients and the health care system. Many aspects of specialty practice require validation: the quality of record keeping in clinical care or the documentation of the scientific methods that underlie research practices. Similarly, documentation validates your lifelong learning activities: the areas of your practice you reviewed, the processes you used and the outcomes that contributed to or enhanced your practice.

Reflecting in, on and for practice

By reflecting on your learning and practice experiences, you develop a greater understanding of the new knowledge, skills or competencies you have acquired and how these can be effectively integrated into your professional practice to achieve the best possible health outcomes. Reflection can be useful during or after a learning activity.

The new MOC Program encourages reflection by promoting self-learning and self-assessment. Assessment in the new MOC framework enables you to identify where improvements can be made and enables you to plan opportunities for further learning. Assessment in the MOC Program must be driven by data and accompanied by feedback.
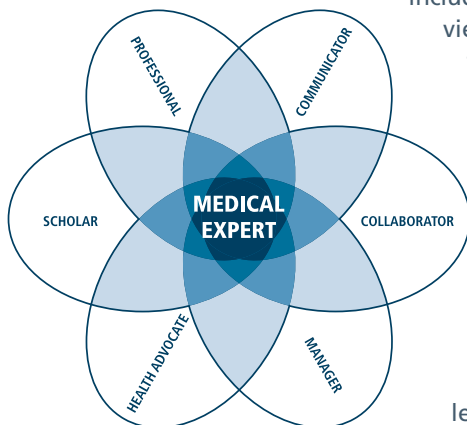
CanMEDS and the MOC Program

The revised MOC Program supports the CanMEDS Physician Competency framework by enabling the planning, recording and reporting of your activities completed across all CanMEDS Roles.

CanMEDS is a framework that describes the essential competencies physicians need to practise high-quality specialty care. It provides a valuable framework that specialists can use to plan and record their learning activities across any area of professional practice.

The learning processes in the MOC Program are relevant to acquiring or refining competencies that enhance performance. The new MAINPORT web application includes a goal-setting exercise where you can connect each goal to one or more CanMEDS Roles. More than that, the system will include a CanMEDS report so that you can view the credits you have completed across the CanMEDS Roles.

CanMEDS Roles apply to all dimensions of professional practice. While all specialists require medical expertise to investigate, diagnose and treat illnesses, the CanMEDS competencies are equally relevant to a specialist's ability to educate, administrate and conduct research. Each of these dimensions requires learning across all CanMEDS Roles.

CanMEDS Roles

The **Medical Expert** applies medical knowledge, clinical skills and professional attitudes in the provision of patient-centred care.

The **Communicator** effectively facilitates the doctor-patient relationship and the dynamic exchanges that occur before, during and after the medical encounter.

The **Collaborator** works effectively as a member of a health care team to achieve optimal patient care.

The **Manager** is an integral participant in health care organizations, organizing sustainable practices, making decisions about allocating resources and contributing to the effectiveness of the health care system.

The **Health Advocate** uses expertise and influence to advance the health and well-being of individual patients, communities and populations.

The **Scholar** demonstrates lifelong commitment to reflective learning and creates, disseminates, applies and translates medical knowledge.

The **Professional** is committed to the health and well-being of individuals and society through ethical practice, professional-led regulation and high personal standards of behaviour.
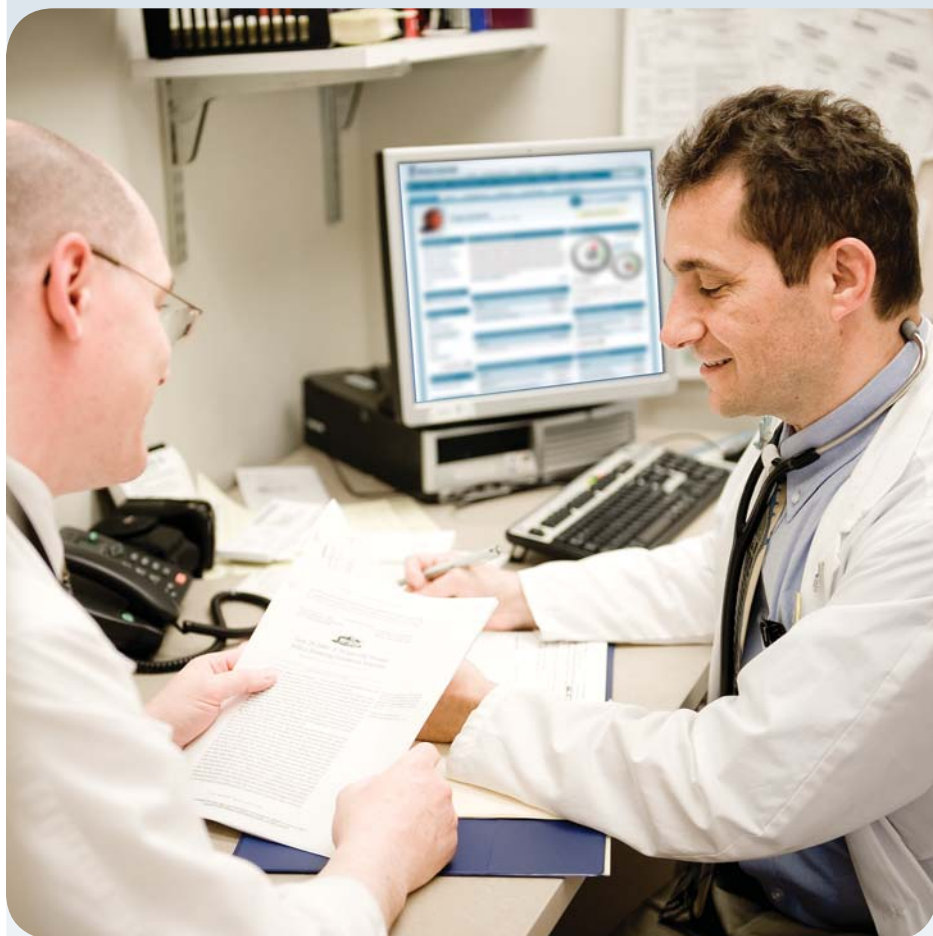
Using the MOC Program

The new MOC Program incorporates a blended credit system, offering MOC Program participants more flexibility in their learning activities.

A learner-centred MOC framework

Once you have given thought to your lifelong learning needs, you can use learning activities within the MOC Program framework to address specific questions, issues, competencies and areas of professional expertise.

The Royal College has substantially revised the MOC framework to address the concerns and recommendations of Fellows,[1] who viewed the former system as overly complex. The revised framework has simplified the number of learning sections from six to three, added a wider range of learning activities, and provided you with more choice in planning and managing your professional development to address your learning needs.

The new framework is informed by a thorough review of CPD literature, which has provided solid evidence about how continuing professional education can best serve the lifelong learning goals of specialists. To assist you further, the Royal College has established 12 **CPD educators** who practice in each region of Canada and who are available to assist you in understanding and using the MOC Program in your practice.

Earning credits

As a MOC Program participant, you earn credits by participating in approved learning activities and self-reporting on your learning activities and outcomes through MAINPORT, a web application that serves as an on-line learning support system. (For information about the new features of MAINPORT, see page 12). You are free to choose learning activities most relevant to your practice and learning goals.

The new MOC Program framework describes examples of specific learning activities for which specialists can earn credits — and the number of credits associated with each of the three learning sections.

Importantly, the revised MOC Program framework uses a blended credit system in which some credits are earned by the hour and others are based on the completion of specific activities. In introducing a blended system, the new framework incorporates a wider range of learning activities, offering MOC Program participants greater flexibility in their learning. **Learn more** about the specific learning sections under the new framework and the activities and credits associated with each.

MOC Program cycle requirements

The MOC Program is based on a five-year cycle, the first cycle beginning January 1 of the year following admission to the program. You must complete a minimum number of credits each year and for each cycle. This includes a minimum of

- **40 credits** per year
- **400 credits** over each five-year cycle.

You must fulfill both requirements to satisfy MOC Program regulations. All learning activities must be submitted in MAINPORT to receive credit. Each year, you can access and print your MOC status report of the credits you have earned. A completion certificate will be available online when you complete a MOC cycle.

Bonus period

The time between when a Fellow joins the Royal College and starts a cycle is considered a bonus period; during this time, Fellows are not required to participate in the MOC Program. However, any learning activities that a Fellow completes during the bonus period can be included in the first MOC cycle. Once a cycle is completed, the Fellow is automatically registered in a new cycle. Specialists, PhDs and other licensed Health Care Professionals who are not members of the Royal College and are participating in the MOC Program may be eligible for a bonus period depending on their date of registration.

75%

Seventy-five per cent in any one section

Under the new MOC learning framework, you can earn up to 75 per cent of credits under any one section. This requirement supports the principle that multiple learning strategies are required to address the range of needs stimulated by practice.

View frequently asked questions about the MOC Program.

Credit validation

The Royal College established a credit validation process for MOC Program participants who report learning activities after the January 31 credit submission deadline or who are requested to provide supporting documentation for their continuing professional development (CPD) activities.

Credit validation allows individuals to submit their learning activities through MAINPORT but requires that they provide supporting documentation for their activities (such as a certificate of attendance for attending a conference). Such documentation can be attached as a file against the MAINPORT submission or can be mailed or faxed to the Royal College's Office of Professional Affairs.

Learning more about the MOC Program credit system

The Royal College **website** contains more information for physicians participating in the MOC Program. You can access information on many topics such as approved CPD activities, planning self-approved small group events and creating personal learning projects. We strongly encourage MOC Program participants to check the website regularly for new information about MOC.

The Royal College of Physicians and Surgeons Credit Validation Office of Professional Affairs 774 Echo Drive Ottawa, ON K1S 5N8 Fax: 613-730-2410

*Visit the **Royal College website** for more information or email: **validation@royalcollege.ca***

Introducing the new MAINPORT

The new MAINPORT is a web application for not only documenting your learning activities and outcomes, but also managing your continuing professional development and accessing learning resources and programs.

MAINPORT

The Royal College designed a new MAINPORT web application in response to Fellows' calls for a streamlined documentation process for the MOC Program. More than a database, the revamped MAINPORT is a powerful tool to assist you not only in documenting your learning activities and outcomes, but also in helping you plan and manage your continuing professional development and access learning resources and programs.

User-friendly interface
The new MAINPORT has an updated look and feel that includes a number of new features for ease of use.

Mobile functionality
The Royal College has developed an application that enables you to access MAINPORT from your iPhone, iPad or BlackBerry. Although the application for handheld devices does not deliver full MAINPORT functionality, it does enable you to input and view your learning activities.

Powerful tools
Through MAINPORT's CPD planning tool, you can set learning goals, associate particular learning activities with those goals and track your progress over time. Another valuable tool is MAINPORT's My Holding Area, in which you can begin the process of documenting part of a learning activity, save your work and then return to finish it later.

Seamless documentation
Another new feature of MAINPORT is its interoperability with conference registration systems and other learning programs. MAINPORT is capable of receiving registration information directly from InfoPOEMS managed by the Canadian Medical Association, as well as participation in conferences and self-assessment programs, relieving specialists of the responsibility to input this information independently. The Royal College intends to build on this feature to improve MAINPORT's ease of use for specialists.

Learning connected to CanMEDS
The new MAINPORT enables you to connect every learning activity to one or more CanMEDS Roles. MAINPORT's CanMEDS Roles help you plan learning activities to address multiple competencies.

"The new MAINPORT is more effective as a CPD/ learning management system than the old version. It has a more inviting interface and enables me to track my activities as I move through the process of developing them and recording them."

Steven Simpson
MD, FRCPC, Psychiatry,
Calgary, Alta.
Royal College CPD educator

Using MAINPORT

Help with MAINPORT is available through an online tutorial. You can also contact the Membership Services Centre via email at **cpd@royalcollege.ca** or phone 1-800-461-9598 or 613-730-6243.

Key features of MAINPORT

My Reports
In MAINPORT you can print a Credit Summary report displaying your total MOC credits by year and MOC section, a Yearly MOC Adherence letter confirming the number of credits completed in a given year, a Transcript of CPD Activities that provides a summary of all your entered CPD activities, and a MOC Completion Certificate when you have successfully completed a MOC cycle.

My Holding Area
MAINPORT's My Holding Area allows you to begin the process of documenting a learning activity, save your work and return to finish it later. You can review activities awaiting credit validation and those activities automatically uploaded by other organizations.

MOC Resources
MAINPORT provides you with links to databases, self-assessment programs, tools, and many online journals. The My Resources section of the dashboard enables you to add personal resources for quick access.

Enter a CPD activity
You can document completed learning activities and outcomes using simple templates created for the group learning, self-learning and assessment sections. MAINPORT enables you to attribute every learning activity to one or more CanMEDS Roles.

My CPD Planning
MAINPORT enables you to document professional practice goals, set a plan and date to complete each goal, and link future learning activities and track progress to accomplishing each goal.

Accessing MAINPORT

MAINPORT can be accessed at **mainport.royalcollege.ca.** To log in, you will need your Royal College ID and password. If you do not know your password or need to change your password, please contact the Membership Services Centre.

In addition, the Royal College has developed a mobile device application that enables you to access MAINPORT from your iPhone, iPad or BlackBerry.

MOC Program participants

When you join the Royal College as a Fellow, you are automatically registered in the MOC Program.

Participation in MOC is mandatory for specialists admitted into or renewing membership in the Royal College, and who use the FRCPC and FRCSC designations to practice. All physicians participating in the MOC Program are included in the public Directory of Fellows. The following categories of physicians are required to participate in the MOC Program.

Active Fellows
This includes active and emeritus Fellows in part-time or full-time practice in clinical, laboratory or community medicine.

Fellows engaged in related professional activities
These are Fellows who have retired from clinical, laboratory or community medicine practice but remain engaged in administration, research or teaching.

Part-time and semi-retired Fellows
Fellows in part-time practice and semi-retired Fellows are required to participate in and meet the expectations of the MOC Program. All physicians who maintain a licence to practise are required to maintain their knowledge, skills and competencies for the benefit of their patients; a reduction in working hours does not correlate with a reduced commitment to lifelong learning, reflection and assessment.

Physicians on Fellowships
This includes Fellows who continue their postgraduate education following initial certification in recognized fellowships or residency programs.

International Fellows

Fellows residing and practising outside of Canada participate in the MOC Program unless they are eligible to participate in an international maintenance of certification or recertification program recognized by the Royal College. International Fellows can obtain more information through the Membership Services Centre about the international maintenance of certification programs the Royal College recognizes.

Since the MOC Program encompasses a wide range of group learning, self-learning and assessment activities, 400 credits per five-year cycle is the minimal requirement for all Fellows in full-time and part-time practice.

Fellows exempt from participating in MOC

Fully retired Fellows

Fellows who are fully retired from all medical and health-related professional activities are exempt from participating in the MOC Program. Please notify the Royal College's Membership Services Centre of any changes to membership status.

Resident affiliates

Resident affiliates are exempt from participating in MOC, although they are encouraged to use the MAINPORT web application to meet the specialty training requirements of their postgraduate education program.

Fellows on health or family-related leave of absence

Program participants who are not able to practice for health or family reasons for more than one year are exempted from the MOC Program until they return to part-time or full-time practice. For more information, please contact the Royal College's **Membership Services Centre**.

Additional program information for licensed specialists

Specialists and other Health Care Professionals with a licence to practise in Canada may join the MOC Program to meet provincial physician revalidation requirements, for personal or professional reasons, or to meet their workplace requirements. Such participants pay a registration fee each year for access to the MAINPORT web application, Royal College support services and regional CPD educators.

MOC Program and PRA/PER participants

International medical graduates participating in the Practice Ready Assessment (PRA) and Practice Eligibility Route (PER) are pursuing a special route to certification through the Royal College. Special requirements and exemptions apply to these two groups. **Learn more** about the MOC Program, PRA and PER.

Getting assistance with MOC

As your main point of contact, the Royal College's **Membership Services Centre** is available to assist you. For help in your region, specialists may contact the MOC Program's **CPD educators**.

CPD educators

The need for greater support in knowing how to use the MOC Program resulted in the Royal College recruiting 12 regional CPD educators who practise in each region of Canada to assist specialists in their lifelong learning.

The CPD educators — all Fellows of the Royal College — have been tasked with identifying and developing educational strategies and tools to support specialists' learning in practice. As an example, educators will run workshops and other educational activities to familiarize specialists with the new MAINPORT web application, revised framework and credit system of the MOC Program. Educators will also assess the specific learning needs of specialists as part of an ongoing process to develop the best possible educational materials.

View a list of CPD educators across Canada.

Membership Services Centre

The Royal College's Membership Services Centre can be reached at: 1-800-461-9598 or 613-730-6243

For MAINPORT and Royal College website password information, email: **membership@royalcollege.ca** or **cpd@royalcollege.ca**

For membership inquiries, email: **membership@royalcollege.ca**

For continuing professional development inquiries, email: **cpd@royalcollege.ca**

"My goal is to facilitate understanding and engender enthusiasm for MOC and MAINPORT as tools for continuing professional growth. Specialists can contact me any time with questions."

Laurette Geldenhuys
MD, FRCPC, Anatomical Pathology, Halifax, N.S.
Royal College CPD educator

ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA | **MOC** PROGRAM
enhancing learning, advancing care

Framework of Continuing Professional Development Activities

This table summarizes the learning sections under the new MOC framework.
A MOC Program participant may earn up to 75 per cent of their required credits from any one learning section.
Activities submitted via MAINPORT are automatically converted into credits.

SECTIONS	CATEGORY	EXAMPLES	CREDIT RATING
Section 1: Group learning	**Accredited activities** Conferences, rounds, journal clubs or small-group activities that adhere to Royal College standards. Accredited group learning activities can occur face-to-face or web-based (online).	• *Accredited rounds, journal clubs, small groups* • *Accredited conferences*	*1 credit per hour*
	Unaccredited activities Rounds, journal clubs or small-group activities in the process of meeting the educational and ethical standards; rural or local conferences that have no industry sponsorship.	• *Unaccredited rounds, journal clubs, small groups* • *Unaccredited conferences without industry support*	*0.5 credits per hour (maximum of 50 credits per cycle)*
Section 2: Self-learning	**Planned learning** Learning activities initiated by the identification of a need, problem, issue or goal, either at or separate from the point of care, leading to the creation of a learning plan developed independently or in collaboration with peers or mentors.	• *Fellowships* • *Formal courses* • *Personal learning projects* • *Traineeships*	*100 credits per year* *25 credits per course* *2 credits per hour* *2 credits per hour*
	Scanning Resources that physicians use to enhance their awareness of new evidence, perspectives or findings that may be potentially relevant to their professional practice.	• *Journal reading* • *Podcasts, audiotapes, videotapes* • *Internet searching (Medscape, UpToDate, DynaMed)* • *InfoPOEMs, CardioCLIPs*	*1 credit per article* *0.5 credits per activity* *0.5 credits per activity* *0.25 credits per activity*
	Systems learning Activities that stimulate learning through contributions to practice standards, patient safety, quality of care; curriculum development; or assessment (examination boards, peer review).	• *Practice guideline development* • *Quality care/patient safety committee* • *Curriculum development* • *Examination development* • *Peer assessment*	*20 credits per year* *15 credits per year* *15 credits per year* *15 credits per year* *15 credits per year*
Section 3: Assessment	**Knowledge assessment** Programs accredited by Royal College CPD providers that provide data with feedback to individual physicians regarding their current knowledge base to enable the identification of needs and the development of future learning opportunities relevant to their practice.	• *Accredited self-assessment programs*	*3 credits per hour*
	Performance assessment Activities that provide data with feedback to individual physicians, groups or interprofessional health teams related to their personal or collective performance across a broad range of professional practice domains. Performance assessment activities can occur in a simulated or actual practice environment.	• *Simulation* • *Chart audit and feedback* • *Multi-source feedback* • *Educational / administrative assessments*	*3 credits per hour* *3 credits per hour* *3 credits per hour* *3 credits per hour*

Framework of CPD activities — Descriptions, credits and documentation requirements
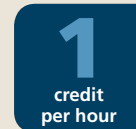
Section 1 – Group learning

This section includes accredited and unaccredited learning activities for groups large and small, including rounds, journal clubs, small-group learning sessions and conferences.

Accredited activities

ONE CREDIT PER HOUR

Accredited group learning activities adhere to the Royal College's educational and ethical accreditation standards. Each activity must be designed to address the identified needs of specialists and integrate didactic and interactive learning strategies.[2] Accredited activities must include an evaluation system that provides evidence about whether the program's intended learning objectives were met and whether the content was balanced and free of commercial bias. Finally, the evaluation should prompt specialists to reflect on what they learned.

All group learning activities must be developed or co-developed by a physician organization to ensure the content presented was evidence-informed and met the highest standards of academic integrity.

1
credit per hour

Examples of group learning activities

1. Rounds, journal clubs and small-group learning sessions

These self-approved, accredited group learning activities provide specialists with opportunities to learn with their peers, compare their current knowledge and approach to practice, and become aware of new evidence relevant to their practice. Regularly sequenced group activities, as a result, can lead to changes in professional practice.[3] Such activities must occur at least six times per year and are scheduled with their objectives circulated in advance. These activities can be sequenced so that learning in one round can be linked to future rounds. The activities — which can occur at formal venues such as hospitals, at informal ones such as private homes and via web or videoconferences — must be interactive in nature with peers discussing and exchanging ideas and learning.

2. Conferences

Accredited conferences are typically large-group activities planned once in a year but may be designed to occur several times per year at multiple locations. Conferences have been shown to have a significant impact on knowledge with a more limited impact on clinical behaviours and patient outcomes.[2,4,5] Examples of accredited conferences include conferences, workshops and seminars. These activities can take place within Canada, outside of Canada or via the web.

![M MAINPORT logo]

For all accredited conferences, MOC Program participants must record in MAINPORT the group activity they attended, the learning outcomes they identified for their practice and the total hours of learning. For all accredited rounds, journal clubs and small-group learning activities, MOC Program participants must record in MAINPORT the round(s) program attended each year, the learning outcomes identified for their practice and the total hours of learning. Note: it is not a requirement or expectation to document individual rounds, etc. Identifying the relevant CanMEDS Roles for accredited rounds, journal club or small-group learning program is optional.

If required for credit validation, MOC Program participants will be asked to provide evidence of their participation in an accredited group learning activity.

In Canada,

all conferences, workshops and seminars developed by accredited CPD providers recognized by the Royal College are automatically approved as accredited group learning activities.

Conferences and courses developed or co-developed by Canadian physician organizations must be reviewed and approved by an accredited CPD provider before receiving approval as an accredited group learning activity.

Outside of Canada,

all conferences and workshops developed by a university, academy, hospital, specialty society or college are automatically approved as accredited group learning activities.

For web conferences,

e-group activities must meet similar educational and ethical standards for live conferences and must be reviewed and approved by a Royal College CPD provider before being approved as an accredited web conference.

Unaccredited activities
0.5 CREDITS PER HOUR

.5
credits
per hour

Some group learning activities, such as rounds or rural conferences that have not completed the process to become registered, self-approved learning activities, or local conferences, which do not receive any industry support, are defined as unaccredited. Although these activities may be a valuable learning experience for specialists, they qualify for a lower credit rating than accredited group learning activities because they have not been reviewed or approved.

For all unaccredited group learning activities, specialists must record in MAINPORT the activity they attended, the learning outcomes identified for their practice, and the total hours of learning. Identifying the relevant CanMEDS Roles for each unaccredited group learning activity is optional.

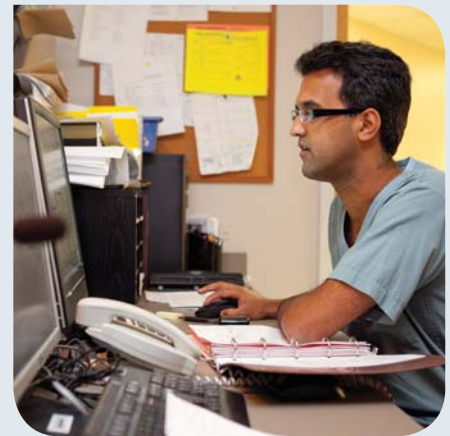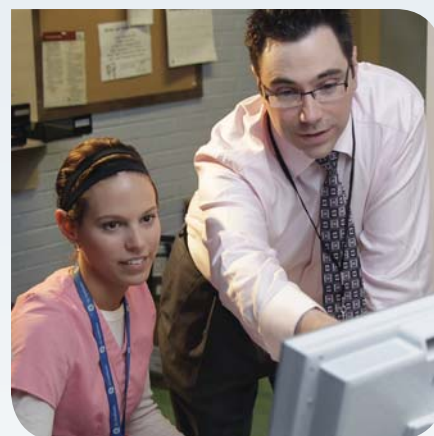If required for credit validation, MOC Program participants will be asked to provide evidence for their participation in an unaccredited group learning activity. Please see the section on Credit Validation on page 11 for further details.

Section 2 – Self-learning

Self-learning occurs as you engage in learning activities where you are responsible for identifying a need, goal or objective relevant to an aspect of your professional practice (which may include clinical, teaching, research or administrative practice), choosing how you want to learn, and identifying the conclusion or outcome.

For the purpose of the MOC Program, we have identified three approaches or types of self-learning: planned learning, scanning and systems learning.

> Section 2 includes activities planned to address specific needs, enhance awareness of new evidence potentially relevant to practice or enhance the quality of multiple systems.

Types of self-learning

1. Planned learning

These are learning activities in which an individual or group identifies a need for further learning and then plans activities to address that need. Thus, planned learning activities reflect the defined or perceived needs of individuals (personal planned learning) or groups (collective planned learning). Planned learning activities are based on models of reflection and reflective practice.[9,10] These activities are examples of self-monitoring[6] where individuals determine when they need to slow down and seek solutions that will enable them to acquire and apply new information in their practice.[7] Often, the outcome of planned learning is a change in practice.[8]

Examples of planned learning activities

Personal learning projects
TWO CREDITS PER HOUR

These projects can be planned to acquire and apply information and solutions at the point of care[11,12] or over a variable period of time. Specialists must record in MAINPORT the question or issue they created, the learning outcomes identified for their practice, and the total hours of learning. Recording the resources used to learn, and identifying the relevant CanMEDS Roles for each planned learning activity is optional.

No additional documentation is required for credit validation.

2
credits
per hour

Traineeships
TWO CREDITS PER HOUR

These are activities planned in collaboration with a mentor or supervisor and are typically focused on acquiring new knowledge or skills. The specialist practices under the supervision of a supervisor or mentor who provides feedback to the specialist related to their achievement of the defined learning objective(s).

Specialists must record in MAINPORT the focus or purpose of the traineeship, the learning outcomes identified for their practice and the total hours of learning. Identifying the relevant CanMEDS Roles for individual traineeships is optional.

If required for credit validation, specialists must provide evidence of their completion of a traineeship. Please see section on credit validation on page 11 for further details.

2
credits
per hour

Formal courses
TWENTY-FIVE CREDITS PER COURSE

These activities include Fellowships and participation in formal certificate programs, Masters or PhD programs. Fellowships are equivalent to completing four courses each year.

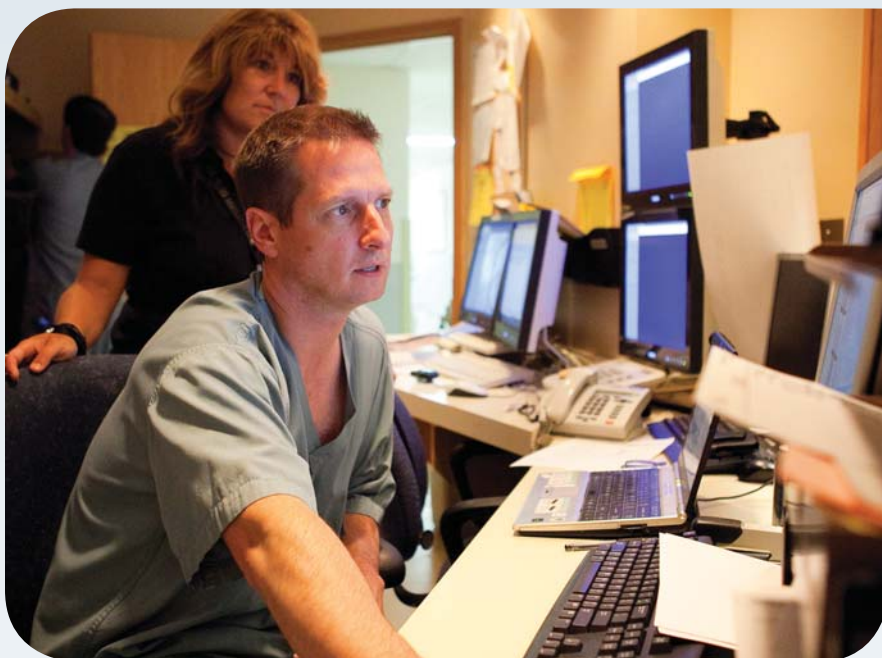Specialists must record in MAINPORT the name of the Fellowship program or formal course and the learning outcomes for their practice. Identifying the relevant CanMEDS Roles for each course is optional.

If required for credit validation, specialists must provide evidence of their completion of each formal course or fellowship. Please see section on credit validation on page 11 for further details.

25
credits
per course

2. Scanning

Scanning activities are learning resources specialists use to scan their environment regularly for new ideas, innovations or research findings relevant to their professional practice. Scanning differs from planned learning activities in that scanning does not require the specialist to define a specific need that triggers the search for information or evidence.

Specialists must record in MAINPORT each scanning activity they completed and document a learning outcome or potential outcome for their practice. Identifying the relevant CanMEDS Roles for each scanning activity is optional.

No additional documentation is required for credit validation.

Examples of scanning activities
(Note: these lists of activities are not exhaustive.)

Reading journal articles, books or clinical practice guidelines
ONE CREDIT PER ACTIVITY

1 credit per activity

Viewing podcasts or videotapes, or listening to audiotapes
0.5 CREDITS PER ACTIVITY

.5 credits per activity

Internet searching (such as Medscape and UpToDate, Dynamed)
0.5 CREDITS PER ACTIVITY

.5 credits per activity

Viewing online summaries of research evidence such as InfoPOEMS or CardioCLIPS
0.25 CREDITS PER ACTIVITY

.25 credits per activity

3. Systems learning

Specialists learn by participating in and contributing to initiatives that enhance the quality of the health care system, educational or assessment systems. Systems learning activities are valuable in promoting learning across multiple CanMEDS Roles. The Royal College has identified three categories of systems learning and provided examples of the types of activities that qualify. (Note: these lists of activities are not exhaustive.)

Types of systems learning

Health systems learning

This includes participating in patient safety initiatives such as reducing adverse event rates or wait times, quality of care initiatives such as a hospital's continuous quality improvement (CQI) process, and clinical performance standard-setting activities such as implementing performance metrics for clinical programs.

Educational systems learning

This includes curriculum development at the undergraduate, postgraduate or professional practice level, review of education programs and development of clinical practice guidelines.

Assessment systems learning

This includes designing examination questions, developing examination standards for national certification processes and assessment of a peer's practice.

Systems learning activities

All systems learning activities earn
15 CREDITS PER YEAR

15
credits
per year

Except for practice guideline development, which earns
20 CREDITS PER YEAR

20
credits
per year

Specialists must record in MAINPORT each systems learning activity they completed and the learning outcomes identified for practice. Identifying the relevant CanMEDS Roles for each systems learning activity is optional.

If required for credit validation, specialists must provide evidence of their participation in a systems learning activity. Please see section on credit validation on page 11 for further details.

Section 3 – Assessment

Assessment activities are important learning strategies. However, the ability of specialists to accurately evaluate their own knowledge, skills and performance without external measures is limited.[13]

Assessment activities provide specialists with tools and a process that generates data and provides feedback to facilitate an assessment of multiple aspects of a competence and performance in relation to external standards. In this way, assessment enables specialists to identify previously unperceived needs to guide their future learning.

Evidence has shown the benefits specialists derive from seeking out and engaging in assessment activities[14]—a key reason why the Royal College has added the incentive of three credits per hour for such activities.

All assessment activities earn THREE CREDITS PER HOUR

3 credits per hour

Types of assessment

1. Knowledge assessment

Self-assessment programs provide specialists with a process to receive data and feedback about their knowledge base. Specialists then use this feedback to identify areas for improvement and create appropriate learning plans. Each accredited self-assessment program is designed and required to meet defined educational and ethical standards.

Specialists must select in MAINPORT the accredited self-assessment program they completed, record their conclusions and/or develop a learning plan they intend to pursue and the total hours of learning.[15]

If required for credit validation, specialists must provide evidence of their completion of a self-assessment program.

2. Performance assessment

Performance assessment can occur in a simulated environment or in the actual practice environment of an individual (personal performance assessment), group (of specialists), or inter-professional health team (collective performance assessment).

Examples of performance assessment

Simulated practice environment

Individual specialists, groups of specialists or inter-professional health teams can participate in simulations within accredited simulation programs, or simulations included within accredited group learning activities. Simulation activities reflect a broad range of fidelity (from standardized patients and joint models to programmed mannequins) and can be designed to be administered through the web or face to face. Simulations lead to effective learning by providing feedback during the learning experience and by enabling physicians to engage in repetitive actions.[16,17]

Actual practice environment

Performance assessment strategies provide specialists with data and feedback related to their actual performance in practice across a broad range of situations.[18] Specialists can assess their performance in their clinical, education, research or administrative practice. Performance can be assessed within any Role in the CanMEDS framework. Examples of processes that provide such feedback include, but are not limited to, audit and feedback,[19] educational outreach visits[20] and multi-source feedback.[21]

Specialists must record in MAINPORT the area or aspect of practice they assessed, the conclusions and/or learning plan they intend to pursue and the total hours they participated in the assessment activity. Identifying the relevant CanMEDS Roles for each assessment activity is optional.

If required for credit validation, specialists must provide evidence of their participation in a performance assessment activity. Please see section on credit validation on page 11 for further details.

Regulations and policies

Definitions

Maintenance of Certification (MOC) Program: the program of professional development administered in accordance with Article 6 of Royal College Bylaw No. 16.

Fellow: a person who has been admitted to Fellowship in the Royal College in accordance with Article 5 of Bylaw No. 16 (Bylaw No. 16, Article 5, Admission to Membership) and who is in compliance with the MOC requirements of Article 6 of Bylaw No. 16 (Bylaw No. 16, Article 6, Maintenance of Certification Program).

Related professional activities: activities that either directly or indirectly contribute to or enhance the quality of specialty medicine, including aspects of medical administration, research, teaching and consulting.

Directory of Fellows: a public register of Fellows on the Royal College's website that lists the names of Fellows participating in the MOC Program and other information as prescribed by the Royal College in accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA) and Article 3.2 of Bylaw No. 16 (Bylaw No. 16, Article 3.2, Register of Fellows).

Cycle: A period of time that is five years in length unless an extension is granted for extenuating circumstances.

MAINPORT: a **web application** MOC Program participants use to submit and track continuing professional development activities, manage their learning and access web resources and programs that contribute to their learning.

Non-adherence: the failure of a MOC Program particpant to report a minimum of 40 credits in any year of a five-year cycle.

Non-compliance: the failure of a MOC Program particpant to achieve a minimum of 400 credits by the end of a five-year cycle.

Program Regulations

2.1   MOC and Fellowship

2.1.1   Participation in the MOC Program is mandatory for admission to and renewal of Fellowship in the Royal College, and for use of the designations FRCPC and FRCSC (Bylaw No. 16, Article 5.2.3).

2.2   Registration and participation

2.2.1   All active Fellows are automatically registered in the MOC Program subsequent to becoming members and are required to meet all MOC Program requirements.

2.2.2   Fellows whose work involves the practice of clinical, laboratory or community medicine are required to participate in the program. Fellows whose professional work involves activities referred to as related professional activities are also required to participate in the program.

2.2.3   Fellows admitted as Medical Scientists or through the Academic Certification route are required to participate in the program.

2.2.4   Submission of continuing professional development activities completed in each year of a cycle must be submitted using **MAINPORT** to the Royal College by January 31 for the previous year.

2.2.5   Records related to continuing professional development activities will remain confidential.

2.3   Exemptions

2.3.1   Fellows who are fully retired from clinical practice and all related professional activities are exempt from the MOC Program.

2.3.2   Royal College Honorary Fellows are not required to participate in the program.

2.3.3   Resident affiliates of the Royal College are encouraged but not required to participate in the program.

2.4   MOC Program requirements

2.4.1   MOC Program participants are required to complete a minimum of 40 credits in each year of a cycle by selecting and completing learning activities included in the Framework of Continuing Professional Development Activities.

2.4.2   Each MOC Program participant is required to complete a minimum of 400 credits during a five-year cycle.

2.4.3   A maximum of 75 per cent of credits can be completed in any one section for a given cycle.

2.4.4   MOC Program participants are responsible for reporting completed continuing professional development activities and documenting learning outcomes through **MAINPORT**.

2.4.5   MOC Program participants can review the number of credits documented and applied in **MAINPORT** at any time of an active cycle.

2.5   MOC Program cycle

2.5.1   The MOC Program cycle is five years.

2.5.2   Each cycle begins January 1 and concludes December 31 of the cycle's final year.

2.5.3   A bonus period may be provided to Fellows who join the Royal College as members and begin their first MOC cycle after the January 1 commencement date. All activities completed and reported during the bonus period contribute to the program requirement of reporting a minimum 400 credits during a five-year cycle. Specialists who are not members of the Royal College may be eligible for a bonus period depending on their date of registration.

2.5.4   Specialists absent from practice or related professional activities for more than four months but less than one year (e.g., medical or family leave) are eligible for a one-year extension to their cycle if they have not completed the program requirement of 400 credits by the end of the cycle. Specialists are requested to notify the Royal College's Membership Services Centre in writing during the year the leave occurs to ensure they are eligible for a cycle extension.

2.5.5   Specialists absent from practice or related professional activities for a period of more than one year (e.g., medical or family leave) will be granted a new cycle subsequent to returning to part-time or full-time practice or related professional activities. Specialists are requested to notify the Royal College's Membership Services Centre in writing during the year of the leave.

2.5.6   A completion certificate will be available online when a MOC Program participant completes a MOC cycle.

2.6   Public register

2.6.1   The Royal College maintains a public Directory of Fellows on its website.

2.6.2   The Directory of Fellows includes the Fellow's name and certified specialty(ies), information on whether the Fellow is participating in the MOC Program, and other information as prescribed by the Royal College in accordance with the Personal Information Protection and Electronic Documents Act (PIPEDA).

2.7   Credit validation

2.7.1   Each year specialists who report continuing professional development activities to the Royal College for a previous year may be selected to participate in credit validation and submit evidence (relevant to individual sections in the Framework of Continuing Professional Development Activities) supporting these activities to the Royal College's Office of Professional Affairs.

2.7.2   If a specialist does not submit evidence that validates self-reported activities, these activities and credits will be removed from their submissions.

Program Policies

3.1 Non-adherence policies

3.1.1   MOC Program participants are required to report a minimum of 40 credits of continuing professional development in each year of a cycle. MOC Program participants who fail to meet the requirement will be notified by the Royal College at the end of each year of non-adherence and will be provided with information on how to seek assistance through the Royal College Membership Services Centre to enhance their understanding of the MOC Program and select relevant continuing professional development activities. All MOC Program participants who are non-adherent will also be informed on how they can report learning activities completed in past years of their current cycle through the process of the credit validation.

3.1.2   After the third year of failing to report any learning activities, according to MOC Program regulations, the Fellow's status on the Directory of Fellows will state that the member has "not yet started to participate in the MOC Program." Upon reporting completed continuing professional development activities, a Fellow's status on the Directory will be updated to reflect his/her participation in the program.

3.1.3   Fellows who have not met the minimum requirement of 400 credits by the end of their five-year cycle will be subject to having their Fellowship terminated for non-compliance with the MOC Program (Bylaw No.16, Article 7.1.3). Fellows subject to having their Fellowship terminated for non-compliance with the MOC Program will be provided with an opportunity to appeal the impending removal of their Fellowship.

3.2   Leave of absence policies (medical or family leave)

3.2.1   MOC Program participants who leave practice for more than four months and return to part-time or full-time practice within one year are automatically eligible to have their cycle extended by one year if they have not met the program requirement of 400 credits by the end of that cycle.

3.2.2   MOC Program participants who leave practice for more than one year are given a new cycle when they return to part-time or full-time practice. The new cycle begins on January 1 of the year following their return to practice.

3.3   International maintenance of certification programs policy

3.3.1   International Fellows may be eligible to participate in an alternative maintenance of certification or recertification program recognized by the Royal College in lieu of participating in the Royal College's MOC Program. For more information visit **royalcollege.ca/moc**.

Mission, vision and learning principles

MOC Program vision

To promote the highest-quality specialty care through lifelong learning processes

MOC Program mission
To establish and implement educational standards, strategies and tools that enable specialists to develop a continuing professional development plan that is effective, efficient and integrated within their practice context.

MOC Educational principles
The following educational principles are foundational to the MOC Program's philosophy, framework and credit system. Collectively, they reflect the Royal College's commitment to learner-centered professional education.

Principle 1: Personal
Each specialist is responsible for designing and implementing a personal continuing professional development plan that is relevant to their professional roles and responsibilities. Learning activities can be planned within four dimensions of professional practice: clinical practice (the evolving knowledge, skills and competencies within the scope of specialty practice), educational practice, administrative practice and research practice. Specialists require the skills and abilities to describe their professional roles and responsibilities, develop learning plans or goals, and track the completion of these plans within MAINPORT.

Principle 2: Needs-based

The continuing professional development plans of specialists and the needs assessment strategies of CPD provider organizations should be based on identified perceived and unperceived needs. Unperceived needs can be identified in part through engagement in rigorous processes that provide personal data and feedback with or without peer review and mentoring.

Principle 3: Reflection

Reflection is a process that enables specialists to think critically about and learn from practice experiences for the purpose of challenging current assumptions and actions. In this way, specialists develop greater understanding, integrating and translating new knowledge or skills, and informing future action. Reflection is relevant during and after educational activities or clinical encounters; it can be an individual or group process.

Principle 4: Continuous improvement

A specialist's commitment to self-regulation and professional autonomy requires continuous engagement in learning activities that result in demonstrated improvements in knowledge, competence, performance and the health of patients.

Principle 5: Competency-based

Continuing professional development activities and outcomes should be designed to enhance the competencies required for professional practice. The CanMEDS framework describes the competencies against which any learning activity can be developed within the MOC Program. Although continuing medical education (CME) plays a significant role in a specialist's ongoing medical expert role, continuing professional development encompasses a more holistic approach to learning that includes but is not limited to communication and collaboration skills, advocacy, practice management, ethical decision-making and risk management, among others.

Principle 6: Choice

Specialists are ultimately responsible to choose appropriate learning methods to address identified needs and evaluate the outcomes of learning for practice in collaboration with their peers and patients. CPD organizations support physicians' learning by providing interactive learning strategies that promote the translation of knowledge and skills into practice. Specialists are encouraged to choose varying learning formats to address identified needs.

Principle 7: Inter-professional

The MOC Program promotes strategies that support learning within inter-professional health teams, groups or communities. Specialists practice within various health teams, groups or communities. Learning with and from various health professions is essential for continuing professional development and to enhance the quality of health care provided to patients.

Principle 8: Evidence-informed

Specialists must base their decisions or conclusions on the best available evidence. The evidence that informs practice may be published in the literature in the form of systematic reviews, meta-analyses, randomized control trials and quasi-experimental designs. However, evidence can be tacitly gleaned from the practice experiences and expertise of colleagues and mentors.

Principle 9: Systems-based

Specialists are encouraged to participate in learning activities that enhance the quality and safety of the health systems within which they work, and the educational and evaluation systems that benefit from their knowledge and expertise.

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