



ALL PROGRAM DIRECTORS & FAMILY MEDICINE SITE DIRECTORS MEETING

Friday January 23, 2015

12:00 – 2:30 pm

LOCATION: 89 Chestnut, Terrace Room, 3rd Floor

Time	Agenda	Presenters
12:00 - 12:30	Registration and Lunch	
12:30 - 12:45	Welcome and Updates - packages	Dr. Linda Probyn, Acting Associate Dean, PGME
12:50 – 1:45	UPDATE: CanMEDS 2015, Competency by Design, and Accreditation System Renewal - Next Steps	Dr. Glen Bandiera Acting Vice Dean, PGME
1:50 – 2:15	PGME - Update on moving forward: - Program Director Competencies & Multi Source Feedback for PDs - Early Lessons in Competency by Design - Resource Stewardship	Dr. Linda Probyn, Acting Associate Dean, PGME - Dr. Glen Bandiera - Dr. Scott Berry - Dr. Paolo Campisi - Dr. Anne Matlow
2:20 – 2:30	Wrap-Up	

*Coffee + desserts will be available throughout the meeting.
Please feel free to avail yourselves of refreshments during the meeting.*

Revised January 9, 2015



ALL PROGRAM DIRECTORS & FAMILY MEDICINE SITE DIRECTORS MEETING

89 Chestnut, Terrace Room

Friday January 23, 2015, 12 noon to 2:30 pm.

TABLE OF CONTENTS

1. Royal College Update on CanMEDS 2015 (Dr. Jason Frank memo December 2014).....	4
2. Draft CanMEDS 2015 Physician Competency Framework.....	7
3. Draft CanMEDS 2015 Milestones Guide.....	27
4. RCPSC Competency by Design, March 2014 (excerpts only) For complete e-book, see http://tinyurl.com/RCPSC-CBD-ebook	62
5. PGMEExchange - the medical education repository.....	83
6. Resource Stewardship.....	85



To: CanMEDS 2015 Expert Working Group members

From: Jason R. Frank, MD, MA (Ed), FRCPC
Director, Specialty Education, Strategy, and Standards
Office of Education

Subject: **CanMEDS 2015 Update for Expert Working Group (EWG) Members**

Date: December 5, 2014

On behalf of the Royal College I am writing to express once more my sincere appreciation for your exemplary work on the CanMEDS 2015 Framework and CanMEDS Milestone Guide.

The level of engagement around this project continues to exceed our expectations. CanMEDS 2015 has already received and continues to receive support from across Canada and around the world. As you may know, CanMEDS is used in approximately 50 different jurisdictions globally. You can be proud that your contribution to CanMEDS 2015 will have significant international impact.

As you know, your work was released for consultation four separate times in 2014. On each occasion, stakeholders embraced the drafts and challenged us to consider different perspectives and to be inclusive, practical and precise. The editing and review process between releases was demanding both in terms of complexity and timing, but with each release we continue to get increasingly positive feedback – congratulations to each of you for creating the foundation for such positive engagement and collaborative development.

More than ever, we see a medical education community that is committed to making CanMEDS a national physician framework. When the final version of the Framework and the evolving Milestones Guide are released, I trust you will see how these documents reflect both the collective expertise of the CanMEDS 2015 EWGs as well as the important input of the broader medical education community.

I'm pleased to report that we are on track to officially release the Framework in Vancouver at the International Conference on Residency Education (ICRE) in October 2015.

At this time I will take the opportunity to provide an update on some things that may be of interest to you as a CanMEDS 2015 EWG member.

National Advisory Committee Summit – In September 2014 more than 70 representatives from key Canadian medical education institutions and organizations met at the Royal College to share direct input on the design and content of the draft framework (Series III) and the second draft of the Milestones Guide. There was unanimous support for the direction that the framework and milestones have taken and suggestions were offered on ways to further strengthen the drafts. There was discussion on the implementation plans for CanMEDS 2015 and CBD, in particular system implications from the perspective of the CFPC, undergraduate and postgraduate medical training, continuing professional development educators, regulatory authorities and assessment. For more information on this summit please refer to:

http://www.royalcollege.ca/portal/page/portal/rc/resources/publications/dialogue/vol14_10/nac_summit

National Online Survey - As part of the September 2014 release, the Royal College also launched its fourth of four national online surveys. The September 2014 survey was designed to collect broad stakeholder feedback on the September 2014 drafts of the Framework and the Milestone Guide.

While this survey represented the final opportunity for stakeholders to provide feedback on the framework before it was finalized, work on the milestones will continue through 2015. Please see the following document for more information:
http://www.royalcollege.ca/portal/page/portal/rc/common/documents/canmeds/framework/canmeds_2015_consultations_results_e.pdf

Creating UGME milestones – As you might recall, when the EWGs were asked to define milestones for residency, we felt that we needed to first define an expectation for where residency started. We did this by writing undergraduate milestones. Our first attempt at these milestones was reflected in the May 2014 CanMEDS Series II draft. Please note that the undergraduate milestones were removed in the September release of the Milestones Guide at the request of the AFMC. This will give the AFMC an opportunity to develop its own process for writing milestones. The Royal College hopes to reintegrate the AFMC's undergraduate milestones into the Milestones Guide at a future date.

Integration Committee (IC) - In late October 2014, the CanMEDS 2015 Integration Committee met to review the results of the latest round of consultations including, for example the September 2014 survey, feedback from EWGs, ePanels, Royal College standing committees and the National Advisory Committee. This data guided the preparation of the final draft of the framework and the November 2014 draft of the Milestones Guide.

Manager/Leader – As you may recall, the Manager EWG recommended a change in title for their Role from Manager to Leader. This was perhaps the most hotly debated issue throughout 2014 and after months of careful consideration the final decision was recently made to make the title change official in the final version of the Framework. Given the level of debate, the CanMEDS Integration Committee expects that people will continue to debate the issue. For this reason, the Leader Expert Working Group Chairs will prepare a position paper clearly outlining the rationale for the change in the hopes that we can address many of the concerns and misconceptions associated with the name change.

Refreshing the CanMEDS diagram - One of several themes that surfaced during the CanMEDS 2015 consultations relates to the CanMEDS diagram. Medical education leaders have asked the College to refresh the diagram so that it reflects the updated vision and value of CanMEDS 2015. Given the level of interest and engagement around this theme, particularly among organizations and institutions involved in medical education, the Royal College has opted to hold consultations in early 2015. These consultations will include a series of 6 focus groups and a possible survey.

CanMEDS 2015 Tools Guide – As you will recall, early in 2014 we talked about creating a Tools Guide to support the roll-out of CanMEDS 2015. Our intent is still to develop this Guide, but our process has changed a bit. In the interest of efficiency we have convened a small writing group to prepare a series of tools for release next October. The CanMEDS 2015 Tools Guide will be a first important step in creating a high impact inventory of tools available to medical educators from around the world. Please let me know if you're interested in reviewing and advising on these tools.

Specialties piloting the new Framework and competency by design – Medical Oncology and Head and Neck Surgery (Otolaryngology) Specialty Committees, with support from the Royal College, have begun the process of creating, refining and integrating specialty-specific milestones into their disciplines. The Specialties Committees for each discipline will focus on developing appropriate tools, document suites, processes and faculty development resources needed to integrate competency-based practices into their disciplines. Once resources are in place these specialties will begin implementing CBD at the program level – likely by July 1, 2016. The rollout of specialty-specific milestones and associated resources will continue for several years after the launch of the Framework, and will include faculty development support from the Royal College.

Next Steps (December 2014-March 2015)

- The penultimate version of the Framework will be presented to the Royal College Education Committee in mid-December. Our hope is that the Education Committee will endorse a resolution recommending that Council adopt the Framework when Council meets in February.

- The third draft of the CanMEDS Milestones Guide will also be presented to Council for approval in February 2015, where we will ask them to approve it in principle. The milestones guide is a companion document to the framework and is a living document that will continue to evolve. The intent is for Council to support the use of milestones in residency training, with the understanding and expectation that the milestones will continue to be refined as the Competence by Design (CBD) cohorts start to create their own competency-based specialty specific documents suites. There is still work to do on the milestones and an in-principle resolution by Council will give us the ability to continue to refine our work on the Milestones Guide.
- A new Royal College French Advisory Committee chaired by Andrée Boucher, will hold a series of teleconferences to ensure the integrity of the translations of critical CanMEDS 2015 documents. This translation review of CanMEDS will ensure that the meaning of CanMEDS is preserved as it is translated into the French language.
- Consultations on the CanMEDS diagram will be undertaken over the next several months; a final diagram is expected by late spring 2015.
- Work will continue on CanMEDS milestones for CPD and Transition out of Practice

Finally, as we shift gears and begin to focus on the roll-out and implementation of CanMEDS 2015, I would appreciate hearing your thoughts on the following:

- How do you think the framework and milestones document will be received at your institution?
- How do you think they will be implemented into your programs?

If you have any ideas or suggestions for how to prepare you and your colleagues for the changes ahead, please let me know.

Thank you again for your continued interest and support of this important endeavour.

Stay tuned for further updates and more information on the launch of CanMEDS 2015 in Vancouver!

A handwritten signature in black ink, appearing to read "Janice Peters".

The Draft CanMEDS 2015 Physician Competency Framework

Series IV

Editors

Jason R. Frank | Linda Snell | Jonathan Sherbino

embargoed

December 2014

Competence
by Design

CanMEDS 2015



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA

The Draft CanMEDS 2015 Physician Competency Framework – Series IV

Royal College of Physicians and Surgeons of Canada
774 Echo Drive
Ottawa ON K1S 5N8
Canada

TOLL FREE 1 800-668-3740
TEL 613-730-8177
FAX 613-730-8262
WEB royalcollege.ca
EMAIL canmeds@royalcollege.ca

Copyright © 2014 by the Royal College of Physicians and Surgeons of Canada.

All rights reserved. This material may be reproduced in full for educational, personal, non-commercial purposes only, with attribution to the source as noted in the next column. Written permission from the Royal College is required for all other uses, including commercial use of the CanMEDS illustrations or its framework.

Printed in Ottawa.

CanMEDS 2015

How to cite this document

Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

How to cite individual Roles

Medical Expert

Bhanji F, Lawrence K, Goldszmidt M, Walton M, Harris K, Creery D, Sherbino J, Ste-Marie L-G, Stang A. Medical Expert. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Communicator

Neville A, Weston W, Martin D, Samson L, Feldman P, Wallace G, Jamouille O, François J, Lussier M-T, Dojeiji S. Communicator. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Collaborator

Richardson D, Calder L, Dean H, Glover Takahashi S, Lebel P, Maniate J, Martin D, Nasmyth L, Newton C, Steinert Y. Collaborator. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Leader

Dath D, Chan M-K, Anderson G, Burke A, Razack S, Lieff S, Moineau G, Chiu A, Ellison P. Leader. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Health Advocate

Sherbino J, Bonnycastle D, Côté B, Flynn L, Hunter A, Ince-Cushman D, Konkin J, Oandasan I, Regehr G, Richardson D, Zigby J. Health Advocate. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Scholar

Richardson D, Oswald A, Chan M-K, Lang ES, Harvey BJ. Scholar. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

Professional

Snell L, Flynn L, Pauls M, Kearney R, Warren A, Sternszus R, Cruess R, Cruess S, Hatala R, Dupré M, Bukowskyj M, Edwards S, Cohen J, Chakravarti A, Nickell L, Wright J. Professional. In: Frank JR, Snell L, Sherbino J, editors. *The Draft CanMEDS 2015 Physician Competency Framework – Series IV*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

MEDICAL EXPERT

Medical Expert Role Expert Working Group

Chair: Farhan Bhanji

Core members: Kathy Lawrence, Mark Goldszmidt, Mark Walton, Kenneth Harris, David Creery, Jonathan Sherbino, Louis-Georges Ste-Marie, Antonia Stang

Advisory members: Ivy Oandasan

For further information about the deliberations of the CanMEDS Medical Expert EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Medical Experts, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional values in their provision of high-quality and safe patient-centred care. Medical Expert is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.

Description

As Medical Experts who provide high-quality, safe, patient-centred care, physicians draw upon an evolving body of knowledge, their clinical skills, and their professional values. They collect and interpret information, make clinical decisions, and carry out diagnostic and therapeutic interventions. They do so within their scope of practice and with an understanding of the limits of their expertise. Their decision-making is informed by best practices and research evidence, and takes into account the patient's circumstances and preferences as well as the availability of resources. Their clinical practice is up-to-date, ethical, and resource-efficient, and is conducted in collaboration with patients and their families,* other health care professionals, and the community. The Medical Expert Role is central to the function of physicians and draws on the competencies included in the Intrinsic Roles (Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional).

Key concepts

- Agreed-upon goals of care: 2.1, 2.3, 2.4, 3.2, 4.1
- Application of core clinical and biomedical sciences: 1.3
- Clinical decision-making: 1.4, 1.6, 2.2
- Clinical reasoning: 1.3, 1.4, 2.1, 3.1
- Compassion: 1.1
- Complexity, uncertainty, and ambiguity in clinical decision-making: 1.6, 2.2, 2.4, 3.2, 3.3, 3.4
- Consent: 3.2
- Continuity of care: 2.4, 4.1
- Duty of care: 1.1, 1.5, 2.4
- Integration of CanMEDS Intrinsic Roles: 1.2
- Interpreting diagnostic tests: 2.2

* Throughout the CanMEDS 2015 Framework and Milestone Guide, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

- Medical expertise: all ECs
- Patient-centred clinical assessment and management: 1.4, 2.2, 2.4, 3.1, 3.3, 3.4, 4.1, 5.2
- Patient safety: 1.5, 3.4, 5.1, 5.2
- Prioritization of professional responsibilities: 1.4, 1.5, 2.1, 3.3, 5.1
- Procedural skill proficiency: 3.1, 3.3, 3.4
- Quality improvement: 5.1, 5.2
- Self-awareness of limits of expertise: 1.4, 3.4
- Timely follow-up: 1.4, 2.2, 4.1
- Working within the health care team: 1.3, 1.4, 2.1, 2.4, 3.3, 4.1, 5.1

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Practise medicine within their defined scope of practice and expertise	1.1 Demonstrate a commitment to high-quality care of their patients 1.2 Integrate the CanMEDS Intrinsic Roles into their practice of medicine 1.3 Apply knowledge of the clinical and biomedical sciences relevant to their discipline 1.4 Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner 1.5 Carry out professional duties in the face of multiple, competing demands 1.6 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice
2. Perform a patient-centred clinical assessment and establish a management plan	2.1 Prioritize issues to be addressed in a patient encounter 2.2 Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion 2.3 Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation 2.4 Establish a patient-centred management plan

Continued on next page.

3. Plan and perform procedures and therapies for the purpose of assessment and/or management

- 3.1 Determine the most appropriate procedures or therapies
 - 3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy
 - 3.3 Prioritize a procedure or therapy, taking into account clinical urgency and available resources
 - 3.4 Perform a procedure in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances
-

4. Establish plans for ongoing care and, when appropriate, timely consultation

- 4.1 Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation
-

5. Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

- 5.1 Recognize and respond to harm from health care delivery, including patient safety incidents
 - 5.2 Adopt strategies that promote patient safety and address human and system factors
-

COMMUNICATOR

Communicator Role Expert Working Group

Chair: Alan Neville

Core members: Wayne Weston, Dawn Martin, Louise Samson, Perle Feldman, Gordon Wallace, Olivier Jamouille, José François, Marie-Thérèse Lussier, Sue Dojeiji

Advisory members: Judy Brown, Erin Keely, Suzanne Kurtz, Abigail Hain

For further information about the deliberations of the CanMEDS Communicator EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Communicators, physicians form relationships with patients and their families* that facilitate the gathering and sharing of essential information for effective health care.[†]

Description

Physicians enable patient-centred therapeutic communication by exploring the patient's symptoms, which may be suggestive of disease, and by actively listening to the patient's experience of his or her illness. Physicians explore the patient's perspective, including his or her fears, ideas about the illness, feelings about the impact of the illness, and expectations of health care and health care professionals. The physician integrates this knowledge with an understanding of the patient's context, including socio-economic status, medical history, family history, stage of life, living situation, work or school setting, and other relevant psychological and social issues. Central to a patient-centred approach is shared decision-making: finding common ground with the patient in developing a plan to address his or her medical problems and health goals in a manner that reflects the patient's needs, values, and preferences. This plan should be informed by evidence and guidelines.

Because illness affects not only patients but also their families, physicians must be able to communicate effectively with everyone involved in the patient's care.

Key concepts

- Accuracy: 2.1, 3.1, 4.2, 5.1
- Active listening: 1.1, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 4.1, 4.3
- Appropriate documentation: 2.1, 5.1, 5.2, 5.3
- Attention to the psychosocial aspects of illness: 1.6, 2.1, 2.2, 4.1
- Breaking bad news: 1.5, 3.1
- Concordance of goals and expectations: 1.6, 2.2, 3.1, 4.3
- Disclosure of harmful patient safety incidents: 3.2

* Throughout the CanMEDS 2015 Framework and Milestones Guide, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardian, and substitute decision-makers.

† Note that the Communicator Role describes the abilities related to a physician–patient encounter. Other communication skills are found elsewhere in the framework, including health care team communication (Collaborator) and academic presentations (Scholar).

- Effective oral and written information for patient care across different media: 5.1, 5.2, 5.3
- Efficiency: 2.3, 4.2, 5.2
- Eliciting and synthesizing information for patient care: 2.1, 2.2, 2.3
- Empathy: 1.1, 1.2, 1.3
- Ethics in the physician–patient encounter: 3.2, 5.1
- Expert verbal and non-verbal communication: 1.1, 1.4
- Informed consent: 2.2
- Mutual understanding: 1.6, 3.1, 4.1
- Patient-centred approach to communication: 1.1, 1.6, 2.1, 3.1
- Privacy and confidentiality: 1.2, 5.1
- Rapport: 1.4
- Relational competence in interactions: 1.5
- Respect for diversity: 1.1, 1.6, 2.2, 4.1
- Shared decision-making: 1.6, 4.1, 4.3
- Therapeutic relationships with patients and their families: 1.2, 1.3, 1.4, 1.5, 1.6
- Transition in care: 5.1, 5.2, 5.3
- Trust in the physician–patient relationship: 1.1, 5.2, 5.3

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Establish professional therapeutic relationships with patients and their families	<p>1.1 Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion</p> <p>1.2 Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety</p> <p>1.3 Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly</p> <p>1.4 Respond to a patient's non-verbal behaviours to enhance communication</p> <p>1.5 Manage disagreements and emotionally charged conversations</p> <p>1.6 Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances</p>

Continued on next page.

-
- | | |
|---|---|
| <p>2. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families</p> | <p>2.1 Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information</p> <p>2.2 Provide a clear structure for and manage the flow of an entire patient encounter</p> <p>2.3 Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent</p> |
| <p>3. Share health care information and plans with patients and their families</p> | <p>3.1 Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding</p> <p>3.2 Disclose harmful patient safety incidents to patients and their families accurately and appropriately</p> |
| <p>4. Engage patients and their families in developing plans that reflect the patient's health care needs and goals</p> | <p>4.1 Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe</p> <p>4.2 Assist patients and their families to identify, access, and make use of information and communication technologies to support their care and manage their health</p> <p>4.3 Use communication skills and strategies that help patients and their families make informed decisions regarding their health</p> |
| <p>5. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy</p> | <p>5.1 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements</p> <p>5.2 Communicate effectively using a written health record, electronic medical record, or other digital technology</p> <p>5.3 Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding</p> |
-

COLLABORATOR

Collaborator Role Expert Working Group

Chair: Denyse Richardson

Core members: Lisa Calder, Heather Dean, Susan Glover Takahashi, Paule Lebel, Jerry Maniate, Dawn Martin, Louise Nasmith, Christie Newton, Yvonne Steinert

Advisory members: Amir Ginzburg, Ivy Oandasan, Sharon Switzer-McIntyre

For further information about the deliberations of the CanMEDS Collaborator EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Collaborators, physicians work effectively with other health care professionals to provide safe, high-quality, patient-centred care.

Description

Collaboration is essential for safe, high-quality, patient-centred care, and involves patients and their families,* physicians and other colleagues in the health care professions, community partners, and health system stakeholders. Collaboration requires relationships based in trust, respect, and shared decision-making among a variety of individuals with complementary skills in multiple settings across the continuum of care. It involves sharing knowledge, perspectives, and responsibilities, and a willingness to learn together. This requires understanding the roles of others, pursuing common goals and outcomes, and managing differences. Collaboration skills are broadly applicable to activities beyond clinical care, such as administration, education, advocacy, and scholarship.

Key concepts

- Collaboration with community providers: 1.1, 1.2, 1.3
- Communities of practice: 1.3, 3.2
- Conflict resolution, management, and prevention: 2.2
- Constructive negotiation: 2.2
- Effective consultation and referral: 1.2, 1.3, 3.1, 3.2
- Effective health care teams: all ECs
- Handover: 3.1, 3.2
- Interprofessional: (i.e., among health care professionals) health care: all ECs
- Intraprofessional: (i.e., among physician colleagues) health care: all ECs
- Recognizing one's own roles and limits: 1.2, 3.1
- Relationship-centred care: 1.1, 1.2, 1.3, 2.1, 2.2, 3.2

* Throughout the CanMEDS 2015 Framework and Milestone Guide, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

- Respect for other physicians and members of the health care team: 2.1, 2.2
- Respecting and valuing diversity: 1.2, 2.1, 2.2
- Shared decision-making: 1.3
- Sharing of knowledge and information: 1.3, 3.1, 3.2
- Situational awareness: 1.1, 1.2, 2.2, 3.1, 3.2
- Team dynamics: 1.1, 2.2, 3.1
- Transitions of care: 3.1, 3.2

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Work effectively with physicians and other colleagues in the health care professions	1.1 Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care 1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care 1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts	2.1 Show respect toward collaborators 2.2 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture
3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care	3.1 Determine when care should be transferred to another physician or health care professional 3.2 Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care

LEADER

Leader Role Expert Working Group

Co-chairs: Deepak Dath and Ming-Ka Chan

Core members: Geoffrey Anderson, Andrew Burke, Saleem Razack, Susan Lieff, Geneviève Moineau, Aaron Chiu, Philip Ellison

Advisory members: David Snadden, Hugh MacLeod, Sherissa Microys, Marie-Josée Bédard, Joshua Tepper, Louis-André Lacasse, Hema Patel

For further information about the deliberations of the CanMEDS Manager EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Leaders, physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

Description

The CanMEDS Leader Role describes the engagement of all physicians in shared decision-making for the operation and ongoing evolution of the health care system. As a societal expectation, physicians demonstrate collaborative leadership and management within the health care system. At a system level, physicians contribute to the development and delivery of continuously improving health care and engage with others in working toward this goal. Physicians integrate their personal lives with their clinical, administrative, scholarly, and teaching responsibilities. They function as individual care providers, as members of teams, and as participants and leaders in the health care system locally, regionally, nationally, and globally.

Key concepts

- Administration: 4.1, 4.2
- Career development: 4.2
- Complexity of systems: 1.1
- Consideration of justice, efficiency, and effectiveness in the allocation of health care resources for optimal patient care: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2
- Effective committee participation: 3.2
- Health human resources: 2.1, 4.2
- Information technology for health care: 1.4
- Leading change: 1.1, 1.2, 1.3, 1.4, 2.2, 3.2
- Management of personnel: 4.2
- Negotiation: 3.1
- Organizing, structuring, budgeting, and financing: 2.1, 2.2, 4.1, 4.2, 4.3
- Personal leadership skills: 3.1, 4.1
- Physician remuneration: 4.2
- Physician roles and responsibilities in the health care system: 1.1, 1.2, 1.3, 1.4, 2.2, 3.2

- Physicians as active participant-architects within the health care system: 1.1, 1.2, 1.3, 1.4, 3.2
- Practice management to maintain a sustainable practice and physician health: 4.1, 4.2, 4.3
- Priority-setting: 2.1, 3.2, 4.1
- Quality improvement: 1.1, 1.2, 1.3, 1.4, 2.2, 3.2, 3.3
- Stewardship: 2.1, 2.2
- Supervising others: 4.2
- Systems thinking: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2
- Time management: 4.1, 4.2

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Contribute to the improvement of health care delivery in teams, organizations, and systems	1.1 Apply the science of quality improvement to contribute to improving systems of patient care 1.2 Contribute to a culture that promotes patient safety 1.3 Analyze patient safety incidents to enhance systems of care 1.4 Use health informatics to improve the quality of patient care and optimize patient safety
2. Engage in the stewardship of health care resources	2.1 Allocate health care resources for optimal patient care 2.2 Apply evidence and management processes to achieve cost-appropriate care
3. Demonstrate leadership in professional practice	3.1 Demonstrate leadership skills to enhance health care 3.2 Facilitate change in health care to enhance services and outcomes
4. Manage career planning, finances, and health human resources in a practice	4.1 Set priorities and manage time to integrate practice and personal life 4.2 Manage a career and a practice 4.3 Implement processes to ensure personal practice improvement

HEALTH ADVOCATE

Health Advocate Role Expert Working Group

Chair: Jonathan Sherbino

Core members: Deirdre Bonnycastle, Brigitte Côté, Leslie Flynn, Andrea Hunter, Daniel Ince-Cushman, Jill Konkin, Ivy Oandasan, Glenn Regehr, Denyse Richardson, Jean Zigby

Advisory members: Marcia Clark, Sherissa Microys

For further information about the deliberations of the CanMEDS Health Advocate EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Health Advocates, physicians contribute their expertise and influence as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.

Description

Physicians are accountable to society and recognize their duty to contribute to efforts to improve the health and well-being of their patients, their communities, and the broader populations they serve.* Physicians possess medical knowledge and abilities that provide unique perspectives on health. Physicians also have privileged access to patients' accounts of their experience with illness and the health care system. Improving health is not limited to mitigating illness or trauma, but also involves disease prevention, health promotion, and health protection. Improving health also includes promoting health equity, whereby individuals and populations reach their full health potential without being disadvantaged by, for example, race, ethnicity, religion, gender, sexual orientation, age, social class, economic status, or level of education.

Physicians leverage their position to support patients in navigating the health care system and to advocate with them to access appropriate resources in a timely manner. Physicians seek to improve the quality of both their clinical practice and associated organizations by addressing the health needs of the patients, communities, or populations they serve. Physicians promote healthy communities and populations by influencing the system (or by supporting others who influence the system), both within and outside of their work environments.

Advocacy requires action. Physicians contribute their knowledge of the determinants of health to positively influence the health of the patients, communities, or populations they serve. Physicians gather information and perceptions about issues, working with patients and their families[†] to develop an understanding of needs and potential mechanisms to address these needs. Physicians support patients, communities, or populations to call for change, and they speak on behalf of others when needed. Physicians increase awareness about important health issues at the patient, community, or population level. They support or lead the mobilization of resources (e.g., financial, material, or human resources) on small or large scales.

Physician advocacy occurs within complex systems and thus requires the development of partnerships with patients, their families and support networks, or community agencies and organizations to influence

* In the CanMEDS framework, a “community” is a group of people and/or patients connected to one’s practice, and a “population” is a group of people and/or patients with a shared issue or characteristic.

† Throughout the CanMEDS 2015 Framework and Milestones Guide, references to the patient’s family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient’s circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

health determinants. Advocacy often requires engaging other health care professionals, community agencies, administrators, and policy-makers.

Key concepts

- Adapting practice to respond to the needs of patients, communities, or populations served: 2.1, 2.2
- Advocacy in partnership with patients, communities, and populations served: 1.1, 1.2, 2.1, 2.2, 2.3
- Continuous quality improvement: 2.2, 2.3
- Determinants of health, including psychological, biological, social, cultural, environmental, educational, and economic determinants, as well as health care system factors: 1.1, 1.3, 2.2
- Disease prevention: 1.3, 2.1
- Fiduciary duty: 1.1, 2.2, 2.3
- Health equity: 2.2
- Health promotion: 1.1, 1.2, 1.3, 2.1
- Health protection: 1.3
- Health system literacy: 1.1, 2.1
- Mobilizing resources as needed: 1.1, 1.2, 1.3
- Principles of health policy and its implications: 2.2
- Potential for competing health interests of the individuals, communities, or populations served: 2.3
- Responsible use of position and influence: 2.1, 2.3
- Social accountability of physicians: 2.1, 2.3

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment	1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources 1.2 Work with patients and their families to increase opportunities to adopt healthy behaviours 1.3 Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner	2.1 Work with a community or population to identify the determinants of health that affect them 2.2 Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities 2.3 Contribute to a process to improve health in the community or population they serve

SCHOLAR

Scholar Role Expert Working Group

Chairs: Denyse Richardson, Anna Oswald

Subgroup chairs: Denyse Richardson (Lifelong Learning); Anna Oswald and Ming-Ka Chan (Teacher); Eddy S Lang (Evidence-informed Decision-making); Bart J Harvey (Research)

For further information about the deliberations of the CanMEDS Scholar EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Scholars, physicians demonstrate a lifelong commitment to excellence in practice through continuous learning and by teaching others, evaluating evidence, and contributing to scholarship.

Description

Physicians acquire scholarly abilities to enhance practice and advance health care. Physicians pursue excellence by continually evaluating the processes and outcomes of their daily work, sharing and comparing their work with that of others, and actively seeking feedback in the interest of quality and patient safety. Using multiple ways of learning, they strive to meet the needs of individual patients and their families* and of the health care system.

Physicians strive to master their domains of expertise and to share their knowledge. As lifelong learners, they implement a planned approach to learning in order to improve in each CanMEDS Role. They recognize the need to continually learn and to model the practice of lifelong learning for others. As teachers they facilitate, individually and through teams, the education of students and physicians in training, colleagues, co-workers, the public, and others.

Physicians are able to identify pertinent evidence, evaluate it using specific criteria, and apply it in their practice and scholarly activities. Through their engagement in evidence-informed and shared decision-making, they recognize uncertainty in practice and formulate questions to address knowledge gaps. Using skills in navigating information resources, they identify evidence syntheses that are relevant to these questions and arrive at clinical decisions that are informed by evidence while taking patient values and preferences into account.

Finally, physicians' scholarly abilities allow them to contribute to the application, dissemination, translation, and creation of knowledge and practices applicable to health and health care.

Key concepts

Lifelong learning

- Collaborative learning: 1.3
- Communities of practice: 1.3
- Patient safety: 1.3
- Performance assessment: 1.2
- Personal learning plan: 1.1

* Throughout the CanMEDS 2015 Framework and Milestone Guide, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

© 2014 Royal College of Physicians and Surgeons of Canada

- Quality improvement: 1.1, 1.2, 1.3
- Reflection on practice: 1.2
- Seeking feedback: 1.2
- Self-improvement: 1.1, 1.2, 1.3

Teacher

- Faculty, rotation, and program evaluation: 2.5, 2.6
- Formal and informal curricula: 2.1
- Hidden curriculum: 2.1
- Learner assessment: 2.5, 2.6
- Learning outcomes: 2.4, 2.5, 2.6
- Mentoring: 2.2, 2.5
- Needs assessment: 2.4
- Optimization of the learning environment: 2.2
- Principles of assessment: 2.6
- Providing feedback: 2.5, 2.6
- Role-modelling: 2.1, 2.5
- Supervision and graded responsibility: 2.3
- Teaching and learning: 2.2, 2.4, 2.5

Evidence-informed decision-making

- Effect size: 3.3, 3.4
- Evidence-based medicine: 3.1, 3.2, 3.3, 3.4
- Evidence synthesis: 3.2, 3.3
- External validity: 3.3
- Generalizability: 3.3
- Information literacy: 3.2
- Internal validity: 3.3
- Knowledge gaps: 3.1
- Knowledge translation: 3.3, 3.4, 4.2
- Quality-appraised evidence-alerting services: 3.2, 3.4
- Recognizing bias in research: 3.3
- Structured critical appraisal: 3.3
- Uncertainty in practice: 3.1

Research

- Clinical innovation: 4.1, 4.2
- Confidentiality: 4.1
- Conflict of interest: 4.1
- Informed consent: 4.1
- Research: 4.1, 4.2
- Scholarly inquiry: 4.1, 4.2
- Scholarship: 4.1, 4.2

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
<p>1. Engage in the continuous enhancement of their professional activities through ongoing learning</p>	<p>1.1 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice</p> <p>1.2 Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources</p> <p>1.3 Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice</p>
<p>2. Teach students, residents, the public, and other health care professionals</p>	<p>2.1 Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners</p> <p>2.2 Promote a safe learning environment</p> <p>2.3 Ensure patient safety is maintained when learners are involved</p> <p>2.4 Plan and deliver a learning activity</p> <p>2.5 Provide feedback to enhance learning and performance</p> <p>2.6 Assess and evaluate learners, teachers, and programs in an educationally appropriate manner</p>
<p>3. Integrate best available evidence into practice</p>	<p>3.1 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them</p> <p>3.2 Identify, select, and navigate pre-appraised resources</p> <p>3.3 Critically evaluate the integrity, reliability, and applicability of health-related research and literature</p> <p>3.4 Integrate evidence into decision-making in their practice</p>
<p>4. Contribute to the creation and dissemination of knowledge and practices applicable to health</p>	<p>4.1 Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care</p> <p>4.2 Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations</p> <p>4.3 Contribute to the work of a research program</p> <p>4.4 Pose questions amenable to scholarly investigation and select appropriate methods to address them</p> <p>4.5 Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry</p>

PROFESSIONAL

Professional Role Expert Working Group

Chair—Professionalism: Linda Snell

Core members: Leslie Flynn, Merril Pauls, Ramona Kearney, Andrew Warren, Robert Sternszus, Richard Cruess, Sylvia Cruess, Rose Hatala, Maggy Dupré

Advisory members: Yvette Lajeunesse, Shiphra Ginsburg, Sharon Johnston

Chair—Physician Health: Leslie Flynn

Core members: Linda Snell, Meri Bukowskyj, Susan Edwards, Jordan Cohen, Anita Chakravarti, Leslie Nickell, Janet Wright

Advisory members: Jonathan DellaVedova, Eva Knell, Derek Puddester, Andrew Warren

For further information about the deliberations of the CanMEDS Professional EWG in revising this Role for CanMEDS 2015, please see their February 2014 [Report](#).

Definition

As Professionals, physicians are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.

Description*

Physicians serve an essential societal role as professionals dedicated to the health and care of others. Their work requires mastery of the art, science, and practice of medicine. A physician's professional identity is central to this Role. The Professional Role reflects contemporary society's expectations of physicians, which include clinical competence, a commitment to ongoing professional development, promotion of the public good, adherence to ethical standards, and values such as integrity, honesty, altruism, humility, respect for diversity, and transparency with respect to potential conflicts of interest. It is also recognized that, to provide optimal patient care, physicians must take responsibility for their own health and well-being and that of their colleagues. Professionalism is the basis of the implicit contract between society and the medical profession, granting the privilege of physician-led regulation with the understanding that physicians are accountable to those served, to society, to their profession, and to themselves.

Key concepts

- Professional identity: 1.1, 4.1, 4.2

Commitment to patients

- Altruism: 1.1
- Bioethical principles and theories: 1.3
- Commitment to excellence in clinical practice and mastery of the discipline: 1.2
- Compassion and caring: 1.1
- Confidentiality and its limits: 1.1, 1.5

* The role description draws from Cruess SR, Johnston S, Cruess RL. "Profession": a working definition for medical educators. *Teach Learn Med* 2004;16(1):74–6 and from Cruess SR, Cruess RL. Professionalism and medicine's social contract with society. *Virtual Mentor* 2004 6(4).

- Disclosure of physician limitations that affect care: 1.1
- Insight: 1.1, 1.3, 1.4, 2.1
- Integrity and honesty: 1.1
- Moral and ethical behaviour: 1.1, 1.3
- Professional boundaries: 1.1
- Respect for diversity: 1.1

Commitment to society

- Commitment to the promotion of the public good in health care: 2.1, 2.2
- Social accountability: 2.1, 2.2
- Social contract in health care: 2.1, 2.2
- Societal expectations of physicians and the profession: 2.1, 2.2

Commitment to the profession

- Accountability to professional regulatory authorities: 3.1
- Codes of ethics: 3.1
- Commitment to patient safety and quality improvement: 2.1, 4.1
- Commitment to professional standards: 3.1
- Conflicts of interest (personal, financial, administrative, etc.): 1.4
- Medico-legal frameworks governing practice: 3.1, 3.3
- Responsibility to the profession, including obligations of peer assessment, mentorship, collegiality, and support: 3.2, 3.3, 4.3

Commitment to self

- Applied capacity for self-regulation, including the assessment and monitoring of one's thoughts, behaviours, emotions, and attention for optimal performance and well-being: 4.1
- Career development and career transitions: 4.1, 4.2
- Commitment to disclosure of harmful patient safety incidents, including those resulting from medical error, and their impact: 4.2, 4.3
- Mindful and reflective approach to practice: 4.2
- Resilience for sustainable practice: 4.2
- Responsibility to self, including personal care, in order to serve others: 4.1

Key competencies	Enabling competencies
Physicians are able to:	Physicians are able to:
1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards	<p>1.1 Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality</p> <p>1.2 Demonstrate a commitment to excellence in all aspects of practice</p> <p>1.3 Recognize and respond to ethical issues encountered in practice</p> <p>1.4 Recognize and manage conflicts of interest</p> <p>1.5 Exhibit professional behaviours in the use of technology-enabled communication</p>
2. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care	<p>2.1 Demonstrate accountability to patients, society, and the profession by responding to societal expectations of physicians</p> <p>2.2 Demonstrate a commitment to patient safety and quality improvement</p>
3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation	<p>3.1 Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p> <p>3.2 Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions</p> <p>3.3 Participate in peer assessment and standard-setting</p>
4. Demonstrate a commitment to physician health and well-being to foster optimal patient care	<p>4.1 Exhibit self-awareness and manage influences on personal well-being and professional performance</p> <p>4.2 Manage personal and professional demands for a sustainable practice throughout the physician life cycle</p> <p>4.3 Promote a culture that recognizes, supports, and responds effectively to colleagues in need</p>

The Draft CanMEDS 2015 Milestones Guide

December 2014

Editors

Jason R. Frank | Linda Snell | Jonathan Sherbino

embargoed

Competence
by Design

CanMEDS 2015



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA

The Draft CanMEDS 2015 Milestones Guide – December 2014

Royal College of Physicians and Surgeons of Canada
774 Echo Drive
Ottawa ON K1S 5N8
Canada

TOLL FREE 1 800-668-3740
TEL 613-730-8177
FAX 613-730-8262
WEB royalcollege.ca
EMAIL canmeds@royalcollege.ca

Copyright © 2014 by the Royal College of Physicians and Surgeons of Canada.

All rights reserved. This material may be reproduced in full for educational, personal, non-commercial purposes only, with attribution to the source as noted below. Written permission from the Royal College is required for all other uses, including commercial use of the CanMEDS illustrations or its framework.

Printed in Ottawa.

How to reference this document:

Frank JR, Snell L, Sherbino J, et al. *The Draft CanMEDS 2015 Milestones Guide – December 2014*. Ottawa: The Royal College of Physicians and Surgeons of Canada; 2014 December.

CanMEDS 2015

The Draft CanMEDS 2015 Milestones Guide

December 2014

29

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
MEDICAL EXPERT MILESTONES						
1 Practise medicine within their defined scope of practice and expertise						
1.1 Demonstrate a commitment to high-quality care of their patients	As a learner in the clinical environment, demonstrate a duty of care toward patients		Demonstrate compassion for patients	Under supervision, demonstrate commitment and accountability for patients in their care	Demonstrate a commitment to high-quality care of their patients	Role-model a commitment to high-quality patient care
1.2 Integrate the CanMEDS Intrinsic Roles into their practice of medicine	Describe the CanMEDS Roles and explain how they relate to the practice of medicine	Explain how the Intrinsic Roles need to be integrated into the practice of their discipline to deliver optimal patient care		Integrate the CanMEDS Intrinsic Roles into their practice of medicine		Teach and assess the application of the CanMEDS Competency Framework to medical practice
1.3 Apply knowledge of the clinical and biomedical sciences relevant to their discipline	Apply knowledge of biomedical and clinical sciences to identify, diagnose, and address common clinical problems		Apply clinical and biomedical sciences to manage core patient presentations in their discipline		Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentations in their discipline	Teach aspects of their discipline to other physicians and health care professionals
1.4 Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner	Perform a patient assessment and provide an interpretation of the clinical situation to the supervising physician		Perform focused clinical assessments with recommendations that are well-documented	Perform clinical assessments that address the breadth of issues in each case	Perform appropriately timed clinical assessments addressing the breadth of the discipline with recommendations that are well organized and properly documented in written and/or oral form	Develop system-level processes to facilitate appropriately timed clinical assessments

Note: In the progression through pre-residency, residency training, and professional practice, competencies acquired at a given stage are sustained and developed further through subsequent stages. Where a specific milestone for the acquisition of an enabling competency is not specified for a given stage, it should be assumed that earlier milestones for that competency still apply.

Continued on next page.

MEDICAL EXPERT MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
1.5 Carry out professional duties in the face of multiple, competing demands	Recognize competing demands in professional duties and seek assistance in determining priorities	On the basis of patient-centred priorities, seek assistance to prioritize multiple competing tasks that need to be addressed	Maintain a duty of care and patient safety while balancing multiple responsibilities Prioritize patients on the basis of clinical presentations	Carry out professional duties in the face of multiple, competing demands Teach and role-model how to prioritize professional duties
1.6 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	Recognize that there is a degree of uncertainty in all clinical decision-making	Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making	Develop a plan that considers the current complexity, uncertainty, and ambiguity in a clinical situation Seek assistance in situations that are complex or new	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice Teach about complexity and clinical care
2 Perform a patient-centred clinical assessment and establish a management plan				
2.1 Prioritize issues to be addressed in a patient encounter	Identify the concerns and goals of the patient and family* for the encounter	Iteratively establish priorities, considering the perspective of the patient and family (including values and preferences) as the patient's situation evolves	Consider clinical urgency, feasibility, availability of resources, and comorbidities in determining priorities to be addressed during the current encounter or during future visits or with other health care practitioners	Prioritize which issues need to be addressed during future visits or with other health care practitioners

Continued on next page.

* Throughout the Series IV draft CanMEDS 2015 Framework and Milestones Guide, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardian, and substitute decision-makers.

MEDICAL EXPERT MILESTONES

Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
	Foundations of discipline				
2.2 Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion	Elicit a history and perform a physical exam that informs the diagnosis Develop a general differential diagnosis relevant to the patient's presentation	Develop a specific differential diagnosis relevant to the patient's presentation	Select and interpret appropriate investigations based on a differential diagnosis	Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion	Conduct a clinical assessment in challenging or unusual situations
2.3 Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation	Initiate, under supervision, discussions with the patient and family about goals of care	Address with the patient and family their ideas about the nature and cause of the health problem, fears and concerns, and expectations of health care professionals	Address the impact of the medical condition on the patient's ability to pursue life goals and purposes Share concerns, in a constructive and respectful manner, with the patient and family about goals of care that are not felt to be achievable	Establish goals of care in collaboration with the patient and family, which may include slowing disease progression, achieving cure, improving function, and palliation	Conduct a clinical assessment when a second opinion is requested or when a high degree of diagnostic uncertainty has already been established
2.4 Establish a patient-centred management plan	Develop an initial management plan for common patient presentations	Develop and implement initial management plans for common problems in their discipline Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines	Establish a patient-centred management plan Develop and implement management plans that consider all of the patient's health problems and context in collaboration with the patient and family and, when appropriate, the interdisciplinary team	Establish management plans in patient encounters when there are significant disagreements about what is achievable	Establish management plans in patient encounters when there are significant disagreements about what is achievable

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
MEDICAL EXPERT MILESTONES						
3 Plan and perform procedures and therapies for the purpose of assessment and/or management						
3.1 Determine the most appropriate procedures and therapies						
		Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy	Integrate all sources of information to develop a procedural or therapeutic plan that is safe, patient-centred, and considers the risks and benefits of all approaches	Determine the most appropriate procedures or therapies for the purpose of assessment and/or management	Develop a novel procedure or therapy while respecting ethical standards for experimentation	
		Describe to patients common procedures or therapies for common conditions in their discipline	Integrate planned procedures or therapies into global assessment and management plans			
3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy						
		Describe the ethical principles and legal process of obtaining and documenting informed consent	Obtain informed consent for commonly performed procedures and therapies, under supervision	Use shared decision-making in the consent process, taking risk and uncertainty into consideration	Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy	
3.3 Prioritize a procedure or therapy, taking into account clinical urgency and available resources						
		Recognize and discuss the importance of the triaging and timing of a procedure or therapy	Consider urgency, and potential for deterioration, in advocating for the timely execution of a procedure or therapy	Triage a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources	Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources	Triage and schedule procedures in complex situations, demonstrating a collaborative approach when competing for limited resources

Continued on next page.

MEDICAL EXPERT MILESTONES

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
3.4 Perform a procedure in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	Perform a simple procedure under direct supervision	Demonstrate effective procedural preparation, including the use of a pre-procedure time-out or safety checklist as appropriate Set up and position the patient for a procedure	Perform common procedures in a skillful, fluid, and safe manner with minimal assistance Seek assistance as needed when unanticipated findings or changing clinical circumstances are encountered	Competently perform discipline-specific procedures Document procedures accurately Establish and implement a plan for post-procedure care	Perform procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	Perform specialized procedures that extend beyond routine practice in the discipline Teach the procedures of the discipline to others
4 Establish plans for ongoing care and, when appropriate, timely consultation						
4.1 Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation	Describe the importance of follow-up in patient care		Coordinate investigation, treatment, and follow-up plans when multiple physicians and health care professionals are involved Ensure follow-up on results of investigation and response to treatment	Establish plans for ongoing care, taking into consideration the patient's clinical state, circumstances, preferences, and actions, as well as available resources, best practices, and research evidence	Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation	Develop a novel system of follow-up that is flexible and adaptable to patients, families, and community resources
5 Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety						
5.1 Recognize and respond to harm from health care delivery, including patient safety incidents	Describe the scope and burden of health-care-related harm Define the types of patient safety incidents	Recognize the occurrence of a patient safety incident Differentiate outcomes of medical conditions and diseases from complications related to the inherent risks of treatments and from patient safety incidents	Prioritize the initial medical response to adverse events to mitigate further injury Incorporate, as appropriate, into a differential diagnoses, harm from health care delivery	Report patient safety incidents to appropriate institutional representatives Recognize near-misses in real time and respond to correct them, preventing them from reaching the patient	Recognize and respond to harm from health care delivery, including patient safety incidents	Teach how to respond to harm from health care and improve bedside care

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
[5.1 continued]				Identify potential improvement opportunities arising from harmful patient safety incidents and near misses Participate in an analysis of patient safety incidents	Apply the principles of situational awareness to clinical practice	Evaluate the impact of system changes on the provision of patient care Design safety initiatives, including those that incorporate needs and metrics identified by patients and their families
5.2 Adopt strategies that promote patient safety and address human and system factors	Describe the individual factors that can affect human performance, including sleep deprivation and stress Describe system factors that can affect patient safety, including resource availability and physical and environmental factors	Describe common types of cognitive and affective bias Describe the principles of situational awareness and their implications for medical practice	Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety Describe strategies to address human and system factors on clinical practice	Adopt strategies that promote patient safety and address human and system factors	Teach and assess the patient-centred approach to communication	Participate in institutional/system initiatives to improve the physical environment for patients
COMMUNICATOR MILESTONES						
1 Establish professional therapeutic relationships with patients and their families						
1.1 Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion	Describe the key components of a patient-centred approach to medical care Outline the evidence that effective physician-patient communication enhances patient and physician outcomes	Communicate using a patient-centred approach that facilitates patient trust and autonomy and is characterized by empathy, respect, and compassion	Mitigate physical barriers to communication to optimize patient comfort, privacy, engagement, and safety	Optimize the physical environment for patient comfort, privacy, engagement, and safety		
1.2 Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety	Describe elements of the physical environment that affect patient comfort, privacy, engagement, and safety					

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
	COMMUNICATOR MILESTONES					
1.3 Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly	Describe how patient and physician values, biases, and perspectives can affect clinical encounters		Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly		Teach learners to recognize situations in which patient and physician values, biases, or preferences may threaten the quality of care, and how to modify the approach to patient care	
1.4 Respond to a patient's non-verbal behaviours to enhance communication	Identify non-verbal communication from a patient and family and its impact on physician–patient communication Describe how to utilize non-verbal communication to build rapport	Identify, verify, and validate non-verbal cues on the part of patients and their families Use appropriate non-verbal communication to demonstrate attentiveness, interest, and responsiveness to the patient and family	Respond to patients' non-verbal communication and use appropriate non-verbal behaviours to enhance communication with patients		Demonstrate advanced non-verbal communication skills in difficult situations	
1.5 Manage disagreements and emotionally charged conversations		Describe physician, patient, and contextual factors that lead to strong emotions Describe how strong emotions may affect the patient–physician interaction Critically reflect upon emotional encounters and identify how different approaches may have affected the interaction	Recognize when personal feelings in an encounter are valuable clues to the patient's emotional state Establish boundaries as needed in emotional situations	Manage disagreements and emotionally charged conversations	Teach others to anticipate, recognize, and manage emotions in routine clinical encounters	

Continued on next page.

COMMUNICATOR MILESTONES

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
1.6 Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances	<p>Describe models of decision-making along the spectrum from "paternalistic" to "shared" to "autonomous"</p> <p>Describe the importance of capacity assessment</p> <p>Assess and appropriately address the patient's preferred involvement in decisions about care</p>	<p>Assess a patient's decision-making capacity</p>	<p>Tailor approaches to decision-making to patient capacity, values, and preferences</p>	<p>Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances</p>	<p>Teach others to tailor approaches to decision-making to patient capacity, values, and preferences</p>	
2 Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families				<p>Conduct a patient-centred interview, gathering all relevant biomedical and psychosocial information for any clinical presentation</p> <p>Integrate and synthesize information about the patient's beliefs, values, preferences, context and expectations with biomedical and psychosocial information</p>	<p>Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information</p>	<p>Intervene when, during the patient interview, a learner or health care professional ignores the patient's beliefs, values, preferences, context, or expectations</p>
2.1 Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information			<p>Describe the basic elements of the patient-centred interview</p> <p>Conduct a patient-centred interview under supervision, gathering relevant biomedical and psychosocial information in the context of an uncomplicated presentation of a common medical problem</p>		<p>Conduct a focused and efficient patient interview, managing the flow of the encounter while being attentive to the patient's cues and responses</p>	<p>Provide a clear structure for and manage the flow of an entire patient encounter</p>
2.2 Provide a clear structure for and manage the flow of an entire patient encounter			<p>Conduct a patient encounter using an organizing framework</p>			

Continued on next page.

COMMUNICATOR MILESTONES

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
2.3 Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent	Describe potential sources of information that may assist in a given patient's care		Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent			
3 Share health care information and plans with patients and their families						
3.1 Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding	Describe the ethical principles of truth-telling in the physician-patient relationship	Communicate the diagnosis, prognosis and plan of care in a clear, compassionate, respectful, and accurate manner to the patient and family	Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, and management plan	Provide information on diagnosis and prognosis in a clear, compassionate, respectful, and objective manner	Convey information related to the patient's health status, care, and needs in a timely, honest, and transparent manner	Communicate clearly with patients and others in the setting of ethical dilemmas
3.2 Disclose harmful patient safety incidents to patients and their families accurately and appropriately	Describe the steps in providing disclosure after a patient safety incident	Describe the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents	Communicate the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents	Apologize appropriately for a harmful patient safety incident	Disclose patient safety incidents to the patient and family accurately and appropriately	Lead disclosure teams Conduct peer review and practice assessments related to unexpected clinical outcomes and patient safety incidents Contribute to the improvement of the system of disclosure for patient safety incidents

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
4 Engage patients and their families in developing plans that reflect the patient's health care needs and goals						
4.1 Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe	<p>Describe the principles of cross-cultural interviewing</p> <p>Demonstrate interviewing techniques for encouraging discussion, questions, and interaction</p> <p>Conduct culturally safe interviews with close supervision</p> <p>Describe steps for conducting an interview with a translator</p>	<p>Conduct an interview, demonstrating cultural awareness</p> <p>Explore the perspectives of the patient and others when developing care plans</p> <p>Communicate with cultural awareness and sensitivity</p>	<p>Facilitate discussions with the patient and family in a way that is respectful, non-judgmental, and culturally safe</p>	<p>Teach others and assess their ability to engage patients in a way that is respectful, non-judgmental, and non-judgmental and that provides cultural safety</p>		
4.2 Assist patients and their families to identify, access, and make use of information and communication technologies to support their care and manage their health			<p>Describe the various technologies and information sources available to enhance patients' understanding and management of their health care</p>	<p>Assist the patient and family to identify, access, and make use of information and communication technologies to support care and manage health</p>		
4.3 Use communication skills and strategies that help patients and their families make informed decisions regarding their health			<p>Answer questions from the patient and family about next steps</p>	<p>Use communication skills and strategies that help the patient and family make informed decisions regarding their health</p>		

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
5 Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy.						
5.1 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements	Describe the functions and principal components of a medical record Describe the regulatory and legal requirements, including privacy legislation, for record keeping Identify potential difficulties and errors in medical record keeping that have a negative impact on patient care or patient safety Document the essential elements of a clinical encounter using a structured approach Include as appropriate in the medical record the patient's narrative* of the illness experience	Organize information in appropriate sections within an electronic or written medical record Maintain accurate and up-to-date problem lists and medication lists	Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care	Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions	Document clinical encounters in an accurate, complete, timely and accessible manner, and in compliance with legal and privacy requirements	Teach or conduct peer review and practice assessment regarding record keeping practices Use medical record review to assess trainee clinical reasoning and their understanding of their patients as persons
5.2 Communicate effectively using a written health record, electronic medical record, or other digital technology						Teach others how to effectively communicate with patients while using a medical record

Continued on next page.

* The patient's narrative is the story of the patient's illness. It includes the patient's feelings about the illness and ideas about what may be wrong or what might be causing it, how the illness affects day-to-day functioning, and the patient's expectations of health care professionals.

Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
[5.2 continued]					
	<p>5.3 Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding</p>	<p>Describe the principles and legal requirements for privacy and confidentiality of written and electronic communication</p> <p>Describe the different levels of written and electronic health literacy of patients and their implications for patient care</p> <p>Describe the advantages, limitations and risks of using electronic communication directly with patients (including telehealth) and strategies to reduce these risks</p>	<p>Assess patients' needs and preferences with respect to methods of information sharing</p>	<p>Adapt written and electronic communication to the specificity of the discipline and to the expectations of patients</p>	<p>Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding</p>

Collaborator milestones begin on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
COLLABORATOR MILESTONES						
1 Work effectively with physicians and other colleagues in the health care professions						
1.1 Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care	<p>Describe relationship-centred care</p> <p>Identify the stages of group development in health care settings</p> <p>Introduce themselves and their role to physicians and other health care professionals</p> <p>Identify opportunities for collaboration among health care professionals along the continuum of care</p>	<p>Compare and contrast enablers of and barriers to collaboration in health care</p>	<p>Respect established rules of their team</p> <p>Receive and appropriately respond to input from other health care professionals</p> <p>Differentiate between task and relationship issues among health care professionals</p>	<p>Anticipate, identify, and respond to patient safety issues related to the function of a team</p>	<p>Analyze interactions among health care professionals to provide feedback to optimize the performance of a team for the benefit of patients</p> <p>Advocate for organizational structures that support relationship-centred collaborative care</p> <p>Contribute to policy discussions related to collaborative care</p> <p>Teach, assess, or develop the relationship-centred model of collaborative care</p>	
1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care				<p>Consult as needed with other health care professionals, including other physicians</p>	<p>Negotiate overlapping and shared care responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care</p>	<p>Teach and assess the negotiation of role overlap and shared responsibilities with other health care professionals</p>

Continued on next page.

COLLABORATOR MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions	Describe strategies to promote the engagement of physicians and other colleagues in the health care professions in shared decision-making	Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care	Integrate the patient's perspective and context into the collaborative care plan	Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
2 Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture	2.1 Show respect toward collaborators	Respect the diversity of perspectives and expertise among health care professionals	Convey information thoughtfully Respond to requests and feedback in a respectful and timely manner	Show respect toward collaborators Delegate tasks and responsibilities in an appropriate and respectful manner
	2.2 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture	List factors that contribute to misunderstandings, differences, and conflicts in the health care setting Describe different approaches to promote understanding and manage differences	Identify communication barriers between health care professionals Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts Listen to understand and find common ground with collaborators	Act as a consultant to physicians and other health care professionals in the promotion of a culture of collaboration Teach conflict resolution in health care Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture Analyze team dynamics Gain consensus among colleagues in resolving conflicts

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
3 Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care						
3.1 Determine when care should be transferred to another physician or health care professional	Describe how scope of practice can trigger transfer of care Describe common transitions in health care and the process of safe transfer of care		Identify patients requiring handover to other physicians or health care professionals		Determine when care should be transferred to another physician or health care professional	
3.2 Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care		Describe specific information required for safe handover during transitions in care	Communicate with the receiving physicians or health care professionals during transitions in care, clarifying issues after transfer as needed Communicate with the patient's primary health care professional about the patient's care	Organize the handover of care to the most appropriate physician or health care professional Analyze gaps in communication between health care professionals during transitions in care Summarize the patient's issues in the transfer summary, including plans to deal with the ongoing issues	Demonstrate safe handover of care, both verbal and written, during patient transitions to a different health care professional, setting, or stage of care Recognize and act on patient safety issues in the transfer of care	Teach effective handover, including structured frameworks for safe and effective transfer of care Analyze local handover practices and contribute to process improvements to enhance the safety and effectiveness of transfer of care

Leader milestones begin on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
LEADER MILESTONES					
1 Contribute to the improvement of health care delivery in teams, organizations, and systems					
1.1 Apply the science of quality improvement to contribute to improving systems of patient care	<p>Describe the relevance of system theories in health care</p> <p>Describe a patient's longitudinal experience through the health care system</p> <p>Describe the domains of health care quality</p>	<p>Describe quality improvement methodologies</p> <p>Compare and contrast the traditional methods of research design with those of improvement science</p> <p>Compare and contrast systems theory with traditional approaches to quality improvement</p> <p>Seek data to inform practice and engage in an iterative process of improvement</p>	<p>Analyze and provide feedback on processes seen in one's own practice, team, organization, or system</p> <p>Participate in a patient safety and/or quality improvement initiative</p> <p>Engage physicians and other health care professionals to collaborate in improving systems of patient care</p>	<p>Apply the science of quality improvement to contribute to improving systems of patient care</p> <p>Design processes to mitigate the impact of human and system factors on performance</p> <p>Apply the science of complexity to the improvement of health care</p> <p>Teach quality improvement science</p>	<p>Lead quality improvement initiatives</p>
1.2 Contribute to a culture that promotes patient safety	Describe the features of a "just culture" approach to patient safety		<p>Actively encourage all involved in health care, regardless of their role, to report and respond to unsafe situations</p> <p>Engage patients and their families in the continuous improvement of patient safety</p> <p>Model a just culture to promote openness and increased reporting</p>	<p>Contribute to a culture that promotes patient safety</p>	<p>Promote a health care culture that enhances safety and quality</p> <p>Evaluate the culture of an institution or group with respect to patient safety and health quality</p> <p>Champion a just culture to enhance patient safety</p>

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
1.3 Analyze safety incidents to enhance systems of care	<p>Describe the elements of the health care system that facilitate or protect against patient safety incidents occur</p>	<p>Describe the available supports for patients and health care professionals when patient safety incidents occur</p>	<p>Analyze harmful patient safety incidents and near misses to enhance systems of care</p>	<p>Implement systems-level improvements in processes for identification of and response to patient safety hazards and patient safety incidents</p>	<p>Participate in systems-based informatics development and improvement</p> <p>Engage others in the adoption and refinement of health information technology for quality improvement</p> <p>Compare service delivery data to accepted targets or goals</p>	
1.4 Use health informatics to improve the quality of patient care and optimize patient safety		<p>Describe the data available from health information systems in their discipline to optimize patient care</p>	<p>Map the flow of information in the care of their patients and suggest changes for quality improvement and patient safety</p> <p>Use data on measures of clinical performance during team discussions and to support team decision-making</p>			
2 Engage in the stewardship of health care resources			<p>Describe models for resource stewardship in health care used at the institutional level</p> <p>Consider costs when choosing care options</p>	<p>Allocate health care resources for optimal patient care</p>	<p>Assess performance of learners in providing high-value care</p> <p>Experiment with care delivery models that may improve care, value, or efficiency</p>	
2.1 Allocate health care resources for optimal patient care	<p>Describe the differences between cost, efficacy, and value with respect to health care delivery</p> <p>Describe the ethical issues related to resource stewardship in health care</p> <p>Analyze how practice-related decisions affect service utilization and health-system sustainability</p>			<p>Use clinical judgment to minimize wasteful practices</p> <p>Develop practice-based and system-based rules for resource allocation</p>		

Continued on next page.

LEADER MILESTONES					
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
2.2 Apply evidence and management processes to achieve cost-appropriate care	<p>Discuss strategies to overcome the personal, patient, and organizational factors that lead to waste of health care resources</p> <p>Describe how evidence-informed medicine can be applied to optimize health care resource allocation</p>	<p>Apply evidence and guidelines with respect to resource utilization in common clinical scenarios</p> <p>Optimize practice patterns for cost-effectiveness and cost control</p>	<p>Determine cost discrepancies between best practice and their current practice</p> <p>Optimize practice patterns for cost-effectiveness and cost control</p>	<p>Apply evidence and management processes to achieve cost-appropriate care</p> <p>Engage health care administration and leadership to reduce waste</p> <p>Analyze a proposed practice innovation to determine its cost impact in the clinical microsystem</p>	<p>Compare utilization data within and outside their institution to revise processes that are inefficient or unnecessary</p> <p>Engage health care administration and leadership to reduce waste</p> <p>Analyze a proposed practice innovation to determine its cost impact in the clinical microsystem</p>
3 Demonstrate leadership in professional practice					
3.1 Demonstrate leadership skills to enhance health care	<p>Describe leadership styles as they relate to health care</p> <p>Describe how self-awareness, self-reflection, and self-management are important to developing leadership skills</p>	<p>Analyze their own leadership styles, including strengths, weaknesses, and biases</p>	<p>Contribute to a health care change initiative</p>	<p>Demonstrate leadership skills to enhance health care</p>	<p>Provide mentorship and guidance to help others develop leadership skills</p>
3.2 Facilitate change in health care to enhance services and outcomes	<p>Compare and contrast the Canadian health care system with other models around the world</p> <p>Describe the key issues regarding the need to improve health care delivery and the role of physician leadership in this improvement</p> <p>Describe a recent local or national health system change and the basis for acceptance or resistance to this change</p>	<p>Analyze patient feedback to help improve patient experiences and clinical outcomes</p> <p>Describe key health policy and organizational issues in their discipline</p>	<p>Develop a strategy for implementing change in health care with patients, physicians, and other health care professionals</p> <p>Analyze ongoing changes occurring in health care delivery</p>	<p>Facilitate change in health care to enhance services and outcomes</p> <p>Provide consultative advice from a physician perspective to institutional managers and policy-makers</p>	<p>Lead a multidisciplinary team to implement a change in health care delivery</p>

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
		LEADER MILESTONES				
4 Manage their practice and career						
4.1 Set priorities and manage time to integrate practice and personal life	Reflect on and set personal, educational, and professional goals Demonstrate time management skills	Align priorities with expectations for professional practice	Build relationships with mentors Organize work using strategies that address strengths and identify areas to improve in personal effectiveness	Set priorities and manage time to integrate practice and personal life	Adjust priorities to enable participation in clinical care, the profession, and institutional, provincial, national, or international activities Teach and assess time and personal management skills Mentor others	Adjust priorities to enable participation in clinical care, the profession, and institutional, provincial, national, or international activities Teach and assess time and personal management skills Mentor others
4.2 Manage career planning, finances, and health human resources in a practice	Prioritize career path options on the basis of personal strengths and goals, the needs of society, and current and projected workforce needs	Review opportunities for practice preparation, including choices available for further training Maintain a portfolio and reflect professional development	Examine personal interests and seek career mentorship and counseling Adjust educational experiences to gain competencies necessary for future independent practice	Reconcile expectations for practice with job opportunities and workforce needs Describe remuneration models as they pertain to their discipline	Manage a career and a practice Hire health care professionals according to defined capabilities Align practice with career goals and opportunities Plan practice finances, considering short- and long-term goals	Manage a career and a practice Hire health care professionals according to defined capabilities Align practice with career goals and opportunities Plan practice finances, considering short- and long-term goals

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
			Foundations of discipline		
4.3 Implement processes to ensure personal practice improvement	Manage a personal schedule using tools and technologies	Describe how practice standardization can improve quality of health care	Improve personal practice by evaluating a problem, setting priorities, executing a plan, and analyzing the results	Implement processes to ensure personal practice improvement	Engage regulatory bodies, medical associations, and specialty societies to improve standards of practice
LEADER MILESTONES					
1 Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment					
1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources			Analyze a given patient's needs for health services or resources related to the scope of their discipline	Demonstrate an approach to working with patients to advocate for health services or resources	Facilitate timely patient access to health services and resources
Describe the health care system, identifying obstacles patients and families face in obtaining health care resources			Define determinants of health and explain their implications	Work with patients to address the determinants of health that affect them and their access to needed health services or resources	Advocate to administrative or governing bodies on behalf of patients
Champion the development, implementation, and promotion of health advocacy teaching			Describe the health care system, identifying obstacles patients and families face in obtaining health care resources	Work with patients to address the determinants of health that affect them and their access to needed health services or resources	Advocate to administrative or governing bodies on behalf of patients
HEALTH ADVOCATE MILESTONES					
2 Promote health advocacy and health systems improvement					
3 Promote health systems improvement					

Continued on next page.

HEALTH ADVOCATE				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
1.2 Work with patients and their families to increase opportunities to adopt healthy behaviours	<p>Describe the value and limitations of promoting healthy behaviours</p> <p>Describe the principles of behaviour change</p>	<p>Identify resources or agencies that address the health needs of patients</p>	<p>Select patient education resources related to their discipline</p> <p>Educate the patient and family about information and communication technologies to improve health</p>	<p>Work with the patient and family to increase opportunities to adopt healthy behaviours</p>
1.3 Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients	<p>Describe the processes of disease prevention, health promotion, and health surveillance</p>		<p>Apply the principles of behaviour change during conversations with patients about adopting healthy behaviours</p>	<p>Create health promotion and education resources</p>
2 Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner				
2.1 Work with a community or population to identify the determinants of health that affect them	<p>Describe the health care system, identifying communities or populations facing health inequities</p>	<p>Identify communities or populations they serve who are experiencing health inequities</p>	<p>Work with a community or population to identify the determinants of health that affect them</p>	<p>Contribute to policy discussions relevant to the determinants of health</p> <p>Engage the communities or populations they serve about ways to improve health</p>
2.2 Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities	<p>Participate in health promotion and disease prevention programs relevant to their practice</p>	<p>Identify patients or populations that are not being optimally served in their clinical practice</p>	<p>Report epidemics or clusters of unusual cases seen in practice, balancing patient confidentiality with the duty to protect the public's health</p>	<p>Collaborate with organizations and surveillance programs to identify populations in need</p> <p>Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities</p>

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
		ADVOCATE				
2.3 Contribute to a process to improve health in the community or population they serve		Partner with others to identify the health needs of a community or population they serve	Appraise available resources to support the health needs of communities or populations they serve	Distinguish between the potentially competing health interests of the individuals, communities, and populations they serve	Contribute to a process to improve health in the communities or populations they serve	Partner with others to support, plan, or lead the implementation of a program to improve the health of the communities or populations they serve
SCHOLAR MILESTONES						
		1 Engage in the continuous enhancement of their professional activities through ongoing learning				
		1.1 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	Describe the principles of effective learning relevant to medical education Describe learning opportunities, learning resources, and assessment and feedback opportunities relevant to the clinical setting	Create a learning plan in collaboration with a designated supervisor identifying learning needs related to their discipline and career goals Use technology to develop, record, monitor, revise, and report on learning in medicine	Review and update earlier learning plan(s) with input from others, identifying learning needs related to all CanMEDS Roles to generate immediate and longer-term career goals	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
		1.2 Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources	Identify and prioritize with guidance, personal learning needs based on formal curriculum learning objectives Define reflective learning as it relates to medicine	Seek and interpret multiple sources of performance data and feedback, with guidance, to continuously improve performance	Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources	Access and summarize sources of performance data applicable to a scope of practice Use practice performance data in dialogue with a peer or mentor to inform personal performance improvement plan for ongoing learning

SCHOLAR MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline
				Transition to practice
[1.2 continued]	<p>Use exam results and feedback from teachers and peers to enhance self-assessment and improve learning</p> <p>Compare, with guidance, self-assessment with external assessments</p> <p>Contribute to collaborative group learning</p> <p>Define a community of practice as it relates to medicine</p> <p>Relate to collective improvements in practice</p>	<p>Identify the learning needs of a health care team</p>	<p>Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice</p>	<p>Revise and monitor a performance improvement plan on the basis of changes to scope of practice</p>
1.3 Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice			<p>Identify behaviours associated with positive and negative role-modelling</p>	<p>Lead learning activities of a team</p>
2 Teach students, residents, the public, and other health care professionals				
2.1 Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners	<p>Describe the link between role-modelling and the hidden curriculum</p>	<p>Use strategies for deliberate, positive role-modelling</p>	<p>Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners</p>	<p>Address systemic issues that contribute to the hidden curriculum</p> <p>Apply strategies to mitigate the tensions between formal, informal, and hidden curricula</p>
2.2 Promote a safe learning environment	<p>Describe factors that can positively or negatively affect the learning environment</p> <p>Describe strategies for reporting and managing witnessed or experienced mistreatment</p>		<p>Ensure a safe learning environment for all members of the team</p>	<p>Address systemic or institutional processes that may compromise the safety of the learning environment</p> <p>Coach others about optimizing learning environments</p>

Continued on next page.

SCHOLAR MILESTONES					
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
2.3 Ensure patient safety is maintained when learners are involved	Speak up in situations in the clinical training environment where patient safety may be at risk because of learner involvement	Identify unsafe clinical situations involving learners and manage them appropriately	Supervise learners to ensure they work within limitations, seeking guidance and supervision when needed	Ensure patient safety is maintained when learners are involved	Contribute to guidelines on the supervision of learners with regard to patient safety and quality improvement
2.4 Plan and deliver a learning activity	Describe the characteristics of effective teachers in medicine	Demonstrate basic skills in teaching others, including peers	Describe how to formally plan a medical education session Describe sources of information used to assess learning needs Define specific learning objectives for a teaching activity Describe clinical teaching strategies relevant to their discipline	Plan and deliver a learning activity Teach the public and other health care stakeholders Use relevant learning theories to enhance the learning of others Coach others to enhance their teaching	Integrate formal and informal methods of needs assessment to guide the development and/or modification of learning activities
2.5 Provide feedback to enhance learning and performance	Describe the features of effective feedback and its importance for teaching and learning	Provide written or verbal feedback to other learners, faculty, and other members of the team	Provide feedback to enhance learning and performance Role-model regular self-assessment and feedback-seeking behaviour Work with recipients of feedback to develop plans for improvement	Help learners and teachers manage the emotional impact of giving and receiving feedback	Continued on next page.

SCHOLAR MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
2.6 Assess and evaluate learners, teachers, and programs in an educationally appropriate manner	Assess teachers in an honest, fair, and constructive manner Evaluate programs in an honest, fair, and constructive manner Contribute to the assessment of other learners	Appropriately assess junior learners	Assess and evaluate learners, teachers, and programs in an educationally appropriate manner	Plan systematic approaches to the assessment of learners or evaluation of programs Develop a new assessment tool or process
3 Integrate best available evidence into practice				
3.1 Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that can address them	Describe the different kinds of evidence and their roles in clinical decision-making	Recognize uncertainty and knowledge gaps in clinical and other professional encounters relevant to their discipline	Generate focused questions that address practice uncertainty and knowledge gaps	
3.2 Identify, select, and navigate pre-appraised resources	Describe the advantages and limitations of pre-appraised resources Select appropriate sources of knowledge as they relate to addressing focused questions	Contrast the various study designs used in medicine and the quality of various pre-appraised resources	Identify, select, and navigate pre-appraised resources	Coach others to find and select sources of evidence for a given practice-related question
3.3 Critically evaluate the integrity, reliability, and applicability of health-related research and literature	For a given practice scenario, formulate a well-structured question using a specific framework Identify appropriate sources that answer a practice question	Interpret study findings, including a critique of their relevance to their practice Determine the validity and risk of bias in a source of evidence	Evaluate the applicability (external validity or generalizability) of evidence from a resource Describe study results in both quantitative and qualitative terms	Critically evaluate the integrity, reliability, and applicability of health-related research and literature

Continued on next page.

Key and enabling competencies		Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
SCHOLAR MILESTONES							
3.4 Integrate evidence into decision-making in their practice		<p>Use evidence, as appropriate, during decision-making</p> <p>Describe the principles of knowledge translation and the knowledge-to-action framework</p>	<p>Discuss the barriers to and facilitators of applying evidence into practice</p> <p>Describe how various sources of information, including studies, expert opinion, and practice audits, contribute to the evidence base of medical practice</p>	<p>Identify new evidence appropriate to their scope of professional practice through quality-appraised evidence-alerting services</p>	<p>Integrate best evidence and clinical expertise into decision-making in their practice</p>	<p>Teach physicians and other health care professionals to effectively integrate evidence into decision-making in their practice</p>	
4 Contribute to the creation and dissemination of knowledge and practices applicable to health							
4.1 Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care				<p>Contribute to a scholarly investigation or the dissemination of research findings in their discipline</p>	<p>Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care</p>	<p>Supervise a research project or scholarly inquiry</p> <p>Teach the principles of research and scholarly inquiry to others</p>	
4.2 Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations				<p>Discuss and provide examples of the ethical principles applicable to research and scholarly inquiry relevant to their discipline</p>	<p>Identify ethical principles for research and incorporate them into obtaining informed consent, considering harm and benefits, and considering vulnerable populations</p>		

Continued on next page.

SCHOLAR MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
4.3 Contribute to the work of a research program		Compare and contrast the roles and responsibilities of members of a research team and describe how they differ from clinical and other practice roles and responsibilities	Actively participate as a research team member, balancing the roles and responsibilities of a researcher with the clinical roles and responsibilities of a physician	Contribute to the work of a research program Create and lead research teams Serve as a research mentor
4.4 Pose questions amenable to scholarly investigation and select appropriate methods to address them		Describe and compare the common methodologies used for scholarly inquiry in their discipline	Select appropriate methods of addressing a given scholarly question	Pose medically and scientifically relevant and appropriately constructed questions amenable to scholarly investigation Coach others to pose relevant, appropriately constructed questions that are amenable to scholarly investigation
4.5 Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry		Summarize and communicate to peers the findings of applicable research and scholarship	Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry Prepare a manuscript suitable for publication in a peer-reviewed journal	Formally present research and scholarly inquiry findings, including presentations at meetings, and in print and digital media Prepare a manuscript suitable for publication in a peer-reviewed journal

Professional milestones begin on the next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
PROFESSIONAL MILESTONES						
1 Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards						
1.1 Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality	Exhibit honesty and integrity with patients, peers, physicians, and other health care professionals	Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met	Demonstrate caring and compassion	Recognize and respect boundaries	Demonstrate sensitivity to issues concerning diversity with respect to peers, colleagues, and patients	Consistently maintain confidentiality in the clinical setting, while recognizing the special limitations on confidentiality
1.2 Demonstrate a commitment to excellence in all aspects of practice						
1.3 Recognize and respond to ethical issues encountered in practice						

PROFESSIONAL MILESTONES

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
1.4 Recognize and manage conflicts of interest	<p>Describe the implications of potential personal, financial, and institutional conflicts of interest, including conflicts of interest with industry</p> <p>Recognize personal conflicts of interest and demonstrate an approach to managing them</p>	<p>Proactively resolve real, potential, or perceived conflicts of interest transparently and in accordance with ethical, legal, and moral obligations</p>	<p>Recognize and manage conflicts of interest in independent practice</p>			<p>Advise on conflicts of interest in practice and in institutions</p>
1.5 Exhibit professional behaviours in the use of technology-enabled communication		<p>Explain the potential abuses of technology-enabled communication and their relation to professionalism</p> <p>Describe policies related to technology-enabled communication</p> <p>Use technology-enabled communication, including their online profile, in a professional, ethical, and respectful manner</p> <p>Follow relevant policies regarding the appropriate use of electronic medical records</p>	<p>Exhibit professional behaviours in the use of technology-enabled communication</p>		<p>Intervene when aware of breaches of professionalism involving technology-enabled communication</p>	<p>Develop standards and/or policies incorporating the principles of professionalism related to the use of technology-enabled communication</p>

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice	Advanced expertise
2 Demonstrate a commitment to society by recognizing and responding to societal expectations in health care					
2.1 Demonstrate accountability to patients, society, and the profession by responding to societal expectations of physicians	<p>Describe the social contract between the profession of medicine and society</p> <p>Explain physician roles and duties in the promotion of the public good</p> <p>Describe the levels of reciprocal accountability of medical students, physicians, and the medical profession in relation to individual patients, society, and the profession</p>	<p>Manage tensions between societal and physicians' expectations</p> <p>Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources</p>	<p>Demonstrate a commitment to the promotion of the public good in health care, including stewardship of resources</p> <p>Demonstrate a commitment to maintaining and enhancing competence</p>	<p>Demonstrate accountability to patients, society, and the profession by recognizing and responding to societal expectations of the profession</p>	<p>Influence the profession's response to issues of societal accountability</p> <p>Advise institutions on social accountability and the profession</p>
2.2 Demonstrate a commitment to patient safety and quality improvement	<p>Describe the link between professionalism and a commitment to patient safety and quality improvement</p>	<p>Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures</p>	<p>Monitor institutional and clinical environments and respond to issues that can harm patients or the delivery of health care</p>	<p>Demonstrate a commitment to patient safety and quality improvement initiatives within their own practice environment</p>	<p>Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p>
3 Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation					
3.1 Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice	<p>Describe the regulatory structures governing physicians and the profession</p>	<p>Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p>	<p>Describe how to respond to, cope with, and constructively learn from a complaint or legal action</p>	<p>Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p>	<p>Contribute to the development of professional codes, standards, or laws governing practice</p>

Continued on next page.

PROFESSIONAL MILESTONES				
Key and enabling competencies	Entry to residency	Transition to discipline	Core of discipline	Transition to practice
	[3.1 continued]		Demonstrate accountability to the profession and society with regard to the impact of decisions that are made	
			Describe the relevant codes, policies, standards, and laws governing physicians and the profession including standard-setting and disciplinary and credentialing procedures	Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions
	3.2 Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions	Describe and recognize key behaviours that are unprofessional or unethical	Describe and identify regulatory codes and procedures relevant to involving a regulatory body in a case of serious unprofessional behaviour or practice	Lead systematic initiatives to minimize unprofessional and unethical behaviours in colleagues
	3.3 Participate in peer assessment and standard-setting	Describe the principles of peer assessment	Participate in the review of practice, standard setting and quality improvement activities Participate in the assessment of junior learners Prepare a morbidity and mortality report or chart review	Participate in the regulatory procedures that govern the profession Lead a debrief of a difficult clinical interaction

Continued on next page.

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
			4 Demonstrate a commitment to physician health and well-being to foster optimal patient care			
4.1 Exhibit self-awareness and manage influences on personal well-being and professional performance	<p>Describe how physicians are vulnerable to physical, emotional, and spiritual illness</p> <p>Use strategies to improve self-awareness to enhance performance</p> <p>Describe the connection between self-care and patient safety</p>	<p>Manage the impact of physical and environmental factors on performance</p> <p>Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks</p>	<p>Integrate skills that support adaptation and recovery in challenging situations</p>	<p>Exhibit self-awareness and effectively manage influences on personal well-being and professional performance</p>	<p>Role-model and teach self-regulation</p> <p>Advise on strategies to mitigate the negative effects of physical and environmental factors on physician wellness and practice performance</p>	<p>Role-model and coach others in resilience</p>
			<p>Recognize evolving professional identity transitions and manage inherent stresses</p>	<p>Manage competing personal and professional priorities</p>	<p>Advocate for learning and work environments that provide opportunities for a healthy lifestyle</p> <p>Coach physicians in the transition out of professional practice (retirement)</p>	

Key and enabling competencies	Entry to residency	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	Advanced expertise
	PROFESSIONAL					
4.3 Promote a culture that recognizes, supports, and responds effectively to colleagues in need	<p>Describe the multiple ways in which poor physician health can present, including disruptive behaviour, and offer support to peers when needed</p> <p>Describe the importance of early intervention for colleagues in need of assistance, identify available resources, and describe professional and ethical obligations and options for intervention</p>	<p>Use strategies to mitigate the impact of patient safety incidents</p>	<p>Support others in their professional transitions</p>	<p>Promote a culture that recognizes, supports, and responds effectively to colleagues in need</p> <p>Provide mentorship to colleagues</p>	<p>Role-model and teach learners and colleagues about personal and professional choices to effectively manage their practice</p> <p>Establish a mentorship program</p> <p>Teach and positively influence the behaviour of others to promote a culture of wellness</p>	



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA
COLLÈGE ROYAL
DES MÉDECINS ET CHIRURGIENS DU CANADA

March 2014

Competence by Design:

Reshaping Canadian Medical Education



INTRODUCTION

The Competence by Design paper series was intended to outline a path forward for postgraduate medical education. Any examination of the postgraduate medical education system must acknowledge and respect the many successes of current residency education in Canada. To this end, the paper series highlighted several strengths and areas for consideration in postgraduate medical education. These areas, crossing the papers in their entirety, highlight the current state from which the Competence by Design program is launched.

Strengths of Postgraduate Medical Education

Physicians today receive the best medical training in the history of civilization. Arguably, residency education in Canada is the envy of the world, as a result of its unique configuration, the strength of its educators, curriculum, standards and innovations. These include, but are not limited to:

- A global reputation for **high-quality training** and graduate performance, with Canadian designations and physicians being highly regarded around the world;
- International aspiration for Canadian PGME **standards**, including requests for collaboration and development support by numerous jurisdictions;
- Worldwide recognition of Canadian medical education **innovations**, including the CanMEDS framework, multi-source feedback instruments, certification examinations, teaching and assessment of professionalism, simulation methods, and competency-based initiatives;
- Leadership in **faculty development** in medicine;
- A unique and enabling **university infrastructure** with academic resources for postgraduate medical education;
- A system of accountability and leadership in the form of residency **program directors and postgraduate deans**; and
- An **accreditation** system considered a gold standard in medical education worldwide.



Challenges and Opportunities in Contemporary PGME

Fellows of the Royal College, while acknowledging the many strengths of our contemporary PGME system, have identified a number of important challenges and opportunities for enhancement. These included:

- 1. System complexity.** The Canadian system has many players with overlapping mandates and redundant infrastructure. Precious resources, including finances, expertise, and authority for decision making are spread across multiple organizations. Practicing physicians in the health human resources “pipeline” must navigate numerous affiliations, applications, examinations, and jurisdictions.
- 2. An era of accountability.** The 21st century has seen medical education criticized for its failure to ensure that all graduates are adequately prepared for practice or the next stage of their careers. Evidence shows graduates still exit residency with significant “lacunae” in competence, and that in practice, physician abilities narrow and degrade over time. These trends have resulted in an inability to adequately meet the needs of the population we serve. Our profession must not only be accountable for the “product” at each stage of medical education, it must also enable maintenance and enhancement of competence over a career in medicine.
- 3. Resource imperatives.** Healthcare and education frequently consume the majority of provincial government budgets, and in a time of fiscal restraint, medical education lies at the nexus of the two. New dollars are unlikely to flow into the enhancement of postgraduate medical education. Health human resources are strained. Accessibility of health care

services is a perpetual problem. Physicians are working harder than ever before. Therefore transformation, not addition, is the mode for successful change.

- 4. Community expectations.** Meanwhile, those served by medicine continue to raise their expectations for comprehensive, timely, safe, high-quality, and personalized care. Medicine must rise to these expectations, to remain relevant and meet the changing needs of society.
- 5. The evolving nature of residents.** Residency education is now 100 years old, dating back to when Osler, Halsted, and others created “a seminary for advanced medical study.” However, the nature of being a resident has evolved significantly since its inception with questions of duty hours, the nature of work and service, and what it means to be a ‘learning professional.’
- 6. The evolving roles of faculty.** The very definition of a medical teacher has changed dramatically in recent decades. Physicians are being asked to do more than ever before. Teaching occurs in settings across the country, far beyond the traditional teaching hospital. New questions arise as to how best to support faculty for continuing excellence in postgraduate medical education in this new context.
- 7. New models and standards in medical education.** Around the world, medical educators are reconsidering the model of PGME. Competency-based medical education, new teaching models, more direct observation, new assessment tools, greater use of portfolios, new teaching settings, greater emphasis on in-training assessment, and the rise of simulation are a few examples of major shifts in medical education.

Transformation of the Royal College's Role: *Competence by Design*

In collaboration with other partners in Canadian medicine, the Royal College is embarking upon *Competence by Design*, a multi-year transformational change initiative in the system of specialty medical education. This project, focused on the learning continuum from the start of residency to retirement, is based on a competency model of education and assessment. Ultimately, it is designed to address societal health need and patient outcomes.

The vision and mission of the *Competence by Design* initiative is underpinned by the following ten papers, all of which articulate an impressive and scholarly vision for change. We invite you to read, reflect, and consider the implications of these papers.

Acknowledgements

Pierre LeBlanc, MD, FRCPC, was a comparative reviewer for the French translation of this paper. An active physician and academic in the Canadian medical education system, particularly in the Francophone community, he generously assisted in the preparation of the French papers. The other participants in this paper series acknowledge his important contributions to the Competence by Design eBook.

Ernest Prégent, MD, CCFP (EM), CSPQ, FCFP, was a comparative reviewer for the French translation of this paper. An active physician and academic in the Canadian medical education system, particularly in the Francophone community, he generously assisted in the preparation of the French papers. The other participants in this paper series acknowledge his important contributions to the Competence by Design eBook.

François LeBlanc, MD, FRCPC, was a comparative reviewer for the French translation of this paper. An active physician and academic in the Canadian medical education system, particularly in the Francophone community, he generously assisted in the preparation of the French papers. The other participants in this paper series acknowledge his important contributions to the Competence by Design eBook.

Andrée Boucher, MD, FRCPC, was a comparative reviewer for the French translation of this paper. An active physician and academic in the Canadian medical education system, particularly in the Francophone community, she generously assisted in the preparation of the French papers. The other participants in this paper series acknowledge her important contributions to the Competence by Design eBook.



ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA
COLLEGE ROYAL
DES MÉDECINS ET CHIRURGIENS DU CANADA

Competence by Design: Reshaping Canadian Medical Education

Table of Contents

1. Addressing Societal Health Needs ————— 8
2. Generalism: Achieving a Balance with Specialization ————— 18
3. Diversified Learning Contexts ————— 32
4. The Resident's Dual Role as Learner and Service Provider ————— 45
5. Professionalism ————— 55
6. Just Culture of Patient Safety ————— 69
7. Competency-based Medical Education ————— 99
8. Assessment ————— 106
9. Faculty Development Re-imagined ————— 118
10. The Continuum of Medical Education ————— 130



1. Addressing Societal Health Needs



Authors

Robert F. Maudsley, MD, FRCSC
Paul Dagg, MD, FRCPC
Jim Wilson, MD, FRCSC
Jason R. Frank, MD, MA(Ed), FRCPC
Minoli Amit, MD, FRCPC
Michael Brundage, MD, FRCPC
Danielle Frechette, MPA
Dorianne Rheaume, MD, FRCPC
Rebekah Smith, MPH, MD Candidate
John Steeves, MEd, MD, BSc, FRCSC
Jennifer Stewart, MHS/MES
Kenneth A. Harris, MD, FRCSC



2. Generalism: Achieving a Balance with Specialization

Authors

Jim Wilson, MD, FRCSC
Graham Bullock, MD, FRCPC
Paul Dagg, MD, FRCPC
Rebekah Smith, MPH, MD Candidate
Minoli Amit, MD, FRCPC
William N. Fitzgerald, CM, MD, FRCSC
Danielle Frechette, MPA
Kevin Imrie, MD, FRCPC
Nicole Robbins, MD, FRCSC
Linda Snell, MD, MHPE, FRCPC, FACP
John Steeves, MEd, MD, BSc, FRCSC
Jennifer Stewart, MHS/MES
Jason R. Frank, MD, MA(Ed), FRCPC



3. Diversified Learning Contexts



Authors

Paul Dagg, MD, FRCPC
Rebekah Smith, MPH, MD Candidate
Margaret Kennedy, MA
Robert F. Maudsley, MD, FRCSC
Jennifer Stewart, MHS/MES
Jason R. Frank, MD, MA(Ed), FRCPC



4. The Resident's Dual Role as Learner and Service Provider



Authors

Kevin Imrie, MD, FRCPC
Deepak Dath, MD, FRCSC
Graham Bullock, MD, FRCPC
Rebekah Smith MPH, MD Candidate
Rachel Fisher, MD
Danielle Frechette, MPA
Kenneth A. Harris, MD, FRCSC
Mohammad Jamal, MD
Margaret Kennedy, MA
Robert F. Maudsley, MD, FRCSC
Aleisha Murhaghan
Natalie Saad, MD, FRCPC
Jason R. Frank, MD, MA(Ed), FRCPC



5. Professionalism



Authors

Lara Cooke, MD, MSc, MEd, FRCPC
Nicolette Caccia, MD, FRCSC
Stefanie De Rossi, BHSc. Hons.
Sherry Espin, PhD, RN
Leslie Flynn, MD, FRCPC
Wendy Levinson, MD, FRCPC
Robert F. Maudsley, MD, FRCSC
Kristin Sivertz, MD, FRCPC
Mark Smilovitch, MD, FRCPC
Kenneth A. Harris, MD, FRCSC



Appendix A: Table 1. Framework for Conceptualizing Professionalism – Individual Physician Behaviors in Interactions with Patients and Family Members and Other Health Care Professionals²¹

Examples of Individual Physician Behaviors		
Values	Interactions with Patients and Family Members	Interactions with Colleagues and Other Members of the Health Care Team
Compassionate, respectful, and collaborative orientation, "in service" of the Patient	<ul style="list-style-type: none"> Provide patient-centered care, demonstrating empathy, compassion, and actively working to build rapport Promote autonomy of the patient; eliciting and respecting patient preferences, and including patient in decision making Be accessible to patients to ensure timely access to care and continuity of providers Act to benefit the patient when a conflict of interest exists 	<ul style="list-style-type: none"> Work collaboratively with other members of the care team to facilitate effective service to the patient Demonstrate respect for other team members in all interactions
Integrity and accountability	<ul style="list-style-type: none"> Maintain patient confidentiality Maintain appropriate relationships with patients Promptly disclose medical errors; take responsibility for and steps to remedy mistakes Actively manage conflicts of interest and publicly disclose any relationships that may affect the physician's recommendations related to diagnosis and treatment (eg, part ownership of surgery center) 	<ul style="list-style-type: none"> Report impaired or incompetent colleagues Participate in peer-review and 360-degree evaluations of team Specify standards and procedures for handoffs across settings of care to ensure coordination and continuity of care
Pursuit of excellence	<ul style="list-style-type: none"> Adhere to nationally recognized evidence-based guidelines (eg, guidelines issued by Agency for Healthcare Research and Quality or US Preventive Services Task Force), individualizing as needed for particular patients but conforming with guidelines for the majority of patients Engage in lifelong learning and professional development Apply system-level continuous quality improvement to patient care 	<ul style="list-style-type: none"> Participate in collaborative efforts to improve system-level factors contributing to quality of care
Fair and ethical stewardship of health care resources	<ul style="list-style-type: none"> Do no harm; do not provide unnecessary or unwarranted care Commit to deliver care equitably, respecting the different needs and preferences of subpopulations, and to provide emergent care without regard to insurance status or ability to pay Deliver care in a culturally competent and resource conscious manner 	<ul style="list-style-type: none"> Establish mechanisms for feedback from peers on resource use and appropriateness of care Work with clinical and nonclinical staff to continuously improve efficiency of care delivery process and ensure that all members of the care team are optimizing their contributions to care delivery and administration Actively work with colleagues to coordinate care, avoid redundant testing, and maximize prudent resource use across settings

Printed with the permission of *The Journal of the American Medical Association*.

Appendix A: Table 2. Framework for Conceptualizing Professionalism – Organizational Behaviors in Practice and Physician Advocacy and Professional Organizations²¹

Examples of Organizational Behaviors		
Values	Practice Settings (i.e. Hospitals, Health Systems, Physician Organizations)	Physician Advocacy and Professional Organizations
Compassionate, respectful, and collaborative orientation, “in service” of the patient	<ul style="list-style-type: none"> Support ongoing development of communication skills and cultural competency to foster effective interactions with patients, families, and care team members Invest in shared decision-making supports and actively encourage patient engagement in care decisions Establish mechanisms to engage representatives of patients and family caregivers in organizational management and governance Adopt policies and practices that support timely access to patients’ providers of choice Foster creation of a physical environment that promotes healing 	<ul style="list-style-type: none"> Advocate payment policy that supports clinician time with patients to build rapport, engage in shared decision making, and be accessible to patients to provide timely care Actively promote ongoing development of competencies related to patient engagement and teamwork
Integrity and accountability	<ul style="list-style-type: none"> Provide peer and organizational support for disclosure of medical errors and reporting impaired or incompetent clinicians Adopt clear and stringent policies regarding conflict of interest and maintaining patient confidentiality Provide performance feedback to care team and hold the team accountable for results for a defined population, eg, via compensation, public reporting, or both Discourage provision of services without an evidence base to support value to the patient 	<ul style="list-style-type: none"> Develop and encourage organizational strategies to foster a “culture of professionalism” Participate in development of professional standards and establish mechanisms for remediation and discipline of members who fail to meet those standards Commit to disclosure of meaningful performance information Encourage development of systems to report and analyze medical mistakes to inform prevention and improvement strategies Develop conflict of interest policies Use benefit to patients as the metric to guide resolution of conflicts of interest
Pursuit of excellence	<ul style="list-style-type: none"> Invest in system-level supports for organization-wide quality improvement, eg, electronic health records, registries Establish clear targets for improvement and continuously monitor and raise the bar for performance 	<ul style="list-style-type: none"> Develop and encourage use of meaningful measures of clinical quality of care and sound guidelines for clinical practice Establish ambitious targets and support actions to achieve significant and rapid system- wide improvements in quality of care Advance scientific knowledge



Examples of Organizational Behaviors		
Values	Practice Settings (i.e. Hospitals, Health Systems, Physician Organizations)	Physician Advocacy and Professional Organizations
Fair and ethical stewardship of health care resources	<ul style="list-style-type: none"> • Encourage judicious use of resources to care for a patient population, eg, by providing information on system- level costs and outcomes • Implement mechanisms for supporting cultural competency and continuous quality improvement focused on reducing disparities in care 	<ul style="list-style-type: none"> • Advocate for development and adoption of tools to support cost-effective care and judicious use of health care resources • Promote public health and advocate on behalf of societal interests with respect to health and health care, without concern for the self-interest of the individual physician or the profession • Advocate for payment policies that drive a focus on total cost of care rather than discrete encounters and individual clinician inputs • Support development of tools to facilitate reflection on disparities in care and drive down unwarranted variation

Printed with the permission of *The Journal of the American Medical Association*.



6. Just Culture of Patient Safety



Authors

Amy Nakajima, MD, FRCSC

Sarah Taber, MHA/MGSS

Susan Brien, MD, MEd, CSPQ, FRCSC, CPE, FRCSC

Mark Daly, RRT MA (Ed)

Chris Hayes, MD, FRCPC

Mark Fleming, PhD

Angèle Landriault, BScN

Anne Matlow, MD, FRCPC

Gary Victor, MD, FRCPC

Gordon Wallace, MD, FRCPC

Kenneth A. Harris, MD, FRCSC



7. Competency-based Medical Education

Authors

Linda Snell, MD, MHPE, FRCPC, FACP
Jason R. Frank, MD, MA(Ed), FRCPC
Grant Stoneham, MD, FRCPC
Stefanie De Rossi, BHSc. Hons.
William Fletcher, MD, FRCPC
Katharine Gillis, MD, FRCPC
Jennifer Stewart, MHS/MES
Tim Allen, MD, MA (Ed), FRCPC
Susan Waserman, MD, FRCPC
Verna Wing-Yun Yiu, MD, FRCPC
Kenneth A. Harris, MD, FRCSC

Table 1. The Spectrum of Design Approaches for Residency Curricula

Built on the Work of Carraccio¹¹

	Time-dependent Model	Hybrid Model	Time-free Model
Organizing Structure	Time spent on rotations	Progression of competence within a time-based rotation	Progression of competence
Degree of Structure	Rotations and academic half-days and other formal teaching contexts	Structured flexible curriculum; rotations as only one learning method	Structured, learner-centred curriculum; time-independent; rotations as a resource to aid learning
Learning Goals	Objectives of training	Milestones	Milestones
Role of Timed Rotations	The unit of curriculum	Resource for acquiring competencies	Irrelevant
Role of In-training Assessment	To ensure that rotations are passed	To document progression and milestone achievement during rotations, plus overall progress over time both within rotations and in other contexts (e.g., simulation)	To document overall progression and milestone achievement in all contexts
Role of Summative Assessment	To infer readiness for exam	To ensure attainment of competencies and milestone achievement	To ensure attainment of competencies and milestone achievement
Key Assessment Tools	Single subjective measures, often removed from the workplace (e.g., in-Training Evaluation Report [ITER], Final in-Training Evaluation Reports [FITERs], global rating scales, oral exams); emphasis on assessment at the end of a time period	Formative and some summative collected in a portfolio (e.g., encounter cards, mini-Clinical Evaluation Exercises [mini-CEX], multi-source feedback [MSF], logbooks, practice-based assessments, Objectively Structured Clinical Examinations [OSCEs] and other simulation methods)	Multiple objective measures emphasizing observation in authentic settings (e.g., encounter cards, mini-CEX, MSF, logbooks, practice-based assessments, OSCE and other simulation methods) all collected in a portfolio with reflection needed
Program Focus	Processes for rotations	Acquisition of competency outcomes via rotations and other activities	Acquisition of competency outcomes
Teacher Roles	Supervision, teaching	Supervision, teaching, direct observation	Supervision, teaching, direct observation
Learner Roles	Service on rotations; attend academic sessions; study for exam	Ownership of learning; plot course for progression of competence through rotations	Ownership of learning; plot course for progression of competence through all learning activities



8. Assessment

Authors

Graham Bullock, MD, FRCPC
Tim Allen, MD, MA (Ed), FRCPC
Jennifer Chapin
Gary Cole, PhD
Kenneth A. Harris, MD, FRCSC
Richard Hodder, MD, FRCPC
A. Curtis Lee, PhD
Jonathan Sherbino, MD, MEd, FRCPC
Chris Watling, MD, MMEd, PhD, FRCPC
Jason R. Frank, MD, MA(Ed), FRCPC



9. Faculty Development Re-imagined



Authors

Jonathan Sherbino, MD, MEd, FRCPC
Lara Cooke, MD, MSc, MEd, FRCPC
Denyse Richardson, MD, FRCPC
Linda Snell, MD, MHPE, FRCPC, FACP
Cynthia Abbott, MPI
Deepak Dath, MD, FRCSC
Kristin Sivertz, MD, FRCPC
John Steeves, MEd, MD, BSc, FRCSC
Kenneth A. Harris, MD, FRCSC



Table 1. Conceptualization of Professional Development Mapped to the CanMEDS/CanMEDS-FM Physician Competency Framework

CanMEDS Role	CFPC Four Principles of Family Medicine	Sample Professional Development Topics for the Physician In-practice
Medical Expert	Principle 2: The family physician is a skilled clinician	<ul style="list-style-type: none"> • Tele-health care • Physician self-assessment • Physician 360° review • Maintaining specialty-specific diagnostic and therapeutic knowledge and skills (e.g., conventional CME) • Practice-based/workplace-based learning
Communicator	Principle 1: The doctor patient relationship is central to the role of the family physician Principle 2: The family physician is a skilled clinician	<ul style="list-style-type: none"> • Interpersonal communication training • Complex topics: bad news, consent, disclosure • Crucial conversations: end of life care
Collaborator	Principle 3: Family medicine is community-based Principle 4: The family physician is a resource to a defined practice	<ul style="list-style-type: none"> • Negotiation and conflict management/resolution • Crucial conversations • Team dynamics • Intradisciplinary care • Interprofessional care • Relationship-centred care • Communities of practice
Manager	Principle 3: Family medicine is community-based Principle 4: The family physician is a resource to a defined practice	<ul style="list-style-type: none"> • Leadership skills: facilitation to run a committee • Change management • Practice assessment • Information technologies • Practice management • Quality management • Patient safety • Cost efficiency
Health Advocate	Principle 3: Family medicine is community-based Principle 4: The family physician is a resource to a defined practice	<ul style="list-style-type: none"> • Policy development • Media relations skills • Health Intelligence Units • Barriers to care • Special populations • Social determinants of health
Scholar	Principle 2: The family physician is a skilled clinician Principle 4: The family physician is a resource to a defined practice	<ul style="list-style-type: none"> • Teaching skills • Curriculum development • Assessment • Program evaluation • Research/scholarship • Lifelong learning • Personal learning plans • Teaching dossiers
Professional	Principle 1: The doctor patient relationship is central to the role of the family physician	<ul style="list-style-type: none"> • Ethics • Ongoing service to the profession • Physician wellness • Mentoring • Behaviours



10. The Continuum of Medical Education



Authors

Jocelyn Lockyer, MHA, PhD

Ivan Silver, MD, MEd, FRCPC

Anna Oswald, MD, MMEd, FRCPC

Graham Bullock, MD, FRCPC

Craig Campbell, MD, FRCPC

Jason R. Frank, MD, MA(Ed), FRCPC

Sarah Taber, MHA/MGSS

Jim Wilson, MD, FRCSC

Kenneth A. Harris, MD, FRCSC

The authors acknowledge Jonathan Sherbino, FRCPC, McMaster University, for his thoughtful contributions to this manuscript.

UT PGMEExchange

What is UT PGMEExchange ?

UT PGMEExchange is an online repository developed by the PGME office. The repository holds and catalogues teaching, assessment, program development, and program evaluation resources for use by faculty and program directors to meet the needs of University of Toronto postgraduate programs.

Why develop UT PGMEExchange ?

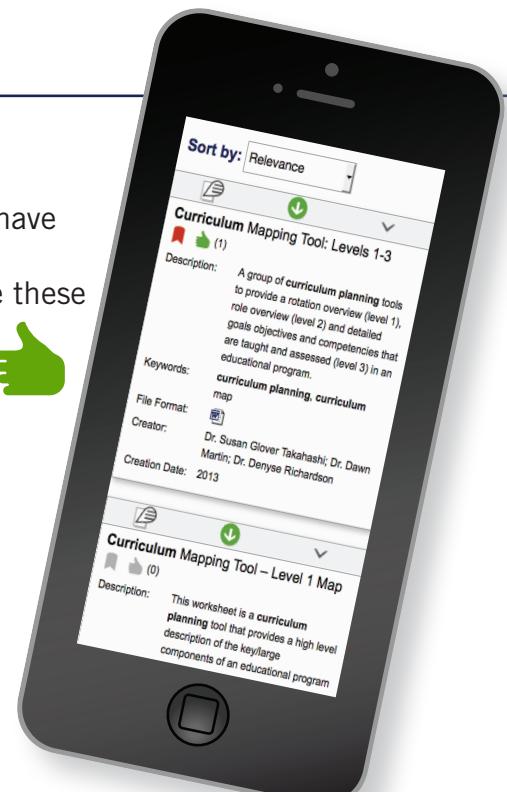
UT PGMEExchange is meant to facilitate a culture of sharing medical education resources within our University of Toronto postgrad community.

Who can access UT PGMEExchange ?

UT PGMEExchange is available to University of Toronto program directors, site directors, and faculty.

Usage of UT PGMEExchange

Since the launch in Spring 2014, faculty, directors and staff have begun to use the UT PGMEExchange to search and browse for educational resources. We hope that you will continue to use these resources and let us know which ones you've found useful by recommending them to others using the “thumbs up” icon:



What is available in UT PGMEExchange ?

The collection is growing daily.

- 89 Resources
- 13 Contributing Authors
- Material in 8 Different Formats Including Videos and Posters

POPULAR TOPICS include:

- Communication
- Assessment
- Remediation
- Sharing Information
- Professionalism
- Developing Relationships
- Feedback
- ...and more

Want to use UT PGMEExchange ?

- Available for Program Directors, FM Site Directors, and Faculty at pgmexchange.utoronto.ca
- Login to this resource with your UTORid & password
- Contact us at pgme.exchange@utoronto.ca

The screenshot shows a web browser window for the 'UTPGMExchange : Login' page at www.pgmexchange.utoronto.ca/login.php. The page features the University of Toronto logo and the text 'Postgraduate Medical Education UNIVERSITY OF TORONTO'. The main heading is 'UT PGMEExchange'. Below the heading is a decorative horizontal bar composed of various colored squares. A section titled 'About the UT PGMEExchange Repository' contains the text: 'Welcome to the PGME Repository of teaching and learning tools and resources. Here you will find lesson plans, modules, guidelines and more! You must log in to download or contribute resources.' At the bottom of the page are two login buttons: 'UTORid Login' and 'PGME Guest Login'. A note at the bottom states: 'For assistance logging in to the repository, please contact us at pgme.exchange@utoronto.ca'.

Rationale for Introducing Resource Stewardship into Postgraduate Medical Education at the University of Toronto

Healthcare costs are rising at an unsustainable rate with up to 30% of healthcare spending unnecessary to improve quality of care. Physicians are responsible for approximately 80% of healthcare spending, yet there has traditionally been little discussion of value or appropriateness of care in medicine. On the heels of the successful launch of the American Board of Internal Medicine's Choosing Wisely campaign, the Canadian Medical Association launched the Choosing Wisely Canada (CWC) campaign in the Spring of 2014. Twenty-one national specialty societies have since joined the campaign and released lists of "Five Things Physicians and Patients Should Question". These efforts are already intensifying the focus on the inappropriate overuse of healthcare resources in Canada, and creating momentum for change.

In addition to producing patient-friendly materials, CWC is working with medical schools to incorporate material on resource stewardship and value-based care into all levels of the curricula. Indeed, until now, resource stewardship has only remotely been recognized as an important concept for residents to learn, and has therefore been under-represented in the curriculum of most postgraduate training programmes.

However, in the new CanMEDS 2015 competency framework, under the "Leader" role, the ability to 'engage in the stewardship of healthcare resources' is considered to be a key competency. The relevant enabling competencies are the ability to:

- allocate healthcare resources for optimal patient care; and,
- apply evidence and management processes or recommendations to achieve cost-appropriate care.

In early 2014 the Resource Stewardship Committee, a subcommittee of PGMEAC was established with the goal of bringing together representatives from across departments to lead in the design, implementation, evaluation, and eventual dissemination of educational programs aimed at teaching residents how to deliver high value appropriate care to patients. Efforts to date have led to:

- access to CWC on the home page of PGME;
- the establishment of draft core competencies in resource stewardship for use across UofT programmes;
- consideration of Educational tools and resources; and,
- strategies on engaging residents and faculty.

Chief residents can play an active and important role in advancing the resource stewardship agenda.