



**DALHOUSIE  
UNIVERSITY**

**Global Comprehensive Needs Assessment for Practicing Physicians  
in the Maritimes**

May 2020

Continuing Professional Development & Medical Education  
Faculty of Medicine  
Dalhousie University

Prepared by,

Anne Mahalik, Evaluation Specialist

Constance LeBlanc, Associate Dean

## **Executive summary**

Dalhousie Medical School's Continuing Professional Development (CPD) aims to improve quality of care in the Maritimes through the facilitation of life-long learning, collaboration, and research.

Dalhousie CPD recently conducted a multisource needs assessment to identify perceived and unperceived learning needs of practicing physicians across the Maritime provinces, leading to the identification of the following recommendations:

1. Incorporate CanMEDS subject area suggestions into future CPD programs.
2. Provide comprehensive preparation to speakers.
3. Provide resources to early career physicians to prepare for transition to practice.
4. Address factors affecting participation in CPD.
5. Assist learners with overcoming barriers to knowledge translation.
6. Ensure Faculty Development opportunities are accessible to all.

## Introduction

### ***Background***

Dalhousie Medical School's Continuing Professional Development (CPD) programs provide an opportunity for physicians and other health care providers in the Maritimes to participate in current, high value, evidence-based education opportunities close to home.

Our mission is to promote excellence in healthcare through facilitation of life-long learning, collaboration, and research. By striving for excellence, forging strong relationships with clinical milieus, and serving healthcare professionals and teams, we aim to improve the quality of care in the Maritimes.

Please refer to our website for up to date information on the programs we offer.

<https://medicine.dal.ca/departments/core-units/cpd.html>

In 2019-2020, Dalhousie CPD conducted a multisource needs assessment to identify perceived and unperceived physician learning needs to inform their continuing education programs. The strategy for the needs assessment was based on the Committee on Accreditation of Continuing Medical Education (CACME) Accreditation Standard 3.1:

*The planning, curriculum design and implementation of the CPD activities organized or co-developed by the CME/CPD office include needs assessment strategies. These involve intended participants and should address their practices and relevant population health issues.*

The 2015 CanMEDS framework defines the required competencies for medical education and practice in Canada (<http://www.royalcollege.ca/rcsite/canmeds/about-canmeds-e>). The framework describes the following roles for practicing physicians: medical expert (integrating role), communicator, collaborator, leader, health advocate, scholar, and professional.

### ***Objectives***

The objectives of this needs assessment were to:

1. identify perceived learning needs for maritime physicians
2. identify unperceived learning needs for maritime physicians
3. identify barriers that prevent knowledge translation
4. identify suggestions for enhancing program delivery/content
5. identify factors influencing participation in CPD
6. identify faculty development needs

## Methods

### ***What we did***

We conducted a mixed method needs assessment using survey and evaluation data; content analysis of published health care reports; descriptive analysis of physician regulatory College and hospital complaints in the Maritimes; and a focus group with participants from the Dalhousie CPD Mini Medical School program. Results of focused research conducted within the past two years were also included.

Data were analysed using a combination of descriptive statistics and content and thematic analysis.

### ***Data sources***

To gain a comprehensive view of physician learning needs, we adopted the CACME recommendation to use a multisource needs assessment strategy to identify perceived and unperceived learning needs.

### **Perceived**

Perceived learning needs are self-identified, *I know what I want and need to know*. We assessed physicians' perceived learning needs using quantitative and qualitative evaluation data (i.e., suggested topics, program improvement suggestions) from the 2017-2019 CPD conferences, the largest of which are the twice-yearly refresher conferences.

Learners are asked to complete an evaluation form following any conferences organised by CPD at Dalhousie. As part of this survey, they are asked to comment on their satisfaction with conference offerings, speaker effectiveness and suggestion for topics of future learning. (Appendix 1. CPD Events 2017-2020)

In Fall 2019 and Winter 2020, all practicing Maritime physicians were asked to complete an online survey regarding their learning needs. Topics addressed were specifically related to CanMEDS roles, faculty development needs, barriers to integrating knowledge into practice, and factors influencing participation in CPD activities. (Appendix 2. Survey of practicing physicians)

In Spring and Summer 2019, early career physicians across Nova Scotia, i.e., those with less than ten years of experience, were asked to participate in a research study exploring the learning needs of early career physicians. (Appendix 3. Survey of early career learners; Interview questions)

### **Unperceived**

Unperceived learning needs are identified by others, *I don't know what I need to know*. We assessed unperceived learning needs for practicing maritime physicians using summary data from a variety of sources:

Patients:

- patient survey re physician learning needs
- (Mini Med) patient focus group

- Complaints to Colleges of Physicians and Surgeons for NS, NB, PEI
- Complaints to hospitals in NSHA, Health PEI, Vitalite NB (Horizon NB declined)

Health Care providers:

- HCP survey re physician learning needs
- ADS survey re physician learning needs

Health statistics and data from government bodies:

- Canadian Institute for Health Information (CIHI)
- Canadian Medical Protective Association (CMPA)
- NS Prescription Monitoring Program
- Drug Evaluation Alliance NS
- Choosing Wisely (Canada, NS)
- Atlantic Provinces Medical Peer Review Program

Research:

- Evaluation of active learning strategies used in therapeutic conference lectures (CPD) for practicing physicians

Patients and health care providers were asked to complete an online survey and participants in the annual Mini Med School at Dalhousie were invited to participate in a focus group (Appendix 4. HCP/Patient Survey; Appendix 5. Focus Group questions). Complaints to Colleges of Physicians and Surgeons are published on their website. Disciplinary decisions of the Colleges; the subject of complaints to Maritime health authorities; reports and recommendations published online by the government agencies listed above were reviewed for relevance to physician learning needs. Observation research was conducted during the 2018 CPD Fall Refresher conference to explore interaction and active learning strategies employed during individual presentations. (Appendix 6. Observation data collection template)

***How will these results be used?***

Results of this needs assessment will be shared with Directors within CPD and used to inform CPD programming and planning over the next 4 years. With the appointment of a new Associate Dean in July 2020, this document will serve as an introduction to Continuing Professional Development needs of physicians practicing across the Maritime provinces.

## Findings

### *Overall*

We identified perceived and unperceived learning needs for all seven CanMeds roles. (see Table 1)

Each of the sources consulted were analysed for their inclusion of the seven CanMEDS roles. Although the roles of Medical Expert and Communicator were referenced most often, each of the roles was reflected at least once in the sources of data compiled for this needs assessment. (See Table 2).

### *Learning Needs*

#### **Perceived**

In the direct survey of physicians (n=165), they were asked to identify specific learning needs under each of the seven CanMEDS roles.

Complete data is included in Appendix 7.

It is interesting to note that at least one respondent expressed their lack of awareness/engagement with the CanMEDS roles, commenting,

"I have been looking at CanMEDS categories for many years and still cannot see it as a framework that helps me identify deficiencies in my knowledge or direct CME. A presentation that demonstrates its value would help. I see it as an academic framework not as user interface."

There was a comment that was repeated under each of the roles:

"This is exactly the problem with current teaching, it is esoteric. CanMEDS is the ultimate example of the way that it should not be done."

Learners are also asked to complete an evaluation form following any conferences organised by CPD at Dalhousie. As part of this survey, they are asked to comment on speaker effectiveness and to provide suggestions for topics of future learning.

(Appendix 8. Conference evaluation form)

The following topics were recommended, sorted here by frequency of utterance.

- mental health
- diabetes management
- female uro-reproductive health
- pharmacy/ medications
- emergency medicine (n=8)
- diet/ weight loss/ obesity management
- paediatrics
- hematology
- dermatology

**Table 1. CanMEDs roles identified in sources for each of the unperceived and perceived learning needs**

SOURCE of Learning Needs	Medical expert	Communicator	Collaborator	Leader	Health Advocate	Scholar	Professional
<b>PERCEIVED</b>							
CPD conference evaluations	X	X	X	X	X	X	X
Direct survey practicing physicians	X	X	X	X	X	X	X
<b>UNPERCEIVED</b>							
Patient survey		X	X	X			
(Mini Med) Patient Focus Group	X	X	X				
HCP survey	X	X	X	X	X	X	X
Academic Detailing Service	X	X	X		X	X	X
NS Provincial Monitoring Program	X				X		X
Drug Evaluation Alliance NS	X				X		X
College of Physicians and Surgeons of NS, NB & PEI	X	X	X	X	X		X
Hospital Complaints	X	X	X				X
Choosing Wisely (Canada, NS)	X	X		X	X		X
Canadian Medical Protective Association (CMPA)	X		X				X
Canadian Institute for Health Information (CIHI)	X	X	X	X	X		X
Peer review programs (Atl & NS)	X	X	X	X	X		X
<b>CPD DEPT RESEARCH</b>							
Evaluation of active learning strategies used in therapeutic conference lectures		X				X	
Early career physician learning preferences (research study)	X	X		X		X	X

**Table 2. Summary of learning needs by CanMEDS roles, identified by physicians (survey)**

Medical expert	<ul style="list-style-type: none"> <li>• manage efficiency &amp; organisation, time management</li> <li>• maximise efficiency of EMR for pt care</li> <li>• new evidence/guidelines (pharmaceuticals, Imaging)</li> <li>• managing multiple demands</li> <li>• overprescribing, over investigating</li> </ul>
Communicator	<ul style="list-style-type: none"> <li>• managing conflict, e.g. chronic dissatisfaction</li> <li>• incorporating EMR into practice to maximise pt care</li> <li>• breaking bad news</li> <li>• Culturally sensitive, inclusive communication</li> <li>• handling of inappropriate pt requests of patients</li> <li>• documentation of (difficult) encounters</li> </ul>
Collaborator	<ul style="list-style-type: none"> <li>• managing conflict</li> <li>• transfer of care to primary care (esp. underserved community)</li> <li>• negotiate overlapping and shared responsibilities</li> <li>• responding to inappropriate lab and imaging requests</li> </ul>
Leader	<ul style="list-style-type: none"> <li>• focused leadership education (finance, incorporating new ideas, leadership style, opportunities for women)</li> <li>• using QI data to improve pt care</li> <li>• phys engagement, wellness, reduce burnout</li> <li>• change management</li> <li>• NOT a leader. I'm in the trenches!</li> </ul>
Health Advocate	<ul style="list-style-type: none"> <li>• address systemic challenges: obesity, addiction, poverty, HIV)</li> <li>• motivate pts to adopt healthy behaviours (incorporate readiness to change)</li> <li>• apply CQI to disease prevention, health promotion, &amp; health surveillance activities</li> <li>• finding pt resources (maintain up to date repository)</li> <li>• preventive care and strategies for aging population</li> <li>• managing workplace issues (poor physical environment, mental health)</li> </ul>
Scholar:	<ul style="list-style-type: none"> <li>• how to plan and execute learning activities &amp; presentation to build on current skills</li> <li>• feedback to difficult/struggling learners</li> <li>• critical appraisal</li> <li>• recognition of productivity &amp; improved resources</li> <li>• incorporation of research into community practice</li> <li>• micro research programs</li> </ul>
Professional:	<ul style="list-style-type: none"> <li>• peer assessment</li> <li>• supporting colleagues in need</li> <li>• managing personal and professional demands</li> <li>• better awareness &amp; using diversity &amp; inclusion</li> <li>• how to stand up and report unprofessional behaviour</li> <li>• e-learning modules to facilitate self-practice assessments</li> <li>• ethics and managing ethical dilemmas</li> </ul>

Participants also identified a need to review common office presentations and which conditions can be managed in primary care.

The following suggestions were identified regarding the presentation skills of presenters at large group education conferences.

- time management for speakers/presenters and moderators
- allow time for questions
- non-traditional and engaging presentation skills

Participants in the explorative study of learning preferences of early career physicians indicated a need for education in the following areas:

- Practice management
- Navigating the health care system (specifically, in NS)
- Skill based learning (further development of clinical skills)
- Support & Development (Research, leadership, mentorship, teaching)

## **Unperceived**

Unperceived learning needs provide insight into learning needs of which, physicians themselves, are unaware.

A focused research project undertaken by CPD staff highlighted scholarly learning needs of physicians related to conference presentations. Raw data has been included in Appendix 9.

Feedback was gathered from patients through various methods. Participants of the Volunteer Patient Program at Dalhousie were asked to provide their input via a direct survey; participants from the Mini Medical School were asked to participate in a focus group regarding their patient perspective; and Regulatory College and hospital complaints were reviewed for references to physician learning needs. They identified the following:

- Interprofessional team collaboration
- Communication (lack of, poor comm skills, dismissal of concerns)
  - Assessment of patient's understanding of their own health
  - Training or development of patient centred communication skills and behaviours would have a positive impact on complaints
- Holistic care (recognition of mental health aspect underlying many physical conditions)
- Incorporation of technology to increase practice efficiency
- Informed consent
- Mental health care and physician wellness
- Patient care & individual patient visits and procedures

As a result of complaints made to Colleges of Physicians and Surgeons for NS, NB, PEI, specific courses were cited as required learning in some cases, to maintain their license to practice, and in others, to regain their licence. Some examples included,

- Understanding Boundaries and Managing Risks Inherent in the Physician-Patient Relationship
- Medical Record Keeping (medicolegal documentation; information management)
- The Prescribing Course-Safe Opioid Prescribing for Chronic Non-Cancer Pain

Health care providers were also asked to comment on the learning needs of practicing physicians. Nurse practitioners, pharmacists and respiratory therapists in NS, PEI and NB were asked to complete an online survey. A summary of results is below:

- Collaboration with other health professionals
  - Communication with other health professionals--civility
  - Understanding roles and scopes of other hcp (and using their skills)
  - Timely consultation of specialists
- Leadership – being part of a team
  - Being open to changes in practice
- Communication
  - Interpersonal communication (tone of voice, eye contact, active listening, empathy)
- Appropriate prescribing (e.g., non-cancer pain management, anxiety, depression)
- Medicolegal documentation
  - Informed consent; Legal requirements for prescribing controlled substances
  - Medication changes
- Embracing new technology
  - EMR training-optimising use of electronic medical records within your office
  - Prescribing through DIS
- SDOH (impact of)
  - Patients with compliance issues due to insufficient resources
- Stewardship
  - Appropriate lab testing and diagnostic imaging; antibiotics; handwashing
- Mental health care and physician wellness
  - Self-care, compassion fatigue, burnout
- Scholarly activities
  - Remaining current in area of practice
  - Evidence-based medicine / critical appraisal
  - Greater uptake of academic detailing and other CPD programs

Nova Scotia Prescription Monitoring Program has identified specific learning needs related to effective monitoring of benzodiazepines (BDP's) and initiation of opioid therapy.

The Drug Evaluation Alliance NS identified the following learning needs, delivered by pharmacists through the Academic Detailing program:

- Hypertension: High Risk, Pregnancy and Children

- Antibiotics: Why and Why Not
- Choices Before Opioids for CNCP
- Epinephrine and Anaphylaxis
- COPD: What to Do with All These New Inhalers?

As part of this program, specifically related to the topic of *Antibiotics: Why and Why Not*, 232 academic detailing visits were made to 647 participants throughout NS between 2018 and 2019.

#### Choosing Wisely (National Campaigns)

- Opioid Wisely
- Using Antibiotics Wisely
- STARS - Students and Trainees Advocating for Resource Stewardship
- More is not always better - encouraging pts to speak up about unnecessary testing
- Additional Recommendations and Resources, by Specialty
- unnecessary tests and treatments; making the best choice for high quality care
- enhanced communication between patients and health care providers

Various national government agencies release reports and recommendations based on health statistics and data (**CIHI and CMPA**). Recommendations may be related to practice management or patient care, such as the following:

- Privacy and Confidentiality obligations
- Liability protection for collaborative practice
- Obstetrical care in Canada
- Hospital patient safety
- Physician health

Atlantic Provinces Medical Peer Review Program for New Brunswick, Prince Edward Island and Newfoundland is a peer assessment program focusing on physicians' office facilities and procedures; medical record keeping; adherence to the CMA code of ethics, and patient care. Although there are no official reports publicised, the work of this program is ongoing. The College of Physicians and Surgeons in Nova Scotia has a similar program, Physician Peer Review Program, designed to support physicians in quality improvement and improve patient health.

CPD research staff observed conference presentations during the 2018 Fall CPD Refresher. Researchers identified that presenters during the conference should have additional education in the following areas:

- active learning strategies
- powerpoint/presentation skills
- time management
- writing good learning objectives
- allowing for dedicated Q&A time

## ***Focus on delivery***

Survey respondents, conference participants, health care providers, and research participants commented on various aspects of the delivery of CPD programs.

### **Preferred format/delivery**

Participants commented on preferred learning formats. Most preferred delivery formats included the following:

- One day face-to-face conferences
- Case-based discussions
- Skills-based workshops

Least preferred options included:

- Self-assessment (i.e. chart audit, QI, etc.)
- Videoconferences (i.e. Telehealth)
- Journal clubs (online or face-to-face)

Feedback gathered following conferences indicated that preferences varied somewhat depending on the topic of discussion. Responses emphasized the importance of flexibility.

Preferred formats included:

- Short (15 min), pearls-based discussion
- Small group sessions: workshops for learning clinical skills; interactive breakout sessions for focused discussion
- Online (videoconference, webinar, courses, preferably interactive)
- Longitudinal series, offered online with homework in between
- Large group conferences, one or 2-3 days in length
- Leveraging technology: self-directed (2 min medicine; curated evidence reviews)
- Similar model to academic detailing
- hands on simulation

Participants in the early career learning needs study suggested the following:

- creating a group learning session that meets every few months to discuss experiences of new graduates and practical strategies on things such as practice management and navigating our flawed system
- group sessions with other new physicians and a rep from maybe CMPA or DoctorsNS would be extremely helpful
- provide local intensive conferences (e.g., weekend) with primary purpose of reviewing everything in an area of medicine. E.g. weekend review/crash course of cardiology, or psychiatry, or general surgery, etc.
- hands on skill development

## **Factors affecting participation in CPD**

Respondents were asked to speak to some of the factors that influence their participation in CPD. The top 3 responses were:

- relevance of topic to my practice
- timing (time of day or year)
- interest in topic

Other common responses were high cost of registration fees and travel; impact on work-life balance; and lack of relevance of topics being presented. They also added networking opportunities, avoiding bias from pharmaceutical companies, loss of revenue during attendance, workload, and whether it is a place they would like to visit.

This topic also emerged as a strong theme in a recent research study examining the learning needs of early career physicians. Thematically, participants identified workload; family obligations; cost; travel opportunities; relevance to practice; timing (time of year or day); communication of events; speaker (specialty, reputation); location; and format of delivery as influential over their decision whether to participate in CPD programs. They further suggested that conference organisers consider a first 5 or 10 year discount to encourage attendance and the possibility of offering childcare.

Subject areas that were most interesting to respondents when choosing a CPD event were:

- new therapeutic and management approaches
- new clinical practice guidelines
- new diagnostic approaches
- new developments in their specialty
- new drugs and/or therapies

Additional responses included: teaching, social determinants of health, physician wellness, physical literacy, and integrating QI into practice.

Respondents expressed interest in learning about various technology-related topics:

- using mobile devices and/or various apps for accessing CPD and medical information
- electronic health records (including reminders and warning systems)
- using medical databases and online resources for healthcare/medical information

Other suggestions included portable ultrasound and EMR systems that allow touch screen and handwriting to typed notes.

Several cautions were included as well, for example,

Remembering that human contact and not gizmos is the most important part of any doctor-patient interaction. And that patient autonomy, and not following a logarithm, is paramount.

## **Barriers to applying knowledge in practice**

It is not only important to know which topics practicing physicians would like to learn more about, it is essential that we better understand some of the barriers physicians face in applying their newly acquired knowledge into their practice.

- workload
- Support of employer/ organisation/ colleagues (resistance to change)
- length of time between learning and opportunity to apply (inertia)
- lack of technology/resources/\$\$\$
- lack of reinforcement/printed materials/ memory
- patient resistance to change
- distrust of new information

## **Finally, respondents were asked for ideas how we can better meet their CPD needs:**

- Accessibility
  - location: scheduling: bring sessions TO people
  - more varied webinars, ability to watch later
  - opportunity to participate in half days for refreshers conferences
  - Province/region-wide initiatives, e.g., child psychiatry annual meeting in NS
  - in-person faculty development offered IN my community
  - integrate CPD into currently established educational programs/dept rounds
- Subject area
  - presentation to demonstrate the value of CanMEDS-difficulty seeing it as a framework that helps me identify deficiencies in my knowledge or direct CME
  - more training in cognitive sciences
  - reinforcing basic skills as well as learning the latest craze
- Communication
  - List all CME in a single location
- Administration
  - advance notice of academic activities and events, esp. rural communities
  - not so much time sitting
  - discount for rural physicians to attend

## *Faculty development*

Respondents to the direct survey of practicing physicians were asked to speak to their learning needs as an educator, academic, or scholar. Offered in multiple distance learning formats, faculty development opportunities include enhancement of skills in five theme areas: research, leadership, professional development and promotion, and educational development and administration. They were asked to comment on their involvement in teaching activities.

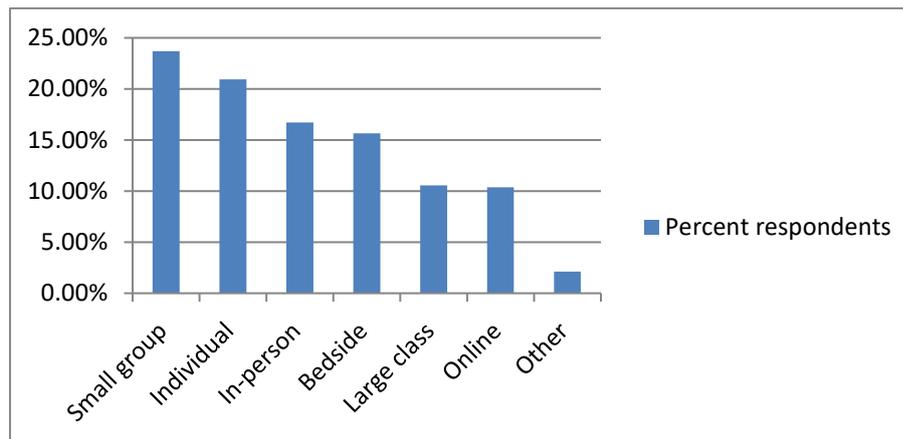


Figure 2. Physician involvement (%) in teaching activities

To the list provided, they added conference presentations, CME programs, podcast videos, Grand Rounds, and the “occasional medical student or resident”.

A list of faculty development programs currently on offer was provided to physicians completing the survey with the request to indicate their level of interest in each of the programs. They were most interested in the Clinician as Teacher (CAT), Teaching, and Leadership programs. Least interest was expressed for the instructor Clinical as Teacher (iCAT) and Educational Development and Administration programs.

Current offerings for meeting teaching/supervision education needs were presented as well. All subjects were rated as important, however, two topics were rated as very important: effective communication with learners, and delivering effective feedback. Topics rated as either very import or important are reflected in Figure 3.

Respondents also provided a list of suggestions for faculty development topics to be offered in the future:

- What teaching style is most effective (practical, in your face, theoretical and politically correct)?
- Clinical decision making and the diagnostic process
- How to incorporate teaching into a busy practice
- Options to participate other than Thursday evening
- Improving selectivity in oneself and learner

- Partner with organisations that are also delivering CME to target specific specialty areas
- Time management

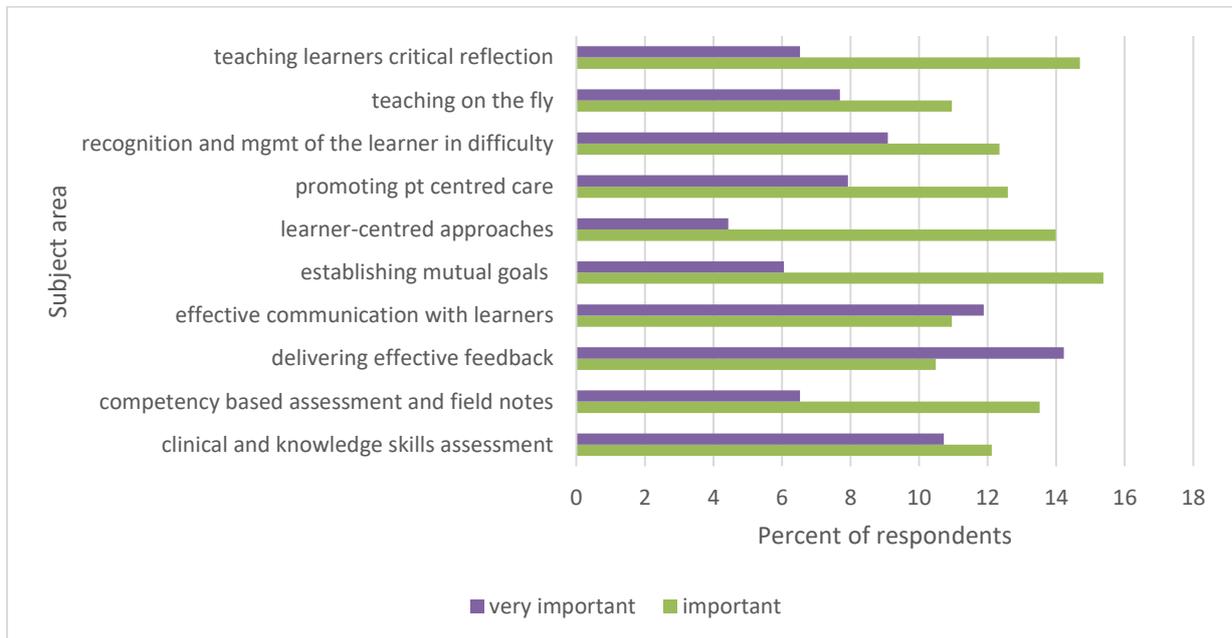


Figure 3. Faculty development subject areas rated as important or very important for meeting teaching/supervision education needs

## Conclusion

Multiple sources were consulted to compile a comprehensive list of learning needs for physicians practicing in the Maritime provinces. Sources included practicing physicians, patients, health care providers, provincial government programs and various national organisations. From a physician point of view, we have learned that accessibility of CPD programs remains a concern. Accessibility in this case refers to communication of programs and events as well as timing and location. Physicians would like to see CPD incorporated into local, existing learning opportunities, taking advantage of local expertise and champions across the Maritimes.

From our findings, we have compiled a list of recommendations for Dalhousie CPD.

### *Recommendations*

#### **1. Incorporate CanMEDS subject area suggestions into current and future CPD programs.**

##### Medical Expert

- Appropriate prescribing and monitoring (e.g., non-cancer pain management)
- New therapeutic and management approaches
- Evidence-based clinical practice guidelines and diagnostic approaches (e.g., increased uptake of academic detailing)

##### Communicator

- Patient centred communication - acknowledging patient experience and ensuring understanding
- Understanding roles and scopes of other health care providers
- Managing conflict with patients (e.g., chronic dissatisfaction, responding to inappropriate requests from patients)
- Negotiating overlapping roles and responsibilities

##### Collaborator

- Negotiating overlapping roles and responsibilities
- Transfer of care, particularly in underserved communities)
- Responding to inappropriate requests from colleagues (e.g., lab and imaging requests)

##### Leader

- EMR training-optimising use of electronic medical records
- Incorporating QI into practice
- Effective use of technology in practice (e.g., using medical databases and online resources for medical information)
- Focused leadership education: finance, incorporating new ideas, leadership style, opportunities for women
- Change management

- Practice management: managing efficiencies, organisation & time management

#### Health Advocate

- address systemic challenges: obesity, addiction, poverty, HIV
- motivate pts to adopt healthy behaviours (incorporate readiness to change)
- finding patient resources
- managing workplace issues (poor physical environment, mental health)

#### Scholar

- Evidence-based medicine / critical appraisal
- Career planning: recognition of productivity and building on current skills
- Incorporation of research into practice

#### Professional

- Physician engagement, wellness, reduce burnout
- Medical record keeping
- Participate in peer assessment
- How to report unprofessional behaviour in colleagues

### **2. Provide comprehensive preparation to speakers.**

- Provide resources to speakers and presenters related to active learning strategies, non-traditional and engaging presentation skills, and writing good learning objectives.

### **3. Provide resources to early career physicians to prepare for transition to practice.**

- Dedicate a learning stream to early career physician learning at the Fall CPD Refresher conference.
- Establish a provincial mentorship program for physicians in the first 5-10 years of practice.
- Create an online course specifically specific to early career physicians.

### **4. Address factors affecting participation in CPD.**

- Share factors affecting participation in CPD with program leaders and conference planners to be considered for all future events.
- Vary some of the following factors to allow for greater participation in programs throughout the year:
  - Format/delivery – in person, webinar, online course
  - Timing (time of day, day of the week, time of year)
  - Location

### **5. Assist learners with overcoming barriers to knowledge translation.**

- Take advantage of opportunities to share information and research with institutional partners.
- Make learning materials accessible when conference has ended.

- Work with government to assist with implementation of new initiatives.

**6. Ensure Faculty Development opportunities are communicated and accessible to all.**

- Develop one new topic each year
- Include in common list of offerings by CPD
- Promote accessibility of programs

## **Appendices (available on request)**

Appendix 1. CPD Events (2017-2019)

Appendix 2. Survey of practicing physicians

Appendix 3. Survey of early career learners; Interview questions

Appendix 4. HCP/Patient Survey

Appendix 5. Focus Group questions App

Appendix 6. Observation data collection template

Appendix 7. Perceived learning needs

Appendix 8. Conference evaluation form

Appendix 9. Unperceived learning needs