

Does Competency By Design Produce Better Vascular Surgeons?

Elisa Greco, BSc, MEd, MD, RPVI, FRCSC
Vascular Surgeon, St. Michael's Hospital
Program Director, Vascular Surgery, University of Toronto
Assistant Professor, University of Toronto
Faculty Wellness Lead, Dept of Surgery, St. Michael's Hospital
Medical Director, Vascular lab St Michael's Hospital









No

Presenter Disclosure

Presenter: (Elisa Greco)

no current relationships with commercial entities



Objectives

- To understand the why the change to CBD
- To highlight some differences between curriculum models
- To understand the desired outcomes of the CBD change



Why CBD and EPAs?

Future Medical Education in Canada Postgraduate Project

The second in a series of projects funded by Health Canada to create a vision for producing the types of physicians Canadians need, now and in the future.

The FMEC PG looked at ways to improve their postgraduate education as they moved through residency and into independent practice.

https://www.afmc.ca/wp-content/uploads/2022/10/2012-FMEC-MD_EN.pdf

https://www.afmc.ca/strategic-priorities/social-accountability/future-of-medical-education-in-canada/

ISSUES RAISED

- Aging and growing population
- Growing number of patients who live with multiple chronic diseases
- Added pressure on healthcare providers and facilities
- Increasing demand for timely and equitable access to health services
- Limited amount of resources with which to provide them

FMEC PG's RESPONSE

 Ensuring that Canada's physicians are responsive to the changing needs and expectations of Canadians is a vital part of the solution to those issues and has been the prime motive behind this FMEC process.

THE VISION

- All physicians must possess, by the end of their training, the clinical competence and commitment to practice medicine based on the principles of quality, patient safety, professionalism, patient-centered and team-based care.
- Central to this vision is the belief that social accountability must inform physician training, and that medical education must be focused on the health and well-being of patients and their communities.

 It was a combined effort from 4 medical governance groups in Canada:

 AFMC, representing the medical schools in Canada

 Canada's three accrediting colleges—the College of Family Physicians of Canada, the Royal College of Physicians and Surgeons of Canada, and le Collège des Médecins du Québec.

- In March 2012, 10 recommendations created through identification of a comprehensive base of evidence,
 - including a literature review, stakeholder interviews, and an examination of international best practices.
- Action plans were drafted and refined through an iterative process involving extensive consultations with many stakeholders (experts and lay people)
- Each and every one of them must be implemented in order to achieve effective and sustainable change in PGME and everyone needs to be on board for it to be successful



Recommendation No. 4 was: Integrate Competency - Based Curricula in Postgraduate Programs

Develop, implement, and evaluate competency based, learnerfocused education to meet the diverse learning needs of residents and the evolving healthcare needs of Canadians.

Moving away from a strictly time-based training model towards one that identifies the **specific knowledge**, **skills**, **and abilities** needed for practice. Some of these competencies will be generic and needed by all physicians; some will be specific to specialties or groups of specialties; and others will be specific to the needs of particular communities. Each needs to be identified, explicitly taught, and assessed.

ACTIONS:

- 1. Conduct a thorough, evidence-based review of competency-based training model options that most effectively develop readiness to practice by specialty. Leadership: CFPC, CMQ, RCPSC.
- 2. Develop and implement competency-based training programs. Leadership: AFMC (Committee on PGME), CFPC, CMQ, RCPSC.
- 3. Show evidence that program standards and resident competencies are relevant to society's evolving healthcare needs. Leadership: AFMC, CAIR, CFPC, CMQ, FMRQ, RCPSC.
- 4. Share curricular innovations and best practices among medical schools and residency training programs. Leadership: AFMC, CAIR, FMRQ.

RATIONALE:

- Must adapt our training of doctors to meet the unique healthcare interests of both the minority and majority of the population
- competencies must be defined on the basis of individual and community health needs as it evolves with the Canadian population
- RCPSC can establish a process whereby competencies are periodically reviewed and articulated to ensure that the right generalist and specialist skills are developed for quality patient care in all settings

RATIONALE:

- provide learning experiences that support the development of defined requisite competencies BUT also be a flexible, learner-centred curriculum
- Readiness to practice is an essential marker for successful completion of resident training. Curriculum and assessment should be fashioned around this objective, with <u>time-based</u> milestones <u>and</u> demonstration of <u>competencies</u> as complementary markers of success.
- Residency training must equip residents with the tools for self-reflection and self-assessment, so they maintain competence throughout their careers.



Does CBD produce a <u>different</u> <u>kind</u> of vascular surgeon?



The aim was <u>not</u> to produce a BETTER vascular surgeon

The aim is to produce a physician who is <u>responsive</u> to the changing needs and expectations of Canadians in both urban and rural setting, exemplifying the principles of <u>quality</u>, <u>patient safety</u>, <u>professionalism</u>, <u>patient-centered</u> and team-based care while having a sense of <u>social accountability</u>.

Have we done this?



Vascular Surgery

Transition to Discipline	Foundations of Discipline	Core of Discipline	Transition to Practice
1. Recognizing, assessing and diagnosing patients with urgent vascular conditions and providing a preliminary management plan 2. Assessing and diagnosing patients with non-urgent vascular conditions and providing a preliminary management plan 3. Assisting in the performance of elective open and endovascular procedures	 Recognizing and providing a comprehensive management plan for patients with an urgent vascular condition Providing comprehensive consultation for patients with common non-urgent vascular conditions Selecting, performing, and interpreting vascular diagnostic tests Performing common/foundational vascular surgical procedures Recognizing and providing initial management for patients with common complications 	1. Executing scholarly work 2. Leading the team caring for patients on the vascular surgery service 3. Managing patients with aortoiliac aneurysms 4. Managing patients with aortoiliac occlusive disease (acute/chronic) 5. Managing patients with upper and lower extremity arterial disease 6. Managing patients with thoracic aortic pathology 7. Managing patients with visceral arterial disease 8. Managing patients with extracranial cerebrovascular disease 9. Managing hemodialysis access 10. Managing patients with vascular injuries (traumatic or iatrogenic) and those needing reconstruction following oncologic surgery 11. Managing patients with chronic venous disease 12. Managing patients with acute venous disease 13. Managing patients with vascular malformations and congenital anomalies 14. Managing nonatheromatous vascular disease 15. Managing patients with lymphatic disorders	1. Coordinating, organizing, and executing the day's list of surgical procedures 2. Managing a vascular clinic 3. Managing patients with rare and complex vascular surgical conditions 4. Developing and implementing a personal learning plan geared to setting of future practice



- PATHWAY TO COMPETENCE IN VASCULAR SURGERY (2020) This
 is different than the EPAs does encompass many of those
 principals and changes outlined in the vision of CBD
- https://www.royalcollege.ca/content/dam/documents/ibd/vascula r-surgery/pathway-to-competence-vascular-surgery-e.pdf
- However, we tend to focus more on and equate CBD with EPAs and we have to remember EPAs are only one part of CBD
- Vascular surgery competencies: <u>https://www.royalcollege.ca/content/dam/documents/ibd/vascular-surgery/vascular-surgery-competencies-e.pdf</u>



VASCULAR SURGERY COMPETENCIES 2021/CBD

VASCULAR SURGERY COMPETENCIES Pre-CBD 2014

Medical Expert:

- Practise medicine within their defined scope
 of practice and expertise
- 2. Perform a **patient-centred** clinical assessment and establish a management plan
- 3. Plan and perform procedures and therapies for the purpose of assessment and/or management
- 4. Establish plans for **ongoing care** and, when appropriate, timely 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

Medical Expert:

- Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centred medical care
- Establish and maintain clinical knowledge, skills, and behaviour appropriate to Vascular Surgery practice
- Perform a complete and appropriate assessment of a Vascular Surgery patient
- Use preventive and therapeutic interventions effectively
- Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic
- Seek appropriate consultation from other health professionals, recognizing the limits of their own expertise



Communicator:

- **1**. Establish professional therapeutic relationships with patients and their families
- 2. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families
- 3. **Share** health care information and plans with patients and their families
- 4. **Engage patients** and their families in developing plans that reflect the patient's health care needs and goals
- 5. **Document and share** written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy

Communicator:

- Develop rapport, trust, and ethical therapeutic relationships with patients and families
- Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals
- Convey relevant information and explanations accurately to patients and families, colleagues and other professionals
- 4. Develop a common understanding on issues, problems and plans with patients, families, and other professionals to develop a shared plan of care
- 5. Convey effective oral and written information about a medical encounter



Collaborator:

- Work effectively 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
- Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care

Collaborator:

- Participate effectively and appropriately in an interprofessional Vascular Surgery team
- Work with other health professionals
 effectively to prevent, negotiate, and resolve
 interprofessional conflict

Leader:

- Contribute to the improvement of health care 1.
 delivery in teams, organizations, and systems
- Engage in the stewardship of health care resources
- 3. Demonstrate leadership in health care systems
- Manage career planning, finances, and health 4.
 human resources in personal practice(s)

Manager:

- Participate in activities that contribute to the effectiveness of their health care organizations and systems
- 2. Manage their practice and career effectively
- Allocate finite health care resources appropriately
- 4. Serve in administration and leadership roles





Health Advocate:

- Respond to an individual patient's health needs by **advocating** with the patient within and beyond the clinical environment
- 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

Scholar:

- Engage in the continuous enhancement of their professional activities through ongoing learning
- Teach students, residents, the public, and other health care professionals
- Integrate best available evidence into practice
- Contribute to the creation and dissemination of knowledge and practices applicable to health

Health Advocate:

- Respond to individual patient health needs and issues as part of patient care
- Respond to the health needs of the communities that Vascular Surgery serve
- 3. Identify the determinants of health for the populations that they serve
- Promote the health of individual patients,
 communities, and populations

Scholar:

- 1. Maintain and enhance professional activities through ongoing learning
- 2. Critically evaluate medical information and its sources, and apply this appropriately to practice decisions
- 3. Facilitate the learning of patients, families, students, residents, other health professionals, the public and others, as appropriate
- Contribute to the development, dissemination, and translation of new knowledge and practices



Professional:

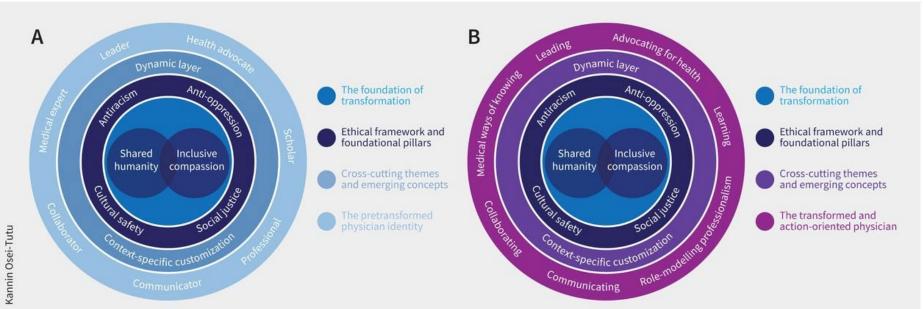
- **1.** Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards
- Demonstrate a commitment to society by recognizing and responding to societal expectations in health care
- 3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation
- Demonstrate a commitment to physician health and well-being to foster optimal patient care

Professional:

- Demonstrate a commitment to their patients, profession, and society through ethical practice
- Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation
- 3. Demonstrate a commitment to physician health and sustainable practice



Vascular surgery competencies: CanMEDS Re-Imagined



(A) A reimagined physician competency model in transformation. Shared humanity and inclusive compassion form its core, cradled by social justice and embraced by its foundational pillars. The "dynamic layer" elevates the sophistication of the model, empowering the integration of crosscutting themes and emerging concepts into a customizable framework that can be tailored to various local and global training and practice contexts. (B) The transformed and action-oriented physician competency model. The "medical expert" role, a cornerstone, is enhanced and expanded to include the latest medical and technological advances, as well as diverse forms of medical knowledge. Each role is transformed from its neutral orientation to

its action-oriented stance — drawing inspiration from the model's core and signalling a commitment to continuous growth and development in all

Redefining excellence in health care: uniting inclusive compassion and shared humanity within a transformative physician competency model Kannin Osei-Tutu CMAJ March 25, 2024 196 (11) E381-E383



Does Competency By Design Produce Better Vascular Surgeons?

No

Does CBD produce a different kind of vascular surgeon?

TBD









Specialty Training Requirements in Vascular Surgery

/ascular Surgery

2014 VERSION 3.0

These training requirements apply to those who begin training on or after July 1st, 2014.

PATHWAY 1 - DIRECT ENTRY

MINIMUM TRAINING REQUIREMENTS

Five (5) years of approved residency training. Training must incorporate the principle of increasing graded responsibility. This period must include:

- Two (2) years of foundational training in surgery (please see the Objectives of Surgical Foundations Training). This period must include:
 - 1.1. A minimum of two (2) blocks of critical care
 - A minimum of one (1) block that provides initial trauma management (e.g. Emergency Medicine, General Surgery, trauma team, Orthopedic Surgery or Plastic Surgery)
 - A minimum of four (4) blocks and a maximum of nine (9) blocks of Vascular Surgery
 - 1.4. A minimum of one (1) block General Surgery
 - 1.5. A minimum of one (1) block Internal Medicine or one of its subspecialties
- 2. Three (3) years, which must include:
 - Twenty six (26) blocks of Vascular Surgery, sixteen (16) blocks of which must be at a senior resident level
 - 2.2. Thirteen (13) blocks of selective rotations, including any combination of the following:
 - 2.2.1. Cardiac Surgery (a maximum of 4 blocks)
 - 2.2.2. General Surgery (a maximum of 3 blocks)
 - 2.2.3. Thoracic Surgery (a maximum of 4 blocks)
 - 2.2.4. Non-invasive vascular laboratory (a maximum of 4 blocks)
 - 2.2.5. Vascular imaging (a maximum of 7 blocks)
 - 2.2.6. Vascular surgery in a community setting (a maximum of 4 blocks)
 - 2.2.7. Research in Vascular Surgery (a maximum of 10 blocks)