

Update on **CBME**

Susan Glover Takahashi, PhD

Director, Education, Innovation & Research

Lead, CBME, PGME

September 13, 2016



Post MD Education
UNIVERSITY OF TORONTO



Post MD Education
UNIVERSITY OF TORONTO

OBJECTIVES

1. Provide update on activities and plans for CBME



WHAT IS COMPETENCY-BASED MEDICAL EDUCATION (CBME)?

CBME is an educational model:

- More oriented to outcomes rather than time in training (i.e. what trainee can DO)
- More flexible to learners' prior skills and current needs
- Training using a coaching approach with more regular feedback to improve
- Enhanced tracking of learners' progress and performance



Two 'brands' of **CBME** in Canada

- **CBD** or Competency by Design
 - Royal College's approach to **CBME**
 - Rollout for approx 80 specialties in 7 cohorts over next decade
 - 2 programs (Medical Oncology & Otolaryngology – Head and Neck Surgery) will start field testing in 16-17
- **Triple C Competency Based Curriculum**
 - CFPC approach implemented in 2011



ROLE OF ASSESSMENT

In CBME, important tools to improving competence:

- Frequent workplace assessments
- Coaching
- Feedback

Assessment *is* also a valuable tool *for* learning

Assessments **for** learning
Assessments **of** learning



CBME models

- ‘pure CBME’ (ortho cCBC model version 1.0)
- Mixed model (ortho cCBC model version 2.0)
- CBD
- CBA



Cases

- Orthopedic Surgery
- Palliative Medicine
- Psychiatry
- Diagnostic Radiology
- Surgical Foundations
- ObGyn



CBD FEATURES

- Mixed model of CBME
- 4 stages of residency education
- Outcomes and competencies defined via EPAs and milestones
- Specialty documents:
 - Nationally approved/required EPAs
 - Nationally approved Required Training Experiences
- Documentation of individual progress & program compliance (i.e. accreditation)
- Staged implementation over 10 year period



COMPETENCE & COMPETENCIES

Competence (outcome, standard)

- Is the array of abilities across multiple domains or aspects of physician performance in a certain context
- Is multi-dimensional and dynamic
- Changes over time, experience, and setting

Competencies (ingredients)

- “An observable ability of a health professional, integrating multiple components such as knowledge, skills, values and attitudes.

Frank JR, Snell L, ten Cate O, Holmboe ES, Carraccio C, Swing SR, et al. Competency-based medical education: theory to practice. *Med Teacher*. 2010;32:638-45



ENTRUSTABLE PROFESSIONAL ACTIVITIES (EPAs)

‘a critical part of professional work that can be identified as a unit to be entrusted to a trainee once sufficient competence has been reached’ (ten Cate, 2006)

<https://www.youtube.com/watch?v=hOw3-lqL9EY>

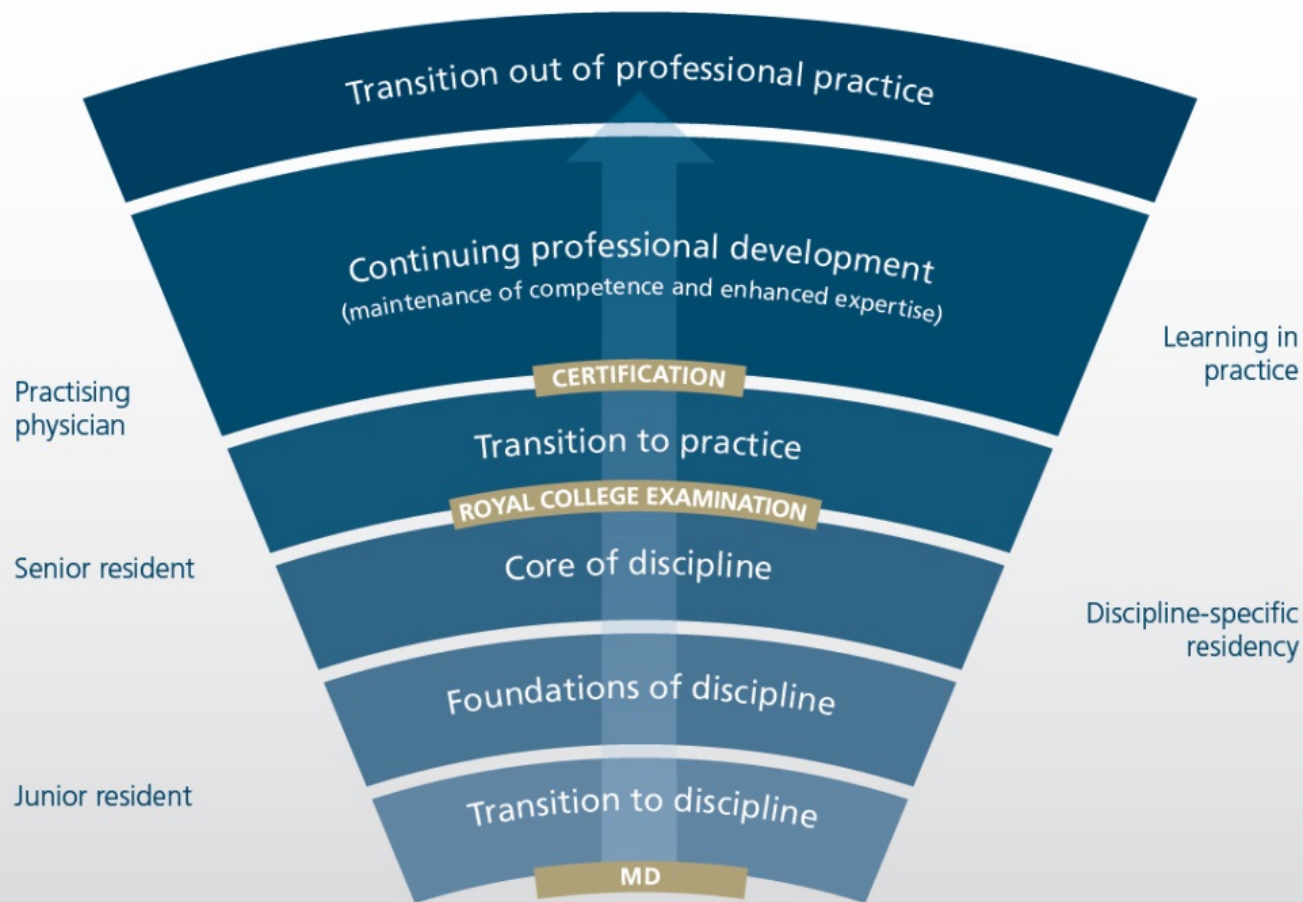


The Competence Continuum

Traditional stages

Proposed CBD stages^{1,2}

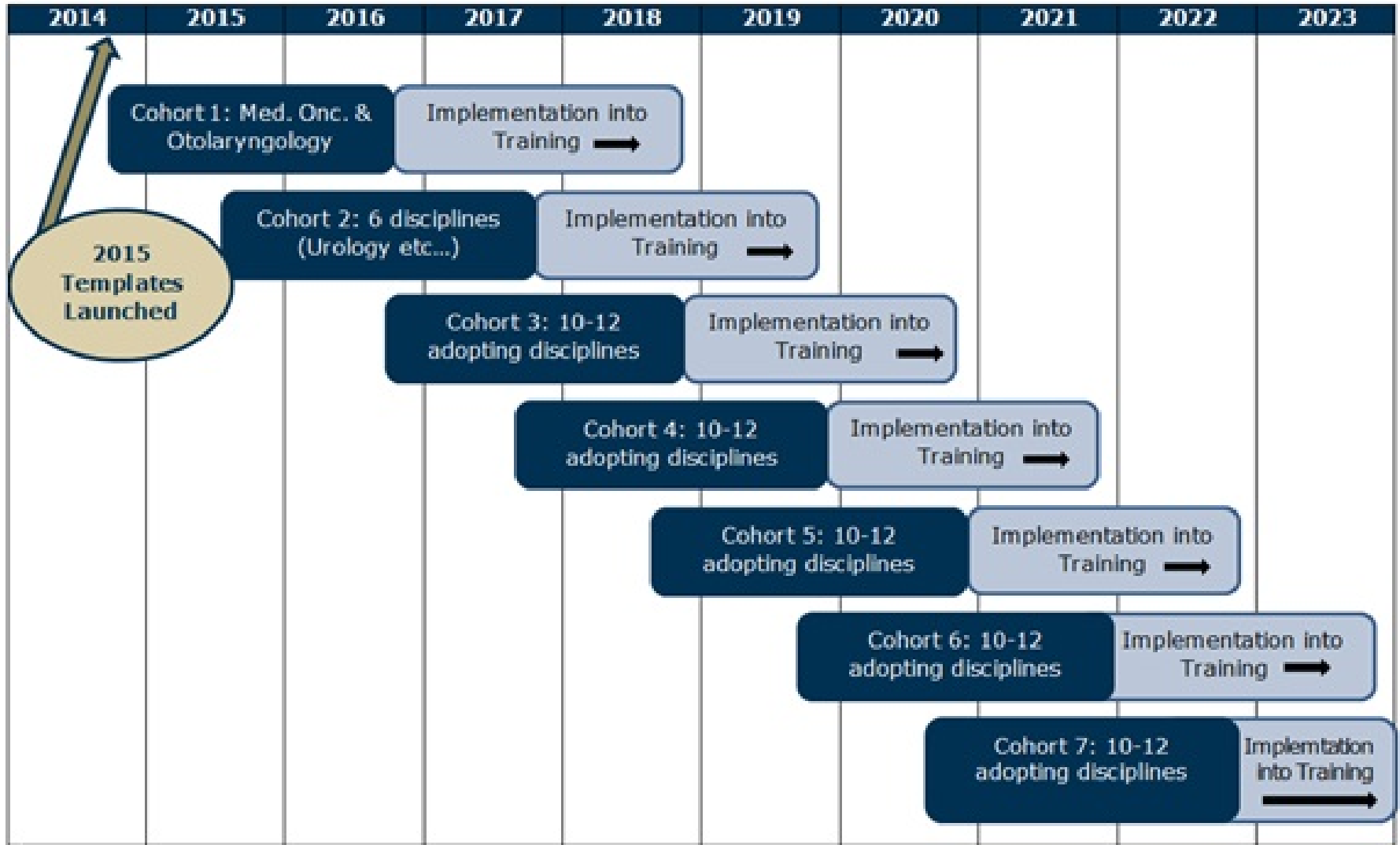
Medical education phases



¹ Competence by Design (CBD)

² Milestones at each stage describe terminal competencies

CBD Discipline Rollout: Proposed Implementation Plan



2015	2016	2017	2018	2019	2020
Urology	Neurosurgery	General Surgery	Orthopedic Sx	Dermatology	Colorectal
Anesthesiology	Cardiac Surgery	Plastic Sx	Vascular Sx	Ophthalmology	Gen Surg Onc
IM	Pediatrics	Obs/Gyn	Neuro Path	Diag Rad	Thoracic Sx
GI	Anatomic Path	PMR	Neurology	Medical Genetics	Interventional Rad
Forensic Path	Gen Path	Nuclear Med	Hem Path	Public Health	Palliative Med
SFAC	Radiation Oncology	Psychiatry	Hematology	Peds EM	Pain Med
	Emergency Medicine	Respirology	Peds Hem/Onc	GREI	Developmental Peds
	CCM	Cardiology	Peds Sx	MFM	Neuro Rad
	GIM	Rheumatology	Clin Pharm/Tox	Gyne/Onc	Peds Rad
	Nephrology	Geriatrics	Forensic Psych	ID	Occupational Med
		NPM	Child and Ado Psy	Med Micro	Endo and Met
		CIA	Geriatric Psych	Med Biochem	
			Adolescent Med		



PRINCIPLES GUIDING U OF T IMPLEMENTATION OF CBME

- ☑ Quality of patient care will not be adversely affected.
- ☑ Health care team functioning should not be negatively impacted.
- ☑ Given fiscal restraint, no additional funds are available for the implementation of CBME & CBD.



- ☑ Implementation will build on the excellence in residency education programs and practices.
- ☑ Implementation will employ best practices and apply best evidence.
- ☑ Innovation and implementation of progress will be shared early, often, and broadly, to enhance collaborations locally, nationally and internationally.
- ☑ Evaluation of structures, processes and outcomes will be used to inform needed refinements and improvements.



WHO is responsible for implementation???

→ → → PARTNERSHIP

1. Residency Program

- Director, Learners, Program Admin, Residency Program Committee, Site Directors

2. Department

- Vice Chair Education, Division Chair, Faculty Development Lead,

3. PGME Office

- PGME Assoc Dean, Lead- Education Innovations Team, Post MD Dean, IT teams

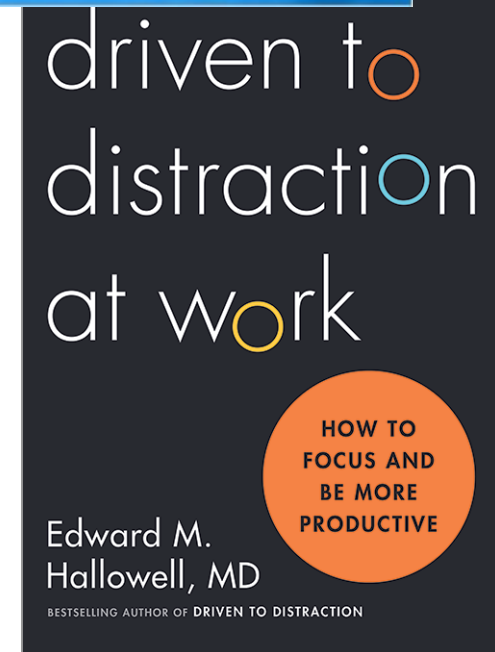
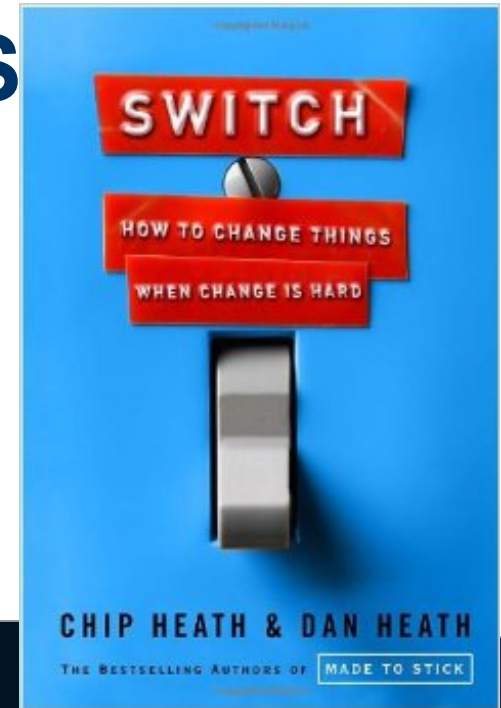
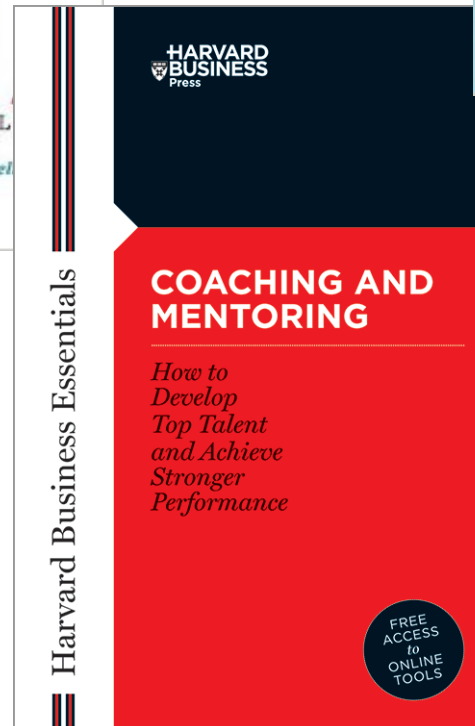
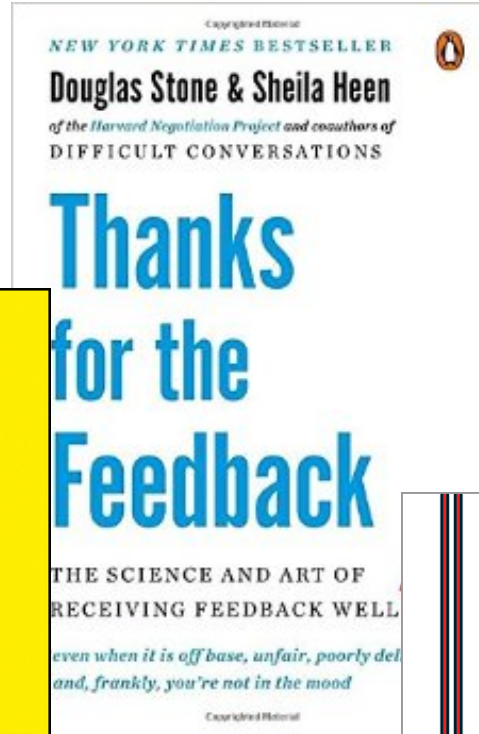
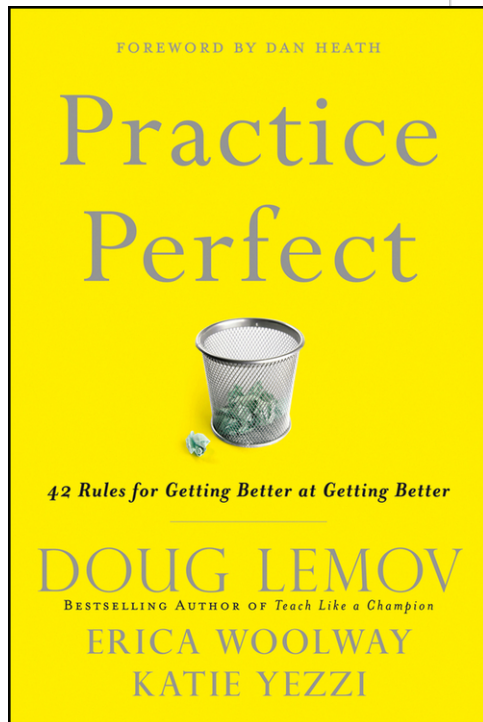


3 areas of **SHARED** work

- Curriculum Development, Implementation & Integration (including Assessment Tools Devt & Deployment)
- Faculty Development including Learners, Teachers, Sites, Leaders, Colleagues
- Monitoring, Evaluation, Communication, Knowledge Translation, & Scholarship



BOOK RECOMMENDATIONS



Post MD Education
UNIVERSITY OF TORONTO

QUESTIONS ABOUT CBME



- **CBME PGME**
University of Toronto
cbme.pgme@utoronto.ca
- **Glen Bandiera**
Associate Dean, PGME
University of Toronto
glen.bandiera@utoronto.ca
- **Susan Glover Takahashi**
Director, Education & Research
Lead for CBME for PGME
sglover.takahashi@utoronto.ca

