WORK CONTINUES AT A BUSY PACE implementing Competency Based Medical Education (CBME) and the Royal College Competence By Design (CBD) at the University of Toronto. This occasional newsletter is for Program Directors and other education leaders in PGME. We encourage you to share this newsletter broadly to other interested faculty, your residents, program administrators and other collaborators in residency education.

There are three main lessons that we have learned as we move forward over the past year:

1) Implementation of an educational change such as CBME requires active and effective partnership with programs, residents, departments and health facilities/hospitals. Much of that partnership is about listening to understand their needs and collaborating on solutions.

2) Effective local implementation requires a pan-Canadian collaboration and working closely with the Royal College to ensure that new national standards can be effectively integrated into our University of Toronto systems.

3) Information and assessment systems that support the roll out are crucial to success.

Since July, the start of the 2016-17 residency year, two of our programs – Medical Oncology (Med Onc) and Otolaryngology- Head and Neck Surgery (OHNS) have been field testing aspects of Competence by Design (CBD). See below where Dr. Scott Berry and Dr. Paolo Campisi report on those field tests. Assessing ‘what works’ and lessons learned in the early programs are the focus of much study and many, many conversations.

In the last few months, I have been meeting with each of the department education leads (e.g. Vice Chair, Education) to inventory how the Departments and their programs, faculty and residents are getting ready for Competence by Design (CBD).

My meetings with health facility/hospital partners have been focused on providing updates on the gradual changes to residency education, which are planned by the Royal College over the next 8-10 years.

Dr. Susan Glover Takahashi (Sue GT) has been leading the Education Innovations Group (EIG) at PostMD to organize and support the implementation of CBME across all our PGME programs. Below you will find Sue GT’s update on key activities and outcomes of the past few months. Given the

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importance of faculty development for the implementation of CBME, time for Dr. Glover Takahashi to focus on Faculty Development has been established as she works more directly with the Centre for Faculty Development (CFD) in the new role of Integrated Senior Scholar, PostMD/Centre for Faculty Development.

Below you will find updates on:

- Royal College implementation plans for 2017
- Progress updates for U of T programs for 2017

As well, you will find the next installment of:

- CBME myth busting
- Innovators in CBME
- Information about important CBME resources

If you have any questions, do not hesitate to contact me or Sue GT via sglover.takahashi@utoronto.ca or our EIG team cbme.pgme@utoronto.ca

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**NEWS AND UPDATES**

**UPDATE FROM THE ROYAL COLLEGE**

In late November 2016, Dr. Andrew Padmos, Chief Executive Officer (CEO) for the Royal College of Physicians and Surgeons of Canada (Royal College) announced that there was an agreement between the Royal College and Canada’s 17 medical schools to collaboratively implement Competence by Design (CBD) in select programs starting on July 1, 2017. This agreement was formalized at a conjoint meeting between the Royal College Committee on Specialty Education, Canada’s 17 postgraduate deans and their CBME leads.

CBD is a multi-year initiative that will transform specialty education from a time-based system to a hybrid competency-based education and assessment system, across the lifelong learning continuum. Effective July 1, 2017, the residents for the following two disciplines will enter a residency training program that will be based on their competency-based specialty standard documents:

- Anesthesiology
- Otolaryngology – Head and Neck Surgery (OHNS)

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LESSONS LEARNED FROM CBD IMPLEMENTATION AT U OF T IN JULY 2016

Otolaryngology – Head and Neck Surgery (OHNS): After months of preparation, OHNS launched a CBD field test with their PGY1 residents. Faculty development at each hospital site and resident readiness preceded the launch. The online software and assessment tools were made available to residents in all years and faculty. The PGY1 residents are the focus of the field test and are being assessed on 4 key OHNS tasks, also known as Entrustable Professional Activities (EPAs). The EPAs assessed were: Assessment & Pre-Op Planning; Assessment & Management of Epistaxis; Initial Management: Emergent Care; and Procedural Skill Assessment. In addition, 8 assessment tools already used by the Department in paper format were converted to electronic versions and made available on the online software. Dr. Paolo Campisi, the OHNS Program Director notes, “Resident readiness and faculty preparation were key to our OHNS roll out. Residents usually initiate the EPA assessments by asking faculty to document what they have observed. Faculty can also initiate, but the large majority of the time, it starts with the residents.”

For Medical Oncology (Med Onc), Dr. Scott Berry led his program in launching CBD on July 1, 2016. Concurrent with the implementation, Med Onc was involved in a cross-Canada program evaluation to closely monitor ‘what works’ and the lessons learned. In Med Onc, the PGY4 residents were involved in the new assessment of 7 important Med Onc clinical activities, also known as Entrustable Professional Activities (EPAs). These EPAs were documented using a brief online assessment tool. Examples of the EPAs assessed were: Initial Consultation; Discussing Serious News; Follow-up Visit, On-going care; and Discussing transition from active systemic therapy to End of Life Care (EOLC). Dr. Berry reports on his early observations and lessons about the Med Onc implementation, “Our residents have been very engaged in guiding us on what works and how to improve the CBD experience. They note that the improved quality and frequency of direct observation is quite noticeable. One thing we are monitoring closely is the impact of CBD on resident and faculty workload. We recently did a first run of our Competence Committee and we were all quite impressed with how well that system works with additional data, including faculty comments to support progress decisions. We are looking forward to the further roll out next year building on our year 1 program evaluation.”

MOVING FORWARD WITH CBD IN JULY 2017

Full-Launch

In July 2017, two programs will be supported as they start to use the new Specialty Training documents for their program design, resident assessment and eventual credentialing decisions. The standard documents for residents entering Otolaryngology – Head and Neck Surgery (OHNS) and Anesthesia (ANES) will be the Competency Training Requirements (CTRs), Required Training Experiences (RTEs) and the Entrustable Professional Activities (EPAs). These new documents will apply to incoming residents while the previous time-based training requirements will be applied to those currently in OHNS and ANES.

Field-Testing

In the meantime, many other programs are starting to try out different aspects of the CBD implementation. Below is a profile of the CBD plans:

• Medical Oncology will build on their implementation from July 2016 and continue a staged implementation of CBD with both PGY4 and PGY5 residents being assessed on EPAs. Residents will benefit from some improvements to rotations to support longitudinal clinical experiences and more interprofessional work opportunities.

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• **Cardiac Surgery** will be working to improve assessments using direct observation and enhancing feedback opportunities for residents using some of the EPA activities.

• **Internal Medicine (Core)** will be testing out some of the EPA activities to assess and determine how to best provide opportunities for more observations, enhanced feedback and assessment, which support the entrustment decisions.

• **Surgical Foundations** is the concurrent educational program run in the PGY1 year for 9 surgical specialties (i.e. Cardiac Surgery, General Surgery, Neurosurgery, OHNS, Obstetrics & Gynaecology, Orthopedic Surgery, Plastic Surgery, Urology and Vascular Surgery). In July 2017, the surgical skills simulation and foundational clinical experiences for the 60+ PGY1 residents will be organized around the Royal College EPAs. Each of the 9 surgical specialties will assess a small number of EPAs for their residents while they are on-service.

• **Urology** will select a small number of EPAs in the 2017-18 academic year in anticipation of the full implementation the following year. By trying out some of the EPAs, both residents and faculty can learn how the new systems work.

**Ongoing CBD Implementation Prep & Meantime Options**

• **Cohort 2 & 3 programs are continuing to plan and move forward.** These programs are engaging in curriculum and rotation mapping, assessment planning and aligning their programs as they get ready for CBD implementation. These programs include: Adult & Pediatric Critical Care, Adult Emergency Medicine, Adult and Pediatric Gastroenterology, Adult & Pediatric Nephology, Anatomic Pathology, General Internal Medicine, Forensic Pathology, Neurosurgery, Pediatrics (Core), and Radiation Oncology.

**POLICY RENEWAL TO SUPPORT CBME IMPLEMENTATION**

To help inform Best Practices in Evaluation and Assessment (BPEA), Dr. Linda Probyn led a working group of faculty, residents, administrators, educators and researchers. This report will be available by the spring of 2017 and will summarize findings, including the identification of priority areas in the development of CBME program evaluation and resident assessment; and outline next steps for PGME to begin implementing best practices in evaluation and assessment.

The following beliefs and values have guided the BPEA group’s work:

a) Competency-based education will produce competent physicians who enhance patient care;

b) Learner centeredness is a central value;

c) Faculty development is essential to the success of competency-based education to ensure faculty are confident and prepared to give feedback; and

d) Program evaluation and resident assessment systems will be developed that continue to value due process, fairness and a comprehensive approach to educational planning.
In addition to the summary report, the working groups have prepared background papers on such topics as:

- Change management and implementation of CBME in PGME
- Learner role and responsibilities
- Faculty role and responsibilities
- Programs of assessment
- Role of technology in assessment and data management
- Program evaluation and monitoring of assessment for Competence by Design
- Assessment/evaluation fatigue
- Residents in difficulty, remediation, Board of Examiners – Postgraduate (BOE-PG)
- Learner handover and appropriate disclosure of learner needs

Stay tuned for more information about this important work.

NEWS FROM SUE GT & THE EIG TEAM

Our team has been working closely with each program to help them navigate the CBD theory and to advise them on how to successfully implement in our complex University of Toronto educational and clinical setting.

While working with the 20 programs that are ‘ready’ or ‘getting ready’, our team is also supporting those programs that are interested in what to do in the ‘meantime’. We have a two-part series workshop, called Meantime Options, which we will repeat in the spring.

We are also working to support the Program Administrators (PA) in their CBD implementation. In 2017, we will be hosting a PA workshop on CBD.

In the near future, we will launch a CBME resources website so that our news and resources are more accessible to all.

If you have questions, contact Susan Glover Takahashi at sglover.takahashi@utoronto.ca or the EIG team at cbme.pgme@utoronto.ca
4 STAGES OF TRAINING are a key change in CBD where the educational experiences are purposely developmentally sequenced:

1. **Transition to Discipline**, aka TTD, is the ‘on-ramp’ to the specialty. In most cases, TTD will be done with residents starting ‘on-service’ so they can meet their co-residents and faculty. During this stage, residents are oriented to their specialty and a few key basic skills are signed off. This allows for confidence in assigning call schedules and ensures residents are aware of the expectations and protocols of the specialty and the site location. This period is a short duration (e.g. 2-4 blocks).

2. **Foundations of Discipline**, aka FOD, is the fundamental building block experiences and skills of the specialty and closely aligns with what is done currently in junior rotations. The duration of this stage varies depending on the overall length of the specialty, but could be 6-9 blocks in a 2-year program and 1-1.5 years in a 5 year program.

3. **Core of Discipline**, aka COD, are the more complex and complicated experiences and skills of the specialty and closely aligns with what is done currently in senior rotations. The duration of this stage varies depending on the overall length of the specialty, but could be 9-12 blocks in a 2-year program and 1.5-2 years in a 5 year program. In most cases in CBD, the specialty exam will occur in the COD stage.

4. **Transition to Practice**, aka TTP, is the ‘off-ramp’ from specialty education into practice. Along with exam completion, this includes the consolidation of activities that are necessary for confidence and competence for practice.

‘MEANTIME OPTIONS’ for CBD implementation refers to those elements of CBD that programs can consider if and how to include so that their program is aligned with the values and structure of CBD. Implementing Meantime Options will help facilitate future formal integration of CBD standards. Meantime options include:

- Take stock: what are you doing now that you want to keep?
- Align your early/orientation experiences for entering PGYs (i.e. start on-service to support integration)
- Align your Transition to Practice (i.e. how to improve confidence and competence for ‘real’ practice)
- Develop a feedback culture (i.e. a KEY activity to consider)
- Connect your residents, faculty & clinicians (e.g. longitudinal experiences, structures advisory / coaching relationships)
- Initiate a sample workplace-based assessments (WBA)
- Refresh / develop your promotions (aka competence) criteria and committee
- Improve / develop approach to handover of learners
- Initiate faculty development on CBME and CBD
OBSTETRICS & GYNAECOLOGY PROGRAM

Since 2014, the Obstetrics and Gynaecology (OBGyn) Program has been implementing a number of competency-based innovations. To build a culture of assessment, generic assessment tools (based on the CanMEDS Roles) were developed, including Mini-CEX; OSATS Trainee as Teacher; and 360° assessments. These assessment tools were piloted in 2 rotations (i.e. Reproductive Endocrinology & Infertility/ Pediatric & Adolescent Gynecology and Maternal Fetal Medicine) in July and were refined based on participant evaluations, including development of a smartphone accessible platform and the development of a simplified assessment tool - the DEEF (Daily Electronic Evaluation Form) that was introduced in Sept 2015. The DEEF allows timely feedback and direct observation in all clinical rotations and settings in the program. The response rate is tracked at all sites and has been embraced by faculty and residents. The DEEF responses are collated centrally and are sent to all site/rotation coordinators and residents on a biweekly basis. The DEEF responses allow for early recognition and planning around rotations and remediation. All tools assess at least two Intrinsic CanMEDS Roles, as well as the Medical Expert components to promote holistic assessment.

In Fall 2015, a full panel of rotation-specific rubrics in Ultrasound were developed and piloted for many clinical contexts and a similar initiative is ongoing in Urogynaecology.

In 2015, a CBME working group was created and has been met with enthusiastic resident participation. The APOG-EIC (Academic Professional in Obstetrics & Gynecology Education Innovation Committee) has been spearheading an effort to support CBME adoption in ObGyn assessment across Canada and includes interested Toronto residents and faculty.

PLASTIC SURGERY PROGRAM

Over the past couple of years, Dr. Mitchell Brown and his faculty in the Plastics Surgery residency program have been actively developing competency-based assessment tools including:

- Interprofessional assessment form
- Intraoperative performance form
- Rotation specific written exam
- Rotation specific oral exam (to simulate RCPSC oral exam format)
- Monitored history, physical and consent taking

Additionally, they have been using the information gained from these new assessment tools as well as their other assessments for more data informed resident progress and promotions discussions. The Plastic Surgery Residency Program Committee meets at the conclusion of every 4 month block and performs a comprehensive review of all assessments (including ITERs) to determine competence and progression to next level.

This has provided each resident with a minimum of three formal assessments per academic year and has assisted in the preparation for certification examinations beginning earlier in the training cycle. It has also allowed the program committee to identify residents in difficulty at an earlier time point.
In this section we will BRIEFLY explore some of the CBD or CBME myths. For more on CBD Myth Busting information, see document:  http://postgrad.med.utoronto.ca/uoftpgmenewsletter/PGME_CBME_CBC_MythBustingFactSheet.docx

**MYTH #1: GOALS & OBJECTIVES NO MORE**

**FACT:** Rotations will continue to need to be focused around the educational purposes for that experience. For the CBD programs, we are developing brief “Rotation Plans” that include the focus of that rotation and also list the Required Training Experiences (RTEs) and Entrustable Professional Activities (EPAs) and include a small number of focused goals and objectives (G&Os) that guide the rotation.

**MYTH #2: COMPETENCE BY DESIGN (CBD) IS AN OPTION**

**FACT:** We have heard from some residents that they would like to opt out of CBD. Opting out of CBD is not an option. The Royal College sets the standards for specialty certification. Our residency programs are accredited to meet the Royal College standards.

The universities are working with the Royal College to clarify the ‘musts’ and where we have local flexibility to implement as is appropriate for our context. These discussions are ongoing as we work through implementation, but the standards are nationally set and approved.

**MYTH #3: PROGRAMS CAN PICK AND CHOOSE BETWEEN REGULAR PROGRAM AND IMPLEMENTING CBD**

**FACT:** The tracking of progress across the competence continuum will be required to document a resident's progress.

In addition, given that funders, funding and payment schedules are based on a resident’s year, and a negotiated agreement between PARO and CAHO, programs will need to monitor and document promotion from PGY year to year.

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MYTH #4: PROGRAMS CAN DEVELOP ONLINE CBD SOLUTIONS THAT WORK FOR THEIR PROGRAMS

FACT:

There will be an overall University of Toronto CBD information technology approach for use by all programs, with a required centralized electronic platform to comply with best practices and reporting (e.g. to Royal College, hospitals, programs) on the following:

• Common CBD assessment tools (e.g. EPA assessment tools, Procedure assessment and logging tools),
• Program evaluation tools (e.g. Rotation Evaluations, Resident Assessment of Teacher Effectiveness),
• Resident, faculty, program tracking of progress
• Reporting for Competence Committees

For those launching and piloting in 2016-17 and 2017-18, an interim solution for an online tool is being used to complement what is available in the central system in POWER (i.e. ITERs, rotation evaluations, teacher assessments).

Programs may develop local ‘extras’ outside of the central resources, information required and provided.

See related Myths & Facts re: that ITERs are still required for CBD programs & that rotations must still be entered in POWER at:

http://postgrad.med.utoronto.ca/uoftpgmenewsletter/PGME_CBME_CBDMythBustingFactSheet.docx
PREVIOUS NEWSLETTERS:
@UofTPGME CBD NEWS Issue 2 - March 2016
@UofTPGME CBD NEWS Issue 1 - November 2015

OTHER RESOURCES FOR PDS, SITE DIRECTORS & PGME LEADERS:

- **UTPGMExchange** is the University of Toronto’s collection of residency education tools including videos, workshop materials, and assessment tools for a variety of CanMEDS Roles. [http://www.pgmexchange.utoronto.ca/login.php](http://www.pgmexchange.utoronto.ca/login.php)
  To access PGMExchange via your UTORID, contact [pgme.exchange@utoronto.ca](mailto:pgme.exchange@utoronto.ca)

- **CanMEDS Tools Guide** is a ‘how to’ with ready to use learning, teaching and assessment tools for CanMEDS 2015. PDs should contact [cbme.pgme@utoronto.ca](mailto:cbme.pgme@utoronto.ca) to get their complementary copy. Others can purchase through the Royal College or the PGME office at [cbme.pgme@utoronto.ca](mailto:cbme.pgme@utoronto.ca)

- **CanMEDs Interactive** is the online, ready to use version of CanMEDS 2015 Framework and many of the resources in the CanMEDs Tools Guide, found at [http://canmeds.royalcollege.ca](http://canmeds.royalcollege.ca)

- **PD handbook** is the RC resource on residency education. For more info, go to: [http://www.royalcollege.ca/rcsite/canmeds/resources/canmeds-publications-e#program-directors-handbook](http://www.royalcollege.ca/rcsite/canmeds/resources/canmeds-publications-e#program-directors-handbook)

QUESTIONS?

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