Strategies for Designing & Implementing Your Competency-based Medical Education Program: An Introductory Workshop

ICRE 2019
We do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Nous n’avons aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
“Please may I be excused? My brain is full”
WHERE ARE YOU FROM?

Brazil
Australia
Canada
Finland
United States
ROLE IN IMPLEMENTATION

- CBME Lead: 5
- Program Director: 3
- Teacher: 2
- Other: 4

* DEAN OF COLLEGE
* FACULTY DEVELOPMENT/ADMINISTRATOR
* MRA
* RESIDENCY PROGRAM COORDINATOR - CONSULTANT IN INTERNAL MEDICINE
A BIT ABOUT YOU . . .

- 50% 1st workshop
- 71% leading CBME implementation

Stage of Implementation

86% are in the pre-implementation stage
REASON FOR ATTENDING . . .
PARTICULAR QUESTION?

• I would like to learn how other programs are assessing and documenting resident progression as well as how programs are providing feedback.
• How will we know in CBME when a resident has mastered something? (i.e. how many 4s or 5's should they have for each domain covered? How does the coach or PA keep track of all the domains?)
• What's the minimum requirements to begin a project that deserves been called CBME project? (I'm thinking about PDSA first steps to implement a CBME program, be it in a single specialty or institutional level)
• Tips to apply CBME to laboratory medicine specialty training and assessment
• To learn the best way to start the methodology
• Potential barriers and how to overcome them
• Assessment in CBME
• Outcomes data
ICBME BACKGROUND: 69 MEDICAL EDUCATORS

Scholarly papers
Webinars
CBME World Summits
Workshops

http://www.royalcollege.ca/rcsite/educational-initiatives/international-competency-based-medical-education-icbme-e
**WORKSHOP GOALS**

By the end of this workshop you will be able to:

- Describe a rationale for adopting CBME to your peers
- Define key terms
- Identify initial strategies for implementing CBME *in your context*
- Use the core components framework; employ a step-wise approach to ongoing implementation
WORKSHOP AGENDA

• Rationale - Karen Schultz
• Identifying competencies - Markku Nousiainen
• Sequencing competencies - Kelly Caverzagie
• Tailoring learning experiences - Steve Lieberman
• Competency-focused instruction - Keith Wycliffe-Jones
• Programmatic assessment - Karen Schultz
• Implementing change & anticipating issues - Keith Wycliffe-Jones
WHAT IS CBME?

An approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs.

Frank et al. Toward a definition of CBME. Med Teacher 2010
WHAT IS CBME?

An approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs.

It de-emphasizes time-based training and promises greater accountability, flexibility and learner-centeredness.

Frank et al. Toward a definition of CBME. Med Teacher 2010
CBME requires a supportive institutional culture

Knowledgeable external stakeholders

Stable, knowledgeable, supportive internal leadership

Positive track record with curricular change

Process for program evaluation

Timely process for communication

Required resources – current and ongoing

Local CBME Program Context

Bland et al, Curricular Change in Medical Schools. 2000.
CBME IMPLEMENTATION
REQUIRES ONGOING CHANGE MANAGEMENT

Initiate

Sustain

Refine

Implement
**Features of genuine CBME**

1. It is **outcome**-based, not process-based: what is *attained* is key, not just what is *done*.

2. It applies **integration of** knowledge, skills, attitudes.

3. It is **time-independent**: length of training adapted to individual attainment of competence.

4. It is **individualized**: trainees are not identical.

5. It is particularly applicable in **workplace-learning**.
IMPLEMENTATION OF SUCH A CBME SYSTEM . . .

Requires a substantial redefinition of faculty and student roles and responsibilities.
CBME REQUIRES A MULTIFACETED APPROACH

Local CBME Program Context

- COMPETENCY FRAMEWORK
- PROGRESSIVE SEQUENCING
- COMPETENCY-FOCUSED INSTRUCTION
- TAILORED LEARNING EXPERIENCES
- PROGRAMMATIC ASSESSMENT
<table>
<thead>
<tr>
<th>5 CORE COMPONENTS</th>
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<tbody>
<tr>
<td>COMPETENCY FRAMEWORK</td>
</tr>
<tr>
<td>Competencies required for practice are <strong>clearly articulated</strong></td>
</tr>
</tbody>
</table>
Why Competency-based Medical Education?  
The Rationale for Change  

Karen Schultz
Why not the status quo?
What are the Most Important Outcomes?
How are We Doing?
## Commonwealth Report 2017

<table>
<thead>
<tr>
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<th>AUS</th>
<th>CAN</th>
<th>FRA</th>
<th>GER</th>
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<td>Administrative Efficiency</td>
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<td>Equity</td>
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<tr>
<td>Health Care Outcomes</td>
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PATIENT OUTCOMES-DIAGNOSTIC ERRORS


• Diagnostic errors account for 6 to 17 percent of hospital adverse events

• Estimated every American will experience at least one diagnostic error in their lifetime

• Diagnostic errors consistently contribute to ~ 10 percent of patient deaths

- Cancer: 585k
- Heart disease: 611k
- COPD: 149k
- Suicide: 41k
- Motor vehicles: 34k
- Firearms: 34k
- Medical error: 251k

- All causes: 2,597k

Based on our estimate, medical error is the 3rd most common cause of death in the US.

However, we’re not even counting this - medical error is not recorded on US death certificates.

Data source:
http://www.cdc.gov/nchs/data/nvss/nvss04/nvss04_02.pdf

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<table>
<thead>
<tr>
<th>RESIDENT</th>
<th>PHYSICIAN</th>
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<tbody>
<tr>
<td>Flourishing</td>
<td>58%</td>
</tr>
<tr>
<td>Languishing</td>
<td>4%</td>
</tr>
<tr>
<td>Moderately mentally healthy</td>
<td>29%</td>
</tr>
<tr>
<td>Emotional well-being (high)</td>
<td>91%</td>
</tr>
<tr>
<td>Emotional well-being (low)</td>
<td>8%</td>
</tr>
<tr>
<td>Social well-being (high)</td>
<td>58%</td>
</tr>
<tr>
<td>Social well-being (low)</td>
<td>41%</td>
</tr>
<tr>
<td>Psychological well-being (high)</td>
<td>81%</td>
</tr>
<tr>
<td>Psychological well-being (low)</td>
<td>12%</td>
</tr>
<tr>
<td>Resilience (high)</td>
<td>83%</td>
</tr>
<tr>
<td>Resilience (low)*</td>
<td>16%</td>
</tr>
<tr>
<td>Burnout (high)*</td>
<td>23%</td>
</tr>
<tr>
<td>Depression (screening)*</td>
<td>32%</td>
</tr>
<tr>
<td>Lifetime suicidal ideation*</td>
<td>18%</td>
</tr>
<tr>
<td>Recent suicidal ideation (last 12 months)</td>
<td>8%</td>
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</tbody>
</table>
**Expert:** Using a patient-centered approach and while understanding issues related to age, gender, culture and ethnicity, the resident is able to...

<table>
<thead>
<tr>
<th>Demonstrating appropriate assessment of patients - general skills</th>
<th>Does Not Meet Expectations</th>
<th>Inconsistently Meets Expectations</th>
<th>Meets Expectations</th>
<th>Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of acute minor illnesses (e.g. common infections, injuries, rash and eye conditions)</td>
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<tr>
<td>Assessment of acute serious illnesses (e.g. cardiorespiratory compromise, diabetic ketoacidosis, status epilepticus)</td>
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<tr>
<td>Assessment of chronic conditions (e.g. headache, gastrointestinal complaints, asthma, developmental delay)</td>
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<tr>
<td>Assessment of psychosocial conditions (e.g. behavioural problems, mental illness, child abuse)</td>
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<tr>
<td>Demonstrate appropriate management of patients - general skills</td>
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<tr>
<td>Management of acute minor illnesses (e.g. common infections, injuries, rash and eye conditions)</td>
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</tr>
<tr>
<td>Management of psychosocial conditions (e.g. behavioural problems, mental illness, family in crisis)</td>
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</tbody>
</table>

Comments: *(if there are any)* ...good job, needs to read more......😊
Please, please, please don’t let them be on call with me tonight.

Oh, I’m not surprised…you wouldn’t believe what they did while on our service.

Someone else will address their…….

Yeah, no, we’ll never hire them.

Please, please, please don’t let them be on call with me tonight.
We can do better......
EXERCISE 1

At your tables

✦ 5 minutes: By yourself: Write your speech

✦ 2 minutes: Give your speech to the person beside you
   Note your “I like that” moments

With the group

✦ 3 minutes: Share the likes
Identifying Required Outcome Competencies

FRAMEWORK: Competencies required for practice are **clearly articulated**

Markku Nousiainen
REVIEW OF DEFINITIONS

- Competence
- Competency
- Domain of Competence
- Competency framework
- Entrustable Professional Activity (EPA)
- Milestone

How does “Competency” differ from “Educational Objective”?

• Context-related/specific

• Integrated – coherent (kn+sk+att)

• Durable

• Related to tasks or activities

From: Van Merrienboer J.J.G et al. 2002 [in Dutch].
How does “Competency” differ from “Educational Objective”?

- Learnable/trainable
- Related to other competencies
- Evaluable/testable/observable
- To prepare students better for the labour market

*From: Van Merrienboer JJG et al. 2002 [in Dutch].*
IDENTIFYING REQUIRED OUTCOME COMPETENCIES

Why is this important?
IDENTIFYING REQUIRED OUTCOME COMPETENCIES

Why is this important?

• For entry & continuing practice; defined outcomes = competence

• Based on societal & patient needs (within health systems)

• Curriculum design: logical & organized (“scaffolding” for outcomes-based education)
IDENTIFYING REQUIRED OUTCOME COMPETENCIES

Why is this important?

• Resource allocation/decision support

• Assessment: design/trustworthiness & selection

• Transparency

• Program evaluation
IDENTIFYING REQUIRED OUTCOME COMPETENCIES

How can this be done?

• Existing frameworks (e.g. CanMEDS, ACGME core competencies)

• Nominal group technique (e.g. Professionalism - Donoff CFP 2012)

• Task/job analysis: professional profile (Patterson; UK GP studies)
IDENTIFYING REQUIRED OUTCOME COMPETENCIES

How can this be done?

• Delphi methods

• Feedback from graduates, patients

• System/public demands (e.g. technology, patient safety events)

• Health care organizations
GROUP WORK - EXERCISE 2:
IDENTIFYING REQUIRED OUTCOME COMPETENCIES IN YOUR CONTEXT

• Are there sources or frameworks already available? (If so, what are they?)
• How will you identify competencies for your specialty area (e.g., Delphi, focus groups, Specialty Committee work)?
• Who will you involve in this process?
• What challenges do you anticipate when identifying competencies?
Progressive Sequencing of Competencies: Milestones (& Entrustable Professional Activities)

Kelly Caverzagie
"An essential task of a discipline (profession, specialty, or subspecialty) that a learner can be trusted to perform without direct supervision and an individual entering practice can perform unsupervised in a given health care context, once sufficient competence has been demonstrated". (England 2017)
PROGRESSIVE SEQUENCING

A. Entry to Residency

B. Resident ready for practice-outcome competencies (e.g. EPAs) met
PROGRESSIVE SEQUENCING

A. Entry to Residency

MAGIC HAPPENS!

B. Resident ready for practice-outcome competencies (e.g. EPAs) met
PROGRESSIVE SEQUENCING

• In CBME, competencies and their developmental markers must be explicitly sequenced to support learner progression from novice to master clinician

• Sequencing must take into account that some competencies form building blocks for the development of further competence
DREYFUS & DREYFUS DEVELOPMENT MODEL

Time, Practice, Experience

Dreyfus SE and Dreyfus HL. 1980 Carraccio CL et al. Acad Med 2008;83:761-7
Progressive Sequencing

- Progress is not always linear and smooth
- Different learner trajectories-progress at different rates
- Time as a resource in CBME
- “Hybrid Programs”- CBME principles but still time-fixed
- Need to operationalize competencies –“in practice”
- Need for shared mental models- e.g. EPAs and milestones

Holmboe E et al. The Milestones Guidebook.ACGME. 2016
DREYFUS & DREYFUS DEVELOPMENT MODEL

MILESTONES

<table>
<thead>
<tr>
<th>Curriculum Assessment</th>
<th>Curriculum Assessment</th>
<th>Curriculum Assessment</th>
<th>Curriculum Assessment</th>
<th>Curriculum Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>Competent</td>
<td>Proficient</td>
<td>Expert/Master</td>
<td></td>
</tr>
<tr>
<td>Time, Practice, Experience</td>
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</table>

Dreyfus SE and Dreyfus HL. 1980 Carraccio CL et al. Acad Med 2008;83:761-7
DEVELOPMENTAL CONTINUUM

• Example-CBD Continuum in Canada
Milestones

- By definition, a milestone is a significant point in development.
- Milestones can describe the developmental trajectory of a competency.
- Milestones should enable residents, fellows, and the training program to better determine an individual’s trajectory of competency acquisition.
PROGRESSIVE SEQUENCING

A. Entry to Residency

Transition point

Transition point

B. Resident ready for practice-Transition point

Med School EPAs

Milestones

Milestones

Milestones

Milestones
PROGRESSIVE SEQUENCING

EPA 1
  DOC 1
    C2
    M1
    M2
    M3
    M4
  DOC 2
    C3
    M1
    M2
    M3
    M4
  DOC 3
    C1
    M1
    M1
    M1
    M1
  DOC 4
    C4
    C4

EPA 2
  DOC 1
    C2
    M1
    M2
    M3
    M4
  DOC 2
    C3
    M1
    M2
    M3
    M4
  DOC 3
    C1
    M1
    M1
    M1
    M1
  DOC 4
    C4
    C4

etc.

Englander et al(2017)
Describe progression of competence in terms of tasks or expertise in which one or more ability is manifested

<table>
<thead>
<tr>
<th>Transition to discipline</th>
<th>Foundations of Discipline</th>
<th>Core of discipline</th>
<th>Transition to practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate the diagnosis, prognosis and plan of care in a clear, compassionate, respectful, and accurate manner to the patient and family</td>
<td>Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, and management plan</td>
<td>Provide information on diagnosis and prognosis in a clear, compassionate, respectful, and objective manner</td>
<td>Communicate clearly with patients and others in the setting of ethical dilemmas</td>
</tr>
</tbody>
</table>
PROGRESSIVE SEQUENCING OF COMPETENCIES

1. Select 1-2 outcomes for your program
2. Identify 3-4 transition points
3. What competencies are necessary for learners to demonstrate at each level? What is necessary prior to progressing to the next level?
4. What methods can you employ to observe resident demonstration of these competencies?
Tailoring Learning Experiences

Learning experiences **facilitate** the developmental acquisition of competencies

Steve Lieberman
CORE COMPONENTS FRAMEWORK FOR CBME PROGRAMS

COMPETENCY FRAMEWORK

PROGRESSIVE SEQUENCING

PROGRAMMATIC ASSESSMENT

COMPETENCY-FOCUSED INSTRUCTION

TAILORED LEARNING EXPERIENCES

Local CBME Program Context

Van Melle et al. Acad Med. 2019; 94:1002-09
Learning experiences facilitate the developmental acquisition of competencies.
Conceptual framework:

- Situated learning
- Deliberate practice
- Self-regulated learning
- Workplace-based learning
- Professional identity formation

Principle: Learning through real life experiences facilitates membership into the practice community & development of competencies.

Practice:
Learning:
- takes place in settings that model practice,
- is flexible enough to accommodate variation in individual learner needs,
- is self-directed.

Van Melle et al. Acad Med. 2019; 94:1002-09
## Tailored experiences – From Concepts to Curriculum

<table>
<thead>
<tr>
<th>Concepts</th>
<th>Curriculum design correlates</th>
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<tbody>
<tr>
<td><strong>Situated learning</strong> (incl. social and physical aspects of learning)</td>
<td>Authentic “practice-like” program structures, design, &amp; environments.</td>
</tr>
<tr>
<td><strong>Deliberate practice</strong></td>
<td>Learning experiences mapped to competencies. Ample opportunities to practice.</td>
</tr>
<tr>
<td><strong>Self-regulated learning</strong></td>
<td>Learner ‘ownership’ of outcomes and progress. Empowering learners with needed tools.</td>
</tr>
<tr>
<td></td>
<td>Adaptability to individual learner needs.</td>
</tr>
<tr>
<td></td>
<td>Personal growth trajectory: formative feedback, coaching, benchmarks.</td>
</tr>
<tr>
<td><strong>Workplace based learning</strong></td>
<td>Authenticity of deliberate practice.</td>
</tr>
<tr>
<td>(instruction &amp; assessment)</td>
<td>Continuity with coaches, team (&amp; patients?).</td>
</tr>
<tr>
<td><strong>Professional identity formation</strong></td>
<td>Coaching, structured reflection &amp; processing.</td>
</tr>
</tbody>
</table>
TAILORED EXPERIENCES-THE LEARNER

Learner-centered curriculum:
– Flexibility vs “order” – **Striking the balance**
– Learner understanding and “buy-in” to change –
  • Passive → Active role.
– Self-regulated learning and responsibility – **Learner ‘ownership’ of outcomes and progress**
  • “How will I know I’m on track?”
  • “How do I get to the next level?”
– Professional identity formation – **Socialization into health care delivery community. Continuity and coaching are key.**
TAILORED EXPERIENCES – PROGRAM CONTEXT

Outcomes e.g. EPAs

Competencies

Learning experiences e.g. longitudinal, blocks, academics, sim

Societal needs

Accreditation Standards Frameworks e.g. CanMEDS, ACGME
Development process e.g. task analysis

• Resources-funding, capacity, support
• Service
• Politics
• Impacts e.g. wellness, relationships
• Individual adaptability/flexibility

External Factors/Drivers
TAILORED EXPERIENCES- EXERCISE #4

In your program’s context (eg, opportunities, realities):

1. How will you provide ample authentic practice opportunities for learners?

2. How will you describe for learners—and instill in them—their responsibility to be independent and self-regulated?

3. What tools and processes will they need to be successful in this (potentially unfamiliar) role?

4. How can flexibility and support be incorporated into the curriculum in your program to address individual learning needs as they are identified?
Competency-Focused Instruction

Teaching practices facilitate the developmental acquisition of competencies

Keith Wycliffe-Jones
Competency-focused Instruction

• Focus is on fidelity of implementation (FOI) across the 5 components-adherence to concepts allowing for local innovation.
• How do/will Programs/Institutions properly support Faculty and learners in terms of delivery of CBME on the ground such that fidelity is maintained?
COMPETENCY-FOCUSED INSTRUCTION

CBME instruction:
• Learning through experience (as well as knowledge acquisition)
• Rich feedback individualized to learner
• Feedback grounded in desired competencies
• Teaching promotes developmental acquisition of competencies
• Individualized teaching-based on abilities required for progression(coaching role)
What’s needed?

• Competencies taught in context—ensure patient safety
• Observe, integrate and assess—based on explicit criteria
• Regular effective observation, assessment, feedback
• Growth Mindset (*see workbook*)
• Teachers aware of core competencies (? Proficient in)
• Beyond medical expertise (Dath)
• System support
EXERCISE #5

• How will you ensure teachers understand how to use competencies in structuring learning and focusing instruction?
• What tools and processes will be needed to guide teachers in real-time, high quality feedback from multiple observations?
• How will you ensure teachers have been equipped with the knowledge and skills required to use the tools and to act as coaches for the purpose of improvement, repeated focused observation and feedback?
Time for lunch

45 minutes
Programmatic Assessment: Implementation & Decision-making

Best assessment practices to support learning and make trustworthy and defensible decisions about competency development/attainment

Karen Schultz
Think way back (slide one) → CBME = “An approach to preparing physicians for practice that is fundamentally oriented to graduate outcome abilities and organized around competencies derived from an analysis of societal and patient needs”

Did it work—are they competent?
Assessment
WHAT ARE THE GOALS OF ASSESSMENT?

• Support learning/optimize development

• Make valid/authentic and reliable/trustworthy, defensible decisions around trainee’s competency development to inform progression and graduation
WHAT IS COMPETENT?

🌟 Webster’s: having requisite or adequate ability or qualities

🌟 The knowledge, skills, attitudes and judgement to deliver care in the real-world complex context of practice, a setting that is unpredictable with many variables, not all of which are knowable
Sooooo, how do we assess that?
TWO ASPECTS TO ASSESSMENT

1. DATA COLLECTION
   = low stakes/formative assessment

2. DATA COLLATION AND INTERPRETATION
   = high stakes/summative assessment

Assessment for Learning

Assessment of Learning
AND NO MATTER WHAT TYPE OF ASSESSMENT THERE IS REALITY......

VAN DER VLEUTEN’S CRITERIA (+ 1)

• Cost
• Acceptability—will stakeholders use it?
• Reliability/Trustworthy—does it measure in a way that gives confidence about the conclusions?
• Validity/Authenticity—does it measure what’s important?
• Educational Value—does it support learning?

• Support program evaluation
MODEL FOR PROGRAMMATIC ASSESSMENT
(WITH PERMISSION FROM CPM VAN DER VLEUTEN)

- = learning task
O = learning artifact
△ = single assessment data-point
△ = single certification data point for mastery tasks

Time

= learner reflection and planning
= social interaction around reflection (supervision)
= learning task being an assessment task also

2019 CBME Workshop | ICBME COLLABORATORS
PRINCIPLES AND PRACTICALITIES

Formative/Low Stakes  Summative/High Stakes
FORMATIVE/LOW STAKES: THE PRINCIPLES

- Validity/ Authenticity: assess what’s meaningful
- No one tool can capture everything
Professional Authenticity

Knows

Knows how

Shows how

Does

Qualitative

- e.g. WBA=preceptors (and a documentation process)
- e.g. OSCEs, SPs

Quantitative

- e.g. SAMPS
- e.g. MCQs

Miller’s Pyramid Acad Med 1990: 65; S63-70
THE PRINCIPLES CONTINUE...

• For quantitative tools: psychometrics
• Qualitative trustworthiness partially comes from triangulation and prolonged engagement. Your tool is your preceptors
• Preceptors have inherent biases. So......
• Lots of different assessors/preceptors, continuity of supervision
• You are setting the stage for interpretation=looking for patterns and trajectory. Your data will need to be gathered over competencies, contexts and time and document the same
• For learning—feedback is critical
FORMATIVE/LOW STAKES: THE PRACTICALITIES

1. Share quantitative tools
MORE PRACTICALITIES

2. The preceptor is the tool in WBA
   - Get buy in
   - Build the skills
     • FD
       - How to provide effective feedback
       - On being a coach, not a cheerleader
       - One pixel does not a picture make

     • Build in feedback to them
   - Smooth the obstacles
     • Give the gift of time: Direct observation, documentation, feedback
     • Intuitive documentation tool(s) → build on an existing, rating scales, minimize artificial conversions
SOME EXAMPLES OF WBA DOCUMENTATION TOOLS
AND THE LAST OF THE PRACTICALITIES.....
**EXERCISE #5 : CREATING AN ASSESSMENT BLUEPRINT**

<table>
<thead>
<tr>
<th>Competency/EPA/Milestone</th>
<th>Learning Experience(s)</th>
<th>Assessment Activitie(s)/Tool(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Have you:
1. Used multiple assessment methods
2. Used both qualitative and quantitative sources of data
3. Focused on direct observation in WBA
4. Focused on feedback
5. Promoted interaction between learner and teacher?

Think fit for purpose
Summative Decisions
PRINCIPLES AND PRACTICALITIES

Formative/Low Stakes

Summative/High Stakes
SUMMATIVE/HIGH STAKES DECISIONS: PURPOSE

- Interpreting data (patterns and trajectory) to make decisions around competency development/attainment to inform progress/graduation decisions, individualize training and, in the rare case of dismissal, ensure due process
SUMMATIVE/HIGH STAKES: OVERARCHING PRINCIPLES

• High Stakes=Validity/ Authenticity + Reliability/Trustworthiness
• Due process is critical
  – Stated performance standards
  – Opportunities to build competence
  – Assessment and feedback
  – Opportunities to address weaknesses and be reassessed
  – Documentation to allow a new set of assessors to make their own conclusions
  – Opportunity for resident input

  – No surprises
PRINCIPLE #1: ALL RESIDENTS NEED/DESERVE MEANINGFUL DATA INTERPRETATION REQUIRES TIME

- Small programs: A committee
- Large programs: Academic Advisors (1/5-6 residents)
- In between: ........
**SUMMATIVE/HIGH STAKES: THE PRINCIPLES**

**PRINCIPLE #2:** WHERE THERE ARE DISAGREEMENTS OR CAREER-ALTERING DECISIONS THERE NEEDS TO BE A SEPARATE GROUP TO REASSESS
**Summative/High stakes: The Principles**

**Principle #3: Group principles: (think qualitative trustworthiness principles, e.g. triangulation, prolonged exposure....)**

- Makeup of the group: diversity, independence
- Expertise of the group: knowledgeable about standards, processes, consequences, active reflection on biases
- Functioning of the group: present evidence before a decision, all heard, do not emphasize consensus, optimize time for discussion
SUMMATIVE/HIGH STAKES: THE PRACTICALITIES

1. Faculty development on roles, standards, processes, group process...

2. Adequate time and administrative support for the work

3. Optimize collation to maximize interpretation

4. Feedback on performance

5. For groups: Choose your chair and your members wisely
SUMMATIVE DECISION MAKING
EXERCISE #7

• What structure will you use?
• At the group level
  – What will be the makeup of the group; who will lead?
• For all approaches
  – How will you ensure shared understanding of CBME and role?
  – What will be the process and accountability for data interpretation and decision making?
  – How will you build expertise and growth?
  – How will their work be supported?
Anticipating & Addressing Implementation Issues

Group Exercise
IMPLEMENTATION ISSUES – EXERCISE #8

Part 1
1. Review 10 issues on page 13
2. Choose your top 2 challenges
3. Place red dot on flipchart next to your top 3 issues

Note: If you identify an issue not listed – capture on the “other” list
Part 2
1. Review your first issue as a group
2. Write down strategies to address the issue
3. Move to the next table
4. Add your strategies to the list
5. Move to the next table . . .
## 5 Core Components

<table>
<thead>
<tr>
<th>Competency Framework</th>
<th>Progressive Sequencing</th>
<th>Tailored Learning Experiences</th>
<th>Competency-focused Instruction</th>
<th>Programmatic Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competencies required for practice are <strong>clearly articulated</strong></td>
<td>Competencies and their developmental markers are <strong>sequenced progressively</strong></td>
<td>Learning experiences <strong>facilitate</strong> the developmental acquisition of competencies</td>
<td>Teaching practices <strong>promote</strong> the developmental acquisition of competencies</td>
<td>Assessment practices <strong>support &amp; document</strong> the developmental acquisition of competencies</td>
</tr>
</tbody>
</table>

**Exercise #9**

*Homework* - Three next steps?
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icbme@royalcollege.ca
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