The Evolution of a Cultural Shift in Continuing Professional Development

Current and Future Implications

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I am a full time director for the Royal College.

I have no financial relationships with members of pharmaceutical or medical supply companies.

I do not hold any research grants funded by industry.

I do not serve on an advisory board of any for-profit industry.

I have many biases related to CPD and Lifelong Learning.
At the end of the presentation you will be able to:

• Describe the factors contributing to the cultural shift in continuing education for physicians.

• Discuss the impact of CPD on performance and health outcomes.

• Define the implications of this cultural shift on the future of CPD for physicians.
William Osler’s Last Studio Portrait
“I desire no other epitaph than the statement that I taught medical students in the wards as I regard this as by far the most useful and important work I have been called upon to do”
The patient - focus for education
Spending time with patient on the wards
Lifelong Learning...

“if the license to practice meant the completion of his education, how sad it would be for the practitioner, how distressing to his patient!”

“The society should be a school in which the scholars teach each other”
Cultural Shifts are typically characterized by...

Change in Values
Change in Beliefs
Change in Behaviors

Cultural shift in CME has more evolutionary than revolutionary!
Change in Values

1. Shift from Continuing Medical Education to Continuing Professional Development

2. Need to establish the link between engaging in lifelong learning and its ability to continuously enhance:
   - Competence / performance
   - Quality of health care
   - Safety of health systems (Berwick)
Traditional Model of CME
New View of Life long Learning

Practice Context

- Clinics
- ER
- Wards
- ICU

Learning Context

- Performance
- Quality of Care
- Patient Safety

Formal, Informal Learning; & Assessment
### Shift to Continuing Professional Development

<table>
<thead>
<tr>
<th>Continuing Medical Education</th>
<th>Continuing Professional Development</th>
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<tbody>
<tr>
<td>Individual Physician</td>
<td>Individuals to inter-professional teams</td>
</tr>
<tr>
<td>Medical Expert Role</td>
<td>All CanMEDS Roles</td>
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<tr>
<td>The Lecture Hall</td>
<td>The Practice Setting</td>
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</table>
Persistent Gap in Performance

Consistent evidence of failure to translate research findings into clinical practice

• 30-40% patients do not get treatments of proven effectiveness.

• 20–25% patients get care that is not needed or potentially harmful.

Grol R (2001). *Med Care*
Health care harms patients too frequently and routinely fails to deliver its potential benefits.

http://www.iom.edu
Adherence to recommended health care indicators provided to adults (in the USA)

Content Areas

Preventative care  54.9%
Acute care  53.5%
Chronic care  56.1%

McGlynn A (2003). NEJM
Quality of care concerns in hospitals

- Adverse events occur in 2.5 – 16.6% of all hospital admissions
- At the Ottawa Hospital adverse event rate was 12.7% with 38% deemed preventable*
  - 61% of the events occurred prior to hospital

Forster et al CMAJ April 13, 2004
Inverse Relationship between Years in Practice and Quality of Healthcare

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>12/12</th>
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</thead>
<tbody>
<tr>
<td>Practice Standards</td>
<td>15/24</td>
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<tr>
<td>Appropriate Rx</td>
<td>14/19</td>
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Choudhry Ann Int Med 2005
Re-designing an CPD system

1. Focused on competencies beyond discipline specific knowledge and skills.


3. Addresses areas for improvement.
Change in Beliefs

Effectiveness of education in producing measurable to:

• learning and change:
• competence,
• performance and
• patient outcomes.
The ‘clinical trial approach’ to the evaluation of Formal CME

<table>
<thead>
<tr>
<th>Problem</th>
<th>Intervention</th>
<th>Intended Outcome</th>
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<tbody>
<tr>
<td>Area of Dyscompetence</td>
<td>Formal CME</td>
<td>Improved Competence</td>
</tr>
<tr>
<td>(Diagnosis)</td>
<td>(Treatment)</td>
<td>(Outcome)</td>
</tr>
<tr>
<td>Needs Assessment</td>
<td>Lectures and Workshops</td>
<td>Multiple Measures</td>
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</table>
Impact of group learning on competence and performance?
Our data show some evidence that interactive CME sessions that enhance participant activity and provide the opportunity to practice skills can effect change in professional practice and, on occasion, health care outcomes. Based on a small number of well-conducted trials, didactic sessions do not appear to be effective in changing physician performance.
Forsetlund L, Bjorndal A, Rashidian A

Continuing education meetings and workshops: effects on professional practice and health care outcomes.

Cochrane Systematic Review
First published 2001 32 trials
Update 2009 81 trials
More than 11,000 health professionals
Any intervention including educational meetings compared to no intervention

Median Adjusted RD: 6%
   (IQR 1.8 to 15.9%)

Median Adjusted % change: 10%
   (IQR 8-32%)

Interactive + Didactic: RD 13.5
Complex Behaviors: RD -0.3
Serious Outcomes: RD 2.5
Conclusions:

Educational meetings alone or combined with other interventions, can improve professional practice and healthcare outcomes for patients.

In general the impact is small!
How do we make a bigger impact?
Assessment in Practice

Two Key Questions

1. Is there a role for self-assessment or self-learning in behavioral change?

2. What does the literature say about the efficacy of formal assessment strategies in promoting learning, enhancing competence or improving performance?
Self-assessment is conceptually viewed as an entry step into a learning cycle...

To identify an area of professional weakness

To guide selection of CPD activities

To enable address practice gaps

Self-assessment is used to describe an ability to reflect on and make overall judgments on performance or ability

Eva K. JCEHP 28 (1) 2008
While suboptimal in quality, the preponderance of evidence suggests that physicians have a limited ability to accurately self-assess.

- The processes currently used to undertake professional development and evaluate competence may need to focus more on external assessment.
Self-Assessment in Practice

How accurate are decisions to pause and learn before acting?

“Knowing when to look it up: a new conception of self-assessment ability.”

Eva, Regehr, Academic Medicine 2007

Focus on:

• Situational awareness when at the limits of knowledge, ability, experience OR

• When confidence in ability is lacking.
Reflecting “in action”
Reflecting “on action”
Definition of Self-Monitoring

“the moment-by-moment awareness of the likelihood that one has the requisite knowledge / skills to act in a particular situation.”

Conclusion:

Greater accuracy in self-monitoring than any global aggregation of performance.

Eva and Regehr

Adv Health Sci Educ Theory Pract. 2011
What is the role for peer or personal assessments of competence or performance within systems of continuing professional development?
What is the impact of engaging in
Audit and Feedback
Simulation
Multi-Source Feedback
On performance or health outcomes?
Ivers N, Jamtvedt G, et al

Audit and feedback: effects on professional practice and health care outcomes.

Cochrane Database of Systematic Reviews

First publication 2003: 88 trials
Update in 2006: 118 trials
Update in 2012: 140 trials
Dichotomous outcomes (82 comparisons)

Weighted median RD 4.3%
(IQR 0.5 to 16.0)

Continuous outcomes (26 comparisons)

Weighted median % change 1.3%
(IQR 1.3 to 28.9%)
Audit and feedback

Impact on performance and health outcomes is small and similar to CME.

Relative effectiveness is enhanced when:

1. Baseline compliance with recommended practice was low!

2. Effective feedback is provided:
   - Format, source, frequency
   - Emphasis more on the narrative
   - Includes strategies for improvement
Impact of workplace based assessment on doctor’s education and performance: a systematic review

Miller, BMJ 2012

Centrality of Feedback

“Performance changes were more likely to occur when feedback was credible and accurate or when coaching was provided to help subjects identify their strengths and weaknesses.”
The Role of Simulation in Continuing Medical Education for Acute Care Physicians: A Systematic Review

Khanduja P et al

Critical Care Medicine (in press)

30 studies: Focus on effectiveness of Simulation-based education

Conclusions – positive learning experience with limited evidence to support improved learning.
Assessment ‘for Learning’ in CPD

1. Assessment requires:
   • Credible data
   • Trusted feedback
   • A strategy for improvement.

2. Need to intentionally integrate multiple educational strategies to address or reinforce complex behavior change.
Some Key Issues...

How can the work environment..

- Increase the frequency, credibility and safety of seeking and receiving feedback?
- Embed assessment within work flow?
- Support the translation of assessment data into learning / action plans that result in enhanced performance?
Change in Behaviors

Shift from documenting participating in CPD activities “for credit”

to

Demonstrating how engagement in learning is continuously enhancing knowledge, skills and competencies.
Competence by Design will transform medical education and learning in practice in Canada.

Revisions to CanMEDS 2015 is an important project within CBD.
CanMEDS 2015:
milestones across the continuum
Shift to Competency-based CPD

Greater emphasis on:

1. Learning and assessment (individuals and teams) are integrated in the work-place.

2. Skills of lifelong learning.

3. Use of new tools to ‘learn on the fly’:
   - ePortfolios – planning, reflection, recording
   - smart phones – access to resources / data
   - social media – access to communities.
Critical Role for Assessment

Ability to access data and receive feedback about our professional performance will become a mandatory expectation for learning in practice.

Some critical data sources...

- Knowledge base;
- Performance against validated measures;
- Patients.
Focus on Outcomes

Systems of CPD that support learning in practice will be focused on the outcomes of education not just the effectiveness of the process.

- A key driver for the development of competency-based models of CPD.

**Key debate:** Will the learning / outcomes be aligned with a specialty (recertification) or a practice (revalidation)?
Focus on Health Teams

Need to improve quality of care and patient safety will require greater emphasis on continuous learning and improvement of health teams and the systems in which they work.

- ‘Inter-professional’ education
- Measures of team performance
- Roles of teams in patient safety and achievement of health care outcomes.
Will this become obsolete?
Need for Culture Change

Building a System of Continuous Learning and Practice Enhancement....

1. Focused on enhancing competence, performance, patient outcomes

2. Context is one’s scope of practice

3. Content is based on evidence, experience

4. Learning process intentionally integrates
   1. Formal learning
   2. Self-planned learning
   3. Assessment
“we must continuously investigate the most effective methods for professional medical education”.