TRANSITION TO COMPETENCY-BASED MEDICAL EDUCATION:
IS THE APPRENTICESHIP MODEL DEAD?

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Disclosure

Grants from Royal College of Physicians and Surgeons of Canada.
“If it isn’t broken, don’t fix it.”

“We’re going to do all this, and then, they’ll realize it doesn’t work.”

“Clearly education technocrats have time to waste.”
Educational Reform

• There is room for improvement.

• The goals are noble, the means... imperfect.

• The solution... complicated.
Four Diseases, One Remedy?

1. *Apprenticeus Doloribus*
2. *Competenciaea Ascensio*
3. *Competenciaea Daemonium*
4. *Apprenticeus Nostalgia*
5. *Hybrida Creatura*
... a disease characterized by the slow and relentless erosion of the apprenticeship model as a result of broader changes happening in the healthcare system.

The Agony In The Garden by Eugene Delacroix
The Beginning
The Key Ingredients

1 Clinician Teachers
2 Learning Environment
3 Patients
4 Learners
Evolving Health Care System

DUTY HOUR REGULATIONS

COMPLEXITY

SUR SPECIALIZATION

INTERDISCIPLINARITY

PATIENT AUTONOMY/SAFETY

DUTY HOUR REGULATIONS

SIMULATION

Evolving Health Care System
Major Problems

1. Variability of clinical experience
2. Break-down of longitudinal relationships
3. Lack of feedback
4. Assessment Issues
Competenciaea Ascensio

An extremely contagious disease that has spread exponentially over the last 10 years; tends to appear in regions where accountability is particularly valued and amongst professionals threatened by the increasing scrutiny of the public or authority. Survival rate is currently unknown.
Rationale

ACCOUNTABILITY

LEARNING
Core Principles

• Outcomes based on societal needs
• Flexible curriculum framed by outcomes (competencies)
• Frequent workplace-based assessments
• Regular review of achievements that determine progress
• Variable length of training
Evidence
Competenciae Daemonium

An aggressive disease that attacks the core of the CBME model. Main manifestations consist of a relentless series of critiques of CBME; A truly critical illness.
“Atomization of Competence”
“Production of Technicians”

- Integration of knowledge in context
- Tolerance to uncertain situations
- Cognitive flexibility in face of complexity
- Habits of mind such as curiosity or innovation
- Development of professional identity, humanism, altruism
“Striving for Mediocrity”

• Minimal Standards

• Restricting the curriculum

• Teaching to the test

• Discourage excellence
Tyranny of Assessment

BY WHOM?

HOW?

HOW OFTEN?
Bureaucratic Disaster
In summary, evidence from 40 years’ use of competence-based curricula across the world reveals that this educational approach is philosophically questionable, methodologically complex and highly controversial. Concerns raised about the rigour, validity and effectiveness of competence-based approaches, and the consequent loss of important higher-order learning outcomes for students, mean that there are serious matters to be addressed if this approach is to be successfully applied to the medical curriculum.

Apprenticeus Nostalgia

... a disease characterized by excessively sentimental yearning for a return to an apprenticeship model of a past and irrecoverable period.
What are we yearning for?

Role Modeling

Guided practice / coaching

Progressive autonomy

Social & cultural values

Tacit learning

Socialization

Integration of knowledge
RELATIONSHIPS
Worn-down Apprenticeship

Because of a focus on biomedical sciences...

Because of changes in healthcare system...

NOT because of CBME.
Rotational System

PROS

• Breadth of clinical exposure

CONS

• Socialization process
• Patient safety
• Educational process
Where does that leave us...

“The cumbersome, gently inefficient, individualized mentor-apprentice model and the community-oriented, holistic, high-touch and human-paced element become increasingly difficult to maintain on an equal footing with the efficient, standardized, evidence-based, state-of-the-art, student-production demands of the new biomedical education.

Hybrida
Creatura
Medical Education

LEARNING ACCOUNTABILITY
Medical Education

1. Longitudinal Development
   Knowledge/skills
   *Easy* to measure... individual-dependent

2. Vertical Development
   Understanding of practice
   Harder to measure... time-dependent
Required Changes

MORE CONTINUITY/RELATIONSHIPS

MORE MEANINGFUL ASSESSMENTS
Continuity

Prolonged rotation

Faculty Advisors

Community of Peers

Longitudinal Assessors

Assessments Fed Forward
the status quo, even in small, non-technological societies, is widespread and consistent. Nevertheless, although people complain about all aspects of their lives:

‘...only rarely do they attempt any fundamental change in their beliefs or social institutions. Large changes, if they occur at all, are typically imposed by some external event or circumstance – innovation, epidemic, drought. In the absence of such events, people tend to muddle through by relying on traditional solutions; that is to say solutions that arose in response to previous circumstances.’¹

THANK YOU.

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Inspirational Readings


