Continuous Professional Education for Health Care Professionals:

Opportunities and Challenges for the Health Care in Flanders

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Dominique Declerck, Ingrid De Meester, Walter Sermeus, Bruno Zwaenepoel, Brigitte Velkeniers, Peter Bols
The changing nature of medical practice

• Growth of complex multi-morbidity
• Advances in medical technology
• Explosion in medical knowledge
  • Pharmaceutical
  • Technological
  • Organisational
• Informed (or misinformed) patients via internet
• Recognition of benefits of integrated management
• Importance of team working
• Need for life long learning
CPE

• Systematic reviews of continuing professional education indicate that it can improve clinical performance.
• CPE appears to be effective at the acquisition and retention of knowledge, attitudes, skills, behaviors and clinical outcomes.
• What are the most effective methods?
Deliberate practice *A Ericsson, 2004*

“Most professionals reach a stable, average level of performance and maintain this mediocre status for the rest of their careers.”
Outline

6 Topics for discussion

1) Assessment of the needs in the profession
2) Interactive learning
3) Audit & feedback
4) Educational approaches
5) Simulations in the clinical setting
6) Testing and recertifications

Dirk Van Raemdonck

23 Februari 2018
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Dominique Declerck, Dentistry
Assessment of needs in the profession
(example from dentistry)

- **DentCPD**, a project initiated through the Association for Dental Education in Europe (ADEE) (2012), funded by EU Lifelong Learning Programme
- Harmonisation of CPD for graduate dentists
- Systematic Review on CPD, including effectiveness and impact on **practice** (not only gain of knowledge!)
- Impact is greater when CPD targets a dentist’s learning needs (*Bullock et al, 2003*)
- **Personal Development Plans (PDP)** rather than ‘ad hoc initiatives’ and ‘courses on topics they are already interested in’ (*Bullock et al, 2007; Hopcraft et al, 2010*).

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<th>General Dental Council (UK): enhanced CPD or ECPD will come into force in 2018</th>
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<td>- Introduction of personal development plan for each member of the dental team</td>
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<td>- Based on pilot project involving all stakeholders</td>
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Ingrid De Meester, Pharmacy

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Interactive activating learning
(example from pharmacists)

TIP for online learning: “Provide a supportive environment for your learners to interact with” Pickering et al in Medical Teacher 2017

Medication Review Series, a project initiated at the UAntwerp for last year pharmacy students and their supervisors

What? A 7 minutes presentation of an anonymous medication history, followed by a 30 minute ‘question and answer (Q&A)’

• Advantages:
  • Interaction between students, supervisors and tutors is stimulated
  • answering is personalized, leaving room for scoring and feedback
  • strongly activating form of learning
  • directly applicable in daily practice, easy integration of new insights
  • Real time distance learning is possible

• Drawbacks:
  • Labour-intensive for tutors
  • Technology-dependent

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Walter Sermeus, Nursing and Midwifery
Audit & feedback

Cochrane Systematic Reviews and Meta-Analyses of Audit and Feedback – led by research group J. Grimshaw, U. Ottawa

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<tr>
<th>Year of review</th>
<th>Effect size</th>
<th>Conclusion</th>
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<td>2012 (search up to December 2010)</td>
<td>Sixty-two studies with dichotomous outcomes: 4 % (IQR: 1–16) weighted median absolute increase in compliance with intended professional behaviors or processes</td>
<td>“Audit and feedback generally leads to small but potentially important improvements in professional practice. The effectiveness of audit and feedback seems to depend on baseline performance and how the feedback is provided. Future studies of audit and feedback should directly compare different ways of providing feedback.”</td>
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**Feedback appears most effective when:**
1. Delivered by a supervisor or respected colleague;
2. Presented frequently;
3. Featuring both specific goals and action-plans;
4. Aiming to decrease the targeted behavior;
5. Baseline performance is lower;
6. Recipients are non-physicians


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Bruno Zwaenepoel, Physiotherapy

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4) Educational approaches: overview

- No scientific studies on CME in PT in Belgium
- Permanent education in Belgium: related to universities
- or private initiative – no quality control
- Since 2012 ‘accreditation’ through PQK vzw – basic control
- Financial incentive through RIZIV – conditional (multimodal)
  - Classic courses, symposia, congresses
  - Peer reviews: intercollegial consultation
  - Patiënt survey
  - questionnaires (organisation of practice, patient file)
4) Educational approaches: shortcomings

• Quality control on CME

• Related to social relevance (impact on society)

• Effect of self-evaluation and effect on improvement process

• Webinars, e-courses, other alternatives

• Incentive: <2000 PT’s on 9.500 portfolio’s on 23.000 PT’s

• Lack of consultation with other groups of healthcare professionals

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Brigitte Velkeniers

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Simulations in the clinical setting
Best practice examples

“Clinical experience alone does not guarantee the acquisition of clinical competence.”

Issenberg & McGaghie 2013
Example: interprofessional education

• The delivery of effective, high-quality patient care is a complex activity. It demands health and social care professionals to collaborate in an effective manner.

• Collaboration between these professionals can be problematic.

• Interprofessional education (IPE) and simulations offer a possible way to improve interprofessional collaboration and patient care.
Outcomes from a labor and delivery team training program with simulation component

Labor and delivery unit team training program that included didactic sessions and simulation training with an active clinical unit

Phipps MG et al., AJOG, 2012
Outcomes

• Number of deliveries identified with an adverse event
• Provider attitudes and perceptions of patient safety
• Patient perspective on the culture of communication on the L&D unit
Results

- Improvements in patient outcomes
- Improved perceptions of patient safety including the dimensions of teamwork and communication

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Note that Q1 and Q2 for 2007 are not included because this was during the time of initial evaluation and training.

AVG, average; CRM, crew resource management; Q, quarter.

Simulations: teach cognitive, psychomotor, and affective skills to individuals and teams

- First determine the outcomes of using simulation.
- Feedback is critical to effective learning using simulation.
- Simulation allows for training in a controlled environment, with opportunities for deliberate practice and assessment.
- Simulation-based mastery learning, or SBML, significantly improves skills for all participants, and also leads to skill retention.
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Peter Bols, Veterinary Medicine
Testing and recertification (continuing education in veterinary medicine)

**General framework:**
- No ‘academic’ subspecialities in veterinary medicine
- Market driven economic imperatives

**National level:**
- Academic continuing education: residencies, ‘species’ training programs
- ‘Private’ initiatives within professional networks
- Credit system, controlled by validation commission (link to Faculty)
- Obligatory for practitioners (controlled by Board Veterinary Medicine ‘Orde’)

**European level:**
- VETCEE (Veterinary Continuous Education Europe)
  - EAEVE (European Association of Establishments for Veterinary Education)
  - EBVS (European Board of Veterinary Specialisations)
- Example: ECAR (European College of Animal Reproduction)
  - Credit point system (practitioners, academics, industry)
  - Re-certification each 5 years
  - Knowledge providers need to be accredited by the College

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