Assessment in Health Care Education - Modelling and implementation of a computer supported scoring process

TAO Days 2012
10-11 September
Berlin Germany

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Components of an assessment

- **Test** corresponds to the entire document
- **Medical cases** contains one or several items
- **Items** contains multiple interactions
- **Item interactions**
Marking and grading

- How it is performed today - with pen and paper
- Challenges in marking and grading -
  - Handling of the test takers work
  - The marking itself where some of the handwritings are unreadable
  - Score summation etc
Approaches to the problem

- Use of informatics
- Modeling criteria
- Specifications and actors
- Use cases and Mock-ups
Methods

- Study and evaluation of platforms
- TAO platform has been used in the development of the scoring model
Developments

- Scoring model
- Scoring proces
  - Grading
  - Conflict solving
  - Reconciliation
Graders’ roles
Mode of grading

1:1:1 How would you complete the medical history? What do you ask and why? (2p)
Smoking, bed rest, recent surgery, previous Deep vein thrombosis, someone in the environment have been sick, no known lung / heart disease, chest pain, leg swelling, dizziness, syncope etc.

| 0 | 0.5 | 1 | 1.5 | 2 |

1:1:2 What physical examination data is particularly important? Motivate! (2p)
Respiratory rate, pulse, blood pressure, oxygen saturation, heart, lungs, swollen leg.

| 0 | 0.5 | 1 | 1.5 | 2 |

Item Total: 1.5 / 4
Achievements and benefits

- Minimize of biasness in scoring of the test takers tests
- Ability to score test takers anonymously
- Analytics on the graders reliability
- A more time efficient process
- Enhance quality of the assessment results
Pilot

- Feedback from the dental students (84)
- TAO pilot experiences
A summary of the scoring model

- Current situation
- Challenges
- Knowledge of informatics
- Implementation
- Development
- Pilot