

# **Non-technical skills teaching in the medical undergraduate curriculum**

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- Calls for Human Factors to be included in the core curriculum
- Little evidence in the literature
  - Simulation based

- An opportunity!
  - Final year
  - Four week block
  - Following all clinical teaching and prior to final exams and shadowing week

# Designing an educational intervention

- What is the goal?
  - aims and objectives
- Learning needs assessment
  - what is the focus of the session / course?
- Teaching and learning materials
  - which will be most useful / instructive?
- Resources available
  - what are the practical considerations?
- Assessment
  - what, when, where and how?
- Remedial support
  - How will this be provided?
- Evaluation
  - has the learning occurred and has it transferred to the workplace?

- Autonomous and self directed
- Foundation of life experiences and knowledge
  - learning occurs as a continual process
- Goal oriented
- Relevancy oriented
- Practical
- Need to be shown respect

- Small working group
- Supported by student summer scholarship project
- Defined core non-technical skills categories
  - Communication
  - Situation awareness
  - Decision making
  - Team working
  - Stress management
  - Management of fatigue
  - Leadership

Safety at the sharp end: Flin, O'Connor, Crichton

- Whole class seminar and Handbook on non-technical skills
- Observation of expert clinician in the workplace
- Reflection on own performance
- Moderated on-line discussion of essay focusing on uncertainty

Atul Gawande

- Small group discussion and reflection on learning
- Framework for use during shadowing week

- **Logistical issues**
  - Technical issues
  - Organising learning activities
- **Moderated on-line discussion**
  - Some tutors didn't engage in discussion with students
  - Many student comments thoughtful and reflective
- **Clinician observation**
  - Clinicians were agreeable to having students observe and comment on their non-technical skills
  - Students were able to pick out the non-technical skills

- Both students and tutors felt that the topic should be taught earlier in the course
  - would allow observation as part of attachments
- Many tutors unfamiliar with topic matter & moderating a discussion board
- Negative student comments
  - Seminar too long
  - Common sense / too complex
  - Would have preferred to be taught technical skills
  - 'acting' consultants

- Small group discussion
  - Allowed students to talk about their fears starting work
  - Expressed uncertainty about their technical skills and knowledge of the workplace

- Has prompted discussion about moving topic and changing the curriculum in final year
- Tutor training and support required
- Further work required on selecting observation for best outcomes
- Shadowing week framework
- Review of handbook

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