

# Curriculum Trends in Medical Education in Europe in the 21st Century

*Summary Report from MEDINE2 Work Package 5 to Participants at AMEE 2013 Conference, Prague 24-28 August, 2013<sup>1</sup>*

*(A more detailed report is available at the AMEE stand in the Conference Exhibition)*

Advances in medicine, changes in healthcare delivery, new approaches to teaching and learning, and technological developments have led to a re-examining of curricula in medical schools across Europe. This research, conducted by Work Package 5 Taskforce and AMEE as part of the MEDINE2 Project, sought to identify the range of curriculum trends within medical education, and the current position and aspirations regarding their implementation in medical schools across Europe and further afield. Concerns expressed in relation to the perceived obstacles to implementing some curriculum trends that were raised during this initial study, led to a second survey which sought to identify the obstacles to curriculum change in medical education.

## Curriculum Trends

Following a literature review, and discussions with medical education experts, 82 curriculum trends were identified relating to developments in three areas: the graduated doctor; the student entering medical studies; and the education process itself. A quantitative survey was designed and distributed to individuals directly connected to medical education.

### Current Curriculum Trends

- Almost all of the 82 trends initially identified were reported by some respondents as a minor or a major trend in their school. Significant differences were found however between institutions and to a lesser extent geographically.
- The major current curriculum trends identified by respondents were: a curriculum planning committee; small group teaching; training in clinical skills units; communication skills, attitudes and professionalism, and drug prescribing as learning outcomes.
- Identified future trends that were not thought by the majority of respondents to feature at present were: the use of games in education; measurement of the educational environment; public consultation in curriculum planning; and patients contributing to the assessment of students.
- Marginally more likely today to be trends in EU than non-EU countries were: the harmonisation of learning outcomes across medical schools in the same country; recognised study-abroad periods; peer-tutoring; students developing learning resources; training in clinical skills units; individualised study options; students as members of planning committees; evaluation of teachers; use of portfolios; and the involvement of other professions in assessing students.
- Trends more common in non-EU than EU countries were: communication skills as a learning outcome; an increase in the number of medical students; the admittance of students from diverse backgrounds; attention to students' health and well-being; the use of MCQs and the OSCE; and having a medical education.

<sup>1</sup>The MEDINE2 Thematic Network on Medical Education in Europe began in October 2009, funded by the European Commission Directorate of Education and Culture. Further information can be found on the MEDINE2 website: [www.medicine2.com](http://www.medicine2.com)

## Future Curriculum Trends

- Trends identified as current were envisaged to continue developing, with minor trends becoming major and aspects of curricula not seen as a trend becoming a minor or major trend. When looking to the future from the current position the rating of major trends also increased, with the exception of the use of MCQs as an assessment tool and increasing the number of students being admitted to study medicine.
- Major future trends identified included: curriculum based on easily accessible learning outcomes communicated to students and teachers; including attitudes and professionalism; communication skills; critical thinking skills; lifelong learning skills, the ability to evaluate research evidence and to collaborate and co-operate effectively in teams; recognised study abroad periods; attention to student health and well-being; the admittance of students from diverse backgrounds; a curriculum planning committee; the systematic evaluation of the curriculum; small group teaching; training in clinical skills units; authentic assessment closely matched to learning outcomes, including the use of the OSCE; training in ambulatory care settings; and the evaluation of teaching performance.
- Future trends desired to a greater extent in EU than non-EU countries were: students having recognised study abroad periods; curriculum with a planned continuum of learning between undergraduate and postgraduate training; and students being full members of curriculum planning committees.
- Future trends desired to a greater extent in non-EU than EU countries were: health promotion, complementary and alternative medicine as learning outcomes; the admittance of students from diverse backgrounds; attention to students' health and well-being; opportunities for students to develop team-work skills; training in ambulatory care settings; horizontal and vertical integration of the curriculum; use of the OSCE and having a medical education unit and staff with specific training and expertise in education.

## Obstacles to Curriculum Change

A second questionnaire was used to gather evidence on the possible obstacles to the implementation of the curriculum trends in relation to four areas: factors that favoured the status quo in the institution; perceived problems relating to the proposed change; factors associated with the cost of implementing the change; and factors associated with the process of change.

The following obstacles to the development of curriculum change within medical schools were identified:

- Status quo: a culture of conservatism, and a satisfaction with the current approach in medical schools. Both of these factors were found to be more of an issue in non-EU than EU countries.
- Proposed change: teachers not convinced that curriculum change would bring an improvement, and teachers were not trained to implement the new approach. This second factor was found to be more of an issue in EU than non-EU countries.
- Cost of the proposed change: the increased workload of implementing the change; the increased workload of planning the change; and fewer resources to support educational initiatives in times of financial constraint. This final factor was found to be more of a concern in EU than non-EU countries.
- Process of change: teachers' work not being incentivised or rewarded, and teachers' conflicting interests of research and clinical care. This later issue was found to be more of an issue in EU than non EU countries.

## Expected Change in Curriculum Trends

- Trends where the greatest change was identified (an increase between current and future trends) included: preparing students to report and analyse medical errors; learning outcomes harmonised between medical schools in Europe; curriculum developing students ability to assess their own competence; teaching and learning programmes being adapted to the individual learning needs of students; students being co-authors and collaborating in the development of learning resources; the use of virtual patients; consultation with recent graduates on curriculum planning; staff promotion on the basis of teaching performance; a planned continuum of learning between undergraduate and postgraduate studies; and measurement of the education environment.
- A low rating for change did not usually indicate that the item was not seen as a feature in the future but rather that the room for change was limited given a high current rating. Trends where the least desired change from the current position was reported included: prescribing drugs, attitudes and professionalism and research skills as part of the curriculum; the admittance of students with a first degree in another area, and with diverse backgrounds; recognised study abroad periods; high levels of IT literacy; curriculum planning committees; training in clinical skills units and ambulatory care settings; students working in small groups; other healthcare professionals teaching medical students; students as full members of curriculum planning committees; use of the OSCE; and the opportunity of individual in-depth study.
- Only two from the list of 82 trends received a negative score in relation to desired change: an increased number of students being admitted to medical school, and the use of MCQs in assessment.
- A greater desired change for the harmonisation of learning outcomes across medical schools in Europe; admittance of students from diverse backgrounds; and communication skills as a learning outcome was reported in EU than non-EU countries.
- A greater desired change in non-EU than EU countries was reported in respect of: other professions and patients contributing to the assessment of students; opportunities for recognised study abroad periods; portfolios as an assessment tool; less reliance on lectures; progress tests; the vertical; integration of the curriculum; students as full members of curriculum planning committees; and students as co-authors and collaborating in the development of learning resources.