Health informatics in UK medical education: a survey of current practice

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Aims

This study aimed to investigate the preparedness of tomorrow's doctors for working in a future health service and to identify any education and training gaps, by collecting up-to-date data on the current status of health informatics (HI) training in UK medical schools and exploring whether it meets the General Medical Council (GMC)'s curriculum requirements.

Methods

An online survey was developed informed by the GMC's *Outcomes for Graduates* and recommendations of the International Medical Informatics Association. Senior academic staff and HI educators at 34 UK medical schools were invited to complete the survey. Quantitative and qualitative data were collected and analysed.

Results

26/34 (76%) of UK medical schools responded. 17% of respondents said there is little or no HI training in their medical school, and respondents commented that among medical school faculty there is limited awareness and capacity to teach HI. It was noted that HI teaching may be integrated with clinical topics and hard to identify. When asked whether specific aspects of HI are taught, respondents most frequently cited clinical record keeping, literature searching and research governance.

Pedagogies used to teach HI are self-directed learning (78%), lecture-based (70%), seminars (70%), informal teaching in clinical settings (57%) and problem-based learning (22%). HI is integrated vertically and horizontally across the curriculum (76%).

57% of respondents said that HI capability is assessed at their medical school. 32% of respondents reported that students have a low level of confidence that they can use HI adequately for their roles as doctors. A minority (41%) of respondents said that their HI curriculum had been reviewed in the past 2 years.

Conclusions

A good response rate was achieved. This study identifies considerable variation in content, pedagogy and timing of HI education across medical schools. Many medical schools do not address many or most HI domains outlined in *Outcomes for Graduates.*

Assessment can be an important driver of learning, thus it is a concern that there is limited assessment of HI capability. Given the rapid pace of development of HI, update of curricula may help to address these concerns.

In order to meet GMC guidelines on HI education, medical schools may require more detailed guidance from leaders in HI, support for curriculum review, referral to existing teaching resources and local leadership to build teaching capacity. Further research should explore the perception, competence and learning needs of students and graduates, and the most appropriate pedagogies for this rapidly evolving topic. ■

Conflict of interest statement

All authors declare no conflict of interest.

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