To note

Reviewing the impact of completed GMC research: Medical Education and Training

Issue

1 This is the second update to the Board in our project review series summarising key findings and resulting actions from our programme of research.

2 The purpose of the project review is to outline how completed studies have informed out work – with reference to key project findings, and where appropriate, project recommendations.

3 The key theme for this paper is our research relating to medical education and training, covering the selection of medical students, the impact of the Working Time Regulations on foundation and specialty training, and the barriers and enablers to ongoing professional development.

Recommendation

4 The Strategy and Policy Board is asked to note the impact and value of the completed projects.

Reviewing the impact of completed GMC research: Medical Education and Training

Issue

5 Within our Research Implementation Plan 2014–2017, we commit to assessing the impact of completed research to explore whether the benefits justified the investment. Project reviews are undertaken 6 to 12 months after publication and focus on our actions in relation to the key findings (or recommendations), project costs and an assessment of value for money.

6 This is the second paper in the project review series and draws on the following studies:

a Identifying best practice in the selection of medical students (University of Aberdeen, published February 2013).

b The impact of the Working Time Regulations on Medical Education and Training (University of Durham, published February 2013).

c Assessing the impact of continuing professional development (CPD) on doctors' performance and patient/service outcomes (University of Sheffield, published April 2013).

Study 1: Identifying best practice in the selection of medical students

7 The objective of this study was to identify and review evidence on the effectiveness of methods used by medical schools to select students and to collate evidence on the effectiveness of widening access initiatives to promote fair access to medicine. At the time of commissioning, the research was intended to inform a proposed joint programme of work, involving the GMC and Medical Schools Council, on student selection in 2012.

8 Comprising a literature review and a telephone survey of medical schools admissions deans, the project cost £43,294, taking approximately six months to complete.

9 The research identified the strengths and weaknesses of various selection methods concluding that the evidence is better for some than others. It concluded that the evidence base for widening access initiatives is more limited, with further research required to determine how widening access students can be best supported once selected and studying.

10 The publication of the Report served as a catalyst for action in this field. To respond to the recommendations in the Report, the Medical Schools Council established the Selection for Excellence (SfE) Group to promote widening participation in medicine and to promote excellence in selection.

11 Although not committed to addressing the specifics of each recommendation, a number of actions have resulted, and continue to result, from the work of this group, with examples set out in table 1 of Annex A. In addition, the SfE Group has established the PRACTISE agreement, which will require healthcare providers to prioritise work experience opportunities in medicine for pupils from a lower socio-economic background.

12 The evidence collected during this review was limited, and where present, incapable of supporting firm findings. It is important to note that literature reviews rely on the availability of credible and relevant evidence. Of course, there is always the possibility that the evidence simply does not exist and where this applies, it is often just as useful to know that this is the case. Therefore, although the study did not necessarily identify best practice, it has provided a platform for further research, through the SfE Group. Taking this into account, it can be argued that the benefits have, in this case, justified the investment.

Learning points

13 The study raises further questions for consideration and discussion by the Research Policy Forum:

a When commissioning research to stimulate external action, to what extent should we be working with third parties to jointly scope, and potentially co-fund, research so that it is more amendable to resulting action?

b Where our intention is to stimulate action on the part of others, to what extent should we be working with partners to drive change in response to published findings? (Should we rely on publication to drive action or do we have a responsibility to lever change through proactive discussion and follow up with those concerned?)

Study 2: The impact of the Working Time Regulations (WTR) on Medical Education and Training

14 The objective of this study was to better understand the impact of working time restrictions, and the efforts to comply with them, on medical education and training. This is in keeping with our responsibility to ensure the quality of medical education delivered in the UK is fit for purpose.

15 The study was commissioned at the request of the Postgraduate Board as a follow up to the systematic review undertaken by Dr Ramani Moonesingh et al.

16 Comprising a literature review and a series of case studies involving primary research with trainees, deanery and Trust/Health Board staff from across the UK, the study took approximately 11 months to complete at a cost of £97,580.

17 The research suggested that the problem of fatigue, and its impact on patient and trainee safety still persists, despite the introduction of the WTR, in part due

to poorly designed rotas and working practices which trainees felt unable to challenge. Existing quality management processes were perceived as being insufficiently sensitive to these issues and concerns. Finally, although not solely attributable to the WTR, the research highlighted an increasing tension between service delivery and education and training.

18 The report did not identify recommendations as such but in response to the report, we identified a number of areas for action, subsequently endorsed by the former Postgraduate Board (at table 2 of Annex A).

19 The research findings have informed our submission to the Working Time Directive Taskforce led by Professor Williams, and the Shape of Training Review, as well as some preliminary work on the other areas for action including a mapping exercise to better understand the relationship between the WTR, the New Deal and the European Court of Justice judgments on *Simap* and *Jaeger*. It will also inform our review of education and training standards.

20 While we continue to monitor data relating to rota compliance and work intensity through the Annual Deanery Reviews and National Training Survey, as well as through our programme of visits, not all of the actions identified by the Postgraduate Board have yet been taken forward. However, we will revisit these once we know the direction of travel with the Williams' review.

21 The political backdrop to the Williams' review highlights the challenges posed by the European and resulting national legislation which go beyond the GMC's regulatory scope. The WTR is not just an issue which affects medical education; it is a systems-wide issue which requires movement at European level if there is to be a workable set of rules which provide more flexibility.

22 Overall, the research has improved our understanding of the impact of the WTR (as per the objective) and enabled us to demonstrate a degree of leadership in this area. Further, the findings have been shared widely across the sector. However, beyond the examples set out above, limited action has resulted from the study (in part due to the issues set out in paragraphs 20 and 21 above).

Learning points

23 For future studies, more detailed consideration should be given to how we intend to use the evidence generated by our research, as well as the risks attached to publicly undertaking studies of this nature. Consideration should also be given to the wider policy context and our ability to influence this.

24 Both issues are now incorporated in our scoping template and serve as an explicit checkpoint prior to commissioning future studies.

Study 3: Assessing the impact of continuing professional development on doctors' performance and patient/service outcomes

25 We commissioned this study to better understand where our regulatory intervention in relation to continuing professional development (CPD) is best placed to support doctors as part of revalidation and to promote development and excellence throughout their careers (and to potentially inform policy development, guidance and/or other policy interventions).

26 The objective of the study was to explore how CPD was impacting on practice and to identify the barriers and enablers to its successful implementation.

27 Comprising interviews with healthcare providers and deaneries, focusing on medical education departments and CPD trainers, the study took approximately 12 months to complete at a cost of £80,358.

28 Although the study did not provide extensive evidence of impact, beyond individual perceptions, the findings did identify conditions in which CPD was more likely to be effective (for example, where integrated with appraisal and aligned with organisational objectives and where organisational support is provided to facilitate change following completion of CPD). It also recognised that many doctors struggled to know how best to effectively reflect on their CPD – an issue that has also been raised in other areas of our work.

29 Although many of the recommendations (table 3 of Annex A) have not been progressed (several were not for the GMC), the findings of the study have influenced the ongoing development of a mobile application to support effective CPD and to help embed this within the appraisal cycle. Similarly, the findings of the research will inform supplementary guidance on reflective practice, to be produced later this year.

30 Considering the investment, the limited resulting action (at this point in time) would question whether the study provided value for money. In part, this reflects the challenge of demonstrating the impact of a single intervention in a complex multi-faceted environment. However, it may also reflect the quality of the research study and the research design, as well as a lack of clarity on the purpose of the project and how the resulting findings would be used.

Learning point

31 As with the WTR and Student Selections studies, greater consideration should be given to the purpose of the study and specifically, the work that it will inform. Where a proposed study is likely to require action from others to implement the resulting findings, consideration should be given to engaging those parties at an early stage to ensure that the research is appropriately designed to enable meaningful action.

Supporting information

How this issue relates to the corporate strategy and business plan

32 The GMC research programme relates to strategic aims 5 of the Corporate Strategy: to work better together to improve our overall effectiveness, our responsiveness and the delivery of our regulatory functions. It is in keeping with our commitment to evaluate the impact of what we do and demonstrate the difference we make.

How the issues support the principles of better regulation

33 The introduction of a formal review process provides an assessment of impact and an indication of value for money. Where the research has not delivered the anticipated value, this has been analysed to identify generic learning points for the design and commissioning of future research studies.

34 Later this year, we will introduce an evaluation of each study (upon completion) to assess the extent to which the research project met our objectives, our working relations with the contractor, and the quality and rigour of their analysis.

What engagement approach has been used to inform the work (and what further communication and engagement is needed)

35 This paper draws on a number of sources of information including the policy lead for each study, board papers and evidence submissions for external reviews.

If you have any questions about this paper please contact: Thomas Jones, Research Policy Manager, Strategy and Communication, tjones@gmc-uk.org, 020 7189 5370.

General Medical Council

Regulating doctors
Ensuring good medical practice

Annex A

Research recommendations and suggested action

Introduction

1 This Annex provides additional details on each of the recommendations/and proposed actions to arise from our research on Student Selection (table 1), Working Time Regulations (table 2) and CPD (table 3). Each recommendation provides a short overview of any action that has since been taken.

Table 1 – Student Selection

Recommendation	Resulting action
The GMC should work with the MSC and medical schools to further explore and define good practice on selection into medical school. This should include consideration of the following ideas which have emerged from the evidence reviewed in this report.	

That an aptitude test (see 6.1) and academic record (6.2) are used conjointly in selection, as this may positively impact on socio-economic class biases in selection.	***Selecting for Excellence* (*SfE*) project includes a sub-group on admissions, which is looking at the tools used by medical schools to select students**
That the use of personal statements (6.3) and references (6.4) in selection for medicine is reviewed, as these lack validity and reliability, and impact on socio-economic class bias. That where personal statements (6.3) and references (6.4) are used, they are not used for ranking purposes in the selection process, as these lack validity and reliability, and impact on socio-economic class bias.	
That the use of SJTs (6.5) be considered as a selection tool for non-academic attributes of medical selection as these are among the best and most valid methods in medical school selection.	
That structured interviews (6.7) are used as part of the selection process.	
That an agreed, national framework for the use and transfer of contextual data (7.5), such as applicant school or social circumstances, is created and validated.	***SfE* is doing a significant amount of work on contextual data. A report on outreach activities was commissioned which included a section on contextual data. The aim is to develop a national standard on use of contextual data by medical schools.**
To explore the utility of a (supplementary) league table which includes selected other indices pertinent to medicine, such as effective WA schemes (7.4) or student support (7.65), which medical schools could	**This has not been taken forward as yet, although there is acknowledgement that the current situation is not**

use to compare and rate activities and performance in selection and WA (Section 7).	**satisfactory.**
That medical schools provide the following to the GMC.	
A declaration of what selection tools are used and their respective weightings.	***Selecting for Excellence* (*SfE*) project includes a sub-group on admissions, is looking at these issues. Weightings are more difficult to report in a standard way than originally thought.**
Mapping of selection procedures against socio-economic markers (e.g., interview ratings and postcode of applicant), using an agreed common format so selection system performance can be assessed.	
Evidence of support systems which acknowledge the needs of widening access students.	**This has not been taken forward as yet.**
That the GMC, the departments of health, and relevant key interests consider the desirability and feasibility of pursuing the following areas of further work which have emerged from the evidence reviewed in this report.	
The development, piloting and evaluation of a common framework for reporting selection processes, how they are used and weighted in each medical school.	***Selecting for Excellence* (*SfE*) project includes a sub-group on admissions, is looking at this issue.**
The development, piloting and evaluation of a common framework for the use of contextual data in selection.	**See earlier comments on contextual data.**
Commissioning a role analysis to determine selection criteria, which will include mapping to existing policy documentation such as GMP as well as the variation between medical schools and different branches of the profession, to clarify the issue of what selection	***SfE* is working to update the existing role of the doctor consensus statement (this statement centres on the values and skills needed to study medicine)**

should actually be measuring.	
Commissioning a project testing out methodologies for long-term follow-up of applicants to medicine through to career posts.	**The GMC is working with the MSC and others to develop a UK Medical Education Database (UKMED). This database will link data from undergraduate medical education to data from postgraduate medical education and training. For example, it will take information collected through selection processes such as aptitude tests and link it with assessments that form part of selection to the Foundation Programme, fitness to practice data and, over time, performance data in postgraduate assessments including royal college exams.**
Commissioning modelling studies to explore the impact of different weightings of admissions procedures on widening access.	**Not taken forward as yet. See earlier comments on weightings.**
The GMC discuss highlight and promote the importance of further longitudinal work to:	
Follow up medical students through to trained post to enable the comparison of prior educational attainment and demographic markers against performance as a clinician and career choices.	**See earlier comments on development of UKMED.**
Develop and evaluating widening access interventions using robust methodologies suited to interventions with multiple components and complexities such as those well-established in health services research.	
Explore the predictive validity of aptitude tests and SJTs in undergraduate selection in relation to performance as a clinician.	

Examine the use of contextual data based on an agreed, national framework which is legally defensible.	**See earlier comments on contextual data.**

Table 2 – Working time Regulations (actions agreed by the Postgraduate Board)

Action	Progress
We invite deaneries to review, in the light of this research, arrangements for management of the WTR, including the interplay of the WTR and New Deal and the robustness of monitoring processes.	**No action taken to date**
We use the key findings of the research to develop new and more relevant questions about the WTR for the 2013 National Training Survey.	**No action taken to date**
We coordinate work on rota design with partners, to highlight good practice and, where appropriate, to identify bad or unacceptable practice.	**No action taken to date**
We explore with partners the desirability and feasibility of developing joint advice for trainees on the WTR, and what they can expect of rotas and work practices	**No action taken to date**
We discuss the key findings of the research with Healthcare Education England's Better Training, Better Care Taskforce (which is tasked with taking forward the recommendations of the Temple and Collin's reviews on working time and the future of Foundation	**The report has informed discussions with Health Education England through the Better Training, Better Care Taskforce.**

training respectively).	
We include the key findings of the research in our submission to the Shape of training review.	**Included in submission. The report recommended longer training placements for individuals (post foundation programme) to minimise pressures on workloads, rotas and development opportunities**
We consider, as part of our review of Quality Assurance, whether we should set some standards around working time issues and, if so, how we would monitor them without creating additional difficulties for the service.	**Will inform our review of education and training standards – and specifically the relationship between the environment and medical training.**

Table 3 – Impact of Continuing Professional Development

Recommendation	Action
The GMC should consider appraisal of the impact of the guidance, particularly from the perspective of employer organisations, in addition to individuals, with regard to current appraisal procedures and with the forthcoming introduction of Revalidation to England in 2012. Again the GMC is now starting work to embed the guidance in local process. [Recommendation 1]	**Developing app to help embed CPD in the appraisal cycle**
Of particular note, no evidence was found of any patient/public involvement in Doctors' CPD. Both of these issues also need to be addressed by Trusts and the GMC. [Recommendation 2]	**No action taken to date**
Although there was some evidence that the value of informal learning was recognised, such learning cannot easily be measured or assessed. However it is important that	**Will be addressed through the CPD and**

Trusts and the GMC continue to recognise and support informal learning as an important component of CPD. [Recommendation 3]	**planned note on reflective practice**
Trusts, in particular need to support good educational models of CPD and the GMC needs to encourage the dissemination of such models by the Royal Colleges and between the specialities - in particular those which emphasize the importance of applying individual learning to Practice. [Recommendation 4]	**No action taken to date**
There was some good evidence that the CPD which was being undertaken was relevant to Practice although little evidence [if not outright hostility in some Trusts] of inter-professional or team learning. Although a very wide variety of CPD was delivered and recognised as potentially valuable in improving patient care, the considerable benefits of learning across professional disciplines and boundaries need to be encouraged and supported by Trusts. [Recommendation 5]	**Action not for the GMC**
What was remarkable in our interviews was that none of our respondents mentioned the importance of self-care and self-management by doctors themselves as a component of their CPD. It should be noted that we did not specifically ask about this issue. The issue of the physical and mental wellbeing of doctors, particularly with the increasing number of complaints, is, in our view, an important issue which needs to be emphasized in the new GMC Guidance as well as highlighted to all Trusts. [Recommendation 6]	**No action taken to date**
Most encouragingly – the importance and contribution of reflection to CPD was recognised by almost all interviewees although to what extent this was formalised and structured varied enormously. How much was only 'lip service' is unknown although the Case studies do provide some evidence of effective reflection being undertaken. The GMC should continue to emphasize the central role of reflection in CPD and the importance of a systematic approach to this. [Recommendation 7]	**Will be addressed through the planned note on reflective practice**

Trusts were generally helpful in providing support/advice on what CPD needed to be undertaken although they currently have little role in the quality assurance or quality enhancement of CPD. Trusts need to continue to develop their role in CPD programmes by not only providing general and local guidance but also in assessing and recognising courses. [Recommendation 8]	**Action not for the GMC**
The use of both the principles highlighted in the new GMC Guidance for CPD [2012] and the framework outlined in the Academy document is highly recommended when new CPD programmes for Doctors are being developed. [Recommendation 9]	**Action not for the GMC**
If Organisations are to support and facilitate the CPD of Doctors, then resources need to be allocated to ensure that high quality CPD takes place within a framework and infrastructure provided by the Organisation and that all Doctors have sufficient protected time to undertake effective CPD. [Recommendation 10]	**Action not for the GMC**
The GMC should use its position to highlight the importance of employers making CPD provision available to such doctors so that they can not only meet the requirements for revalidation but also for the benefit of patients. [Recommendation 11]	**Some initial engagement undertaken in this area**
All employing organisations must continue to recognise and meet their responsibilities to provide CPD opportunities for ALL doctors whom they employ. [Recommendation 12]	**Action not for the GMC**