



1. Introduction to the UK Comparison

1.1 Purpose

We were charged to undertake up to three consultations in the UK environment to generate:

- An overview of the current landscape in British medical education;
- Current issues / trends that impact upon or should impact upon medical education;
- How / if undergraduate medical school programs are engaging / responding to these societal shifts;
- Examples of innovation in British medical education.

1.2 Conduct of the study

Key stakeholder interviews were arranged with representatives of the General Medical Council (GMC), the Postgraduate Medical Education and Training Board (PMETB), and the National Health Service (NHS). We consulted with leaders in medical education in the UK and Canada to identify schools with innovative programs. Visits were arranged to three of these schools: Peninsula, Manchester and Hull-York. During these visits we met with a variety of educational leaders to get an overview of different aspects of the programs, and with students. In addition, a visit was made to Imperial College specific to innovation in simulation. See Appendix 1 for a list of the people we met.

We read a number of key reports in preparation for the visit and followed up on information provided during our meetings through accessing the relevant websites (see Appendix 2).

1.3 Outline of the report

The report is based on notes taken during our interviews and meetings, as well as our background reading. It is not intended to be a comprehensive review of British medical education but rather to highlight some high level themes that we found to be recurring and that seemed to be most relevant to the Future of Medical Education in Canada project. The report is divided into the following sections:

- A description of the organization of medical education in the UK;
- An overview of current and future issues in British medical education;
- A description of the important and unique features of the programs at three medical schools;
- A discussion of some key issues in British medical education organized into the same 5 cluster themes being used in the environmental scan;
- A summary of key points.

2. Organization of medical education in the UK

Medical education in the UK most typically consists of a 5-year program of basic medical education (4 years for a graduate entry program) in one of the 31 UK medical schools, followed by 2 years of generalist postgraduate training (Foundation Program) and 5 to 7 years of specialist training (3 years for General Practice) before award of a Certificate of Completion of Training (CCT).

The General Medical Council works with UK medical schools that issue UK primary medical degrees to set standards for the knowledge, skills attitudes and behaviours that medical students should acquire. These are laid out in a document called *Tomorrow's Doctors* (2003). The GMC runs a quality assurance program for UK medical schools, Quality Assurance of Basic Medical Education (QABME). Reports from the QABME process are made public and available on the GMC website. The GMC also produces joint guidance with the Medical Schools Council on professional behaviour and fitness to practice.

Funding for undergraduate medical education comes from the Department of Innovation, Universities and Skills (formerly the Department of Education) through the Higher Education Funding Council for England (HEFCE) and its equivalents in Scotland and Wales. The Council also plays a key role in ensuring accountability through the university quality assurance procedures. Funding also comes from the Department of Health in the form of the Service Increment For Teaching (SIFT) which is distributed through the Strategic Health Authorities (SHAs).

The GMC currently has very limited responsibility for establishing and maintenance of standards in postgraduate education. It approves curriculum for the Foundation Program jointly with the Postgraduate Medical Education and Training Board (PMETB). This body, created in 2003, regulates postgraduate training. Curriculum for specialist training is set by the respective Royal Colleges and approved by PMETB. The postgraduate deaneries are responsible for the management and delivery of postgraduate medical education and for the continuing professional development of all doctors, although in reality this function appears to be largely scheduling (Postgraduate Deans were described as “directors of postgraduate traffic”). Postgraduate Deans have few powers to control the way hospitals deliver training; they report to the Strategic Health Authorities. (See diagram)

There are large numbers of stakeholders responsible for different parts of the education system leading to fragmentation and an inability to respond nimbly to change. Vested interests make reaching consensus difficult. It was notable that we kept hearing about new groups and organizations at almost every meeting. Some of the major ones are listed in Appendix 2.

3. Overview of current and future issues in British medical education

The GMC is producing a revised version of its recommendations on undergraduate medical education, *Tomorrow's Doctors*, following an extensive consultation process. The process has been delayed because of re-organization within the GMC. The final version will be published in 2009. It will be more outcomes-based to sit better with the curriculum of the Foundation Programs (i.e. more closely resemble *The Scottish Doctor* prepared by the Scottish Deans Medical Curriculum group in 2000).

The predominant current issue in British medical education is the re-organization of postgraduate medical education to respond to deficiencies in the NHS Modernizing Medical Careers (MMC) program. MMC arose from the Chief Medical Officer's 2002 report *Unfinished Business* that pointed out the excess of Senior House Officers in the system many of whom were not in structured training and were required repeatedly to apply for jobs. The MMC program began in 2005 with the conversion of the Pre-Registration House Officer year into the first of two Foundation Training years, followed by entry into specialist training at the end of the second Foundation year. MMC reached crisis point in Spring 2007 with the failure and abandonment of the computerized centralized admission system (Medical Training Application) for entry into specialist training. An independent enquiry into the MMC was established by the Secretary of State for Health under the direction of Sir John Tooke. Its final report, published in January 2008, will set the agenda for future reform of postgraduate education. The Secretary of State responded to the recommendations in the Tooke report in February 2008.

The Foundation Program comprises a national curriculum and formal assessment of clinical competence. There is a single application from medical school. The program is still relatively new and will continue to evolve in response to identified concerns. Although the FY1 year is seen as a useful introduction to supervised clinical practice, trainees have identified problems with the selection process, the competency

assessments, and need for better linkage with undergraduate education. The majority of trainees feel that half way through FY2 is too early to be deciding on a specialty.

A key decision arising out of the Tooke report is to assimilate PMETB within the GMC (but not until 2010) which will give the GMC regulatory responsibility for both undergraduate and postgraduate education (as well as doctors in practice). The government agreed with 24 of the 47 recommendations in the Tooke report; those agreed in principle will be evaluated as part of the next stage review being carried out by Lord Darzi and due to be published in June 2008. A major recommendation which has been put on hold for further review is the creation of a new body NHS: Medical Education England (NHS:MEE) which will relate to the revised medical workforce advisory machinery and act as the professional interface between policy development and implementation on matters relating to postgraduate medication education and training. This body is seen as necessary to promote national cohesion in England as well as working with equivalent bodies in Wales and Scotland to facilitate UK wide collaboration.

The Health Minister, Lord Darzi, has been commissioned by the health secretary to produce a wide ranging review of the National Health Service, the NHS Next Step Review, to coincide with the 60th anniversary of NHS. The Darzi review is based on an extensive consultation with the public and professional groups, but is being done on a tight timeline, with the report due in June 2008. It is expected that report will address, among many other things, the role of "tomorrow's clinicians", including what differentiates a doctor and a doctor's education.

A number of EU directives have impacted the delivery of postgraduate education and training over the past few years. One of the most significant has been the impact of the European Working Time Directive which has restricted working hours and patterns in the NHS. At the undergraduate level there is much talk about the Bologna Process designed to create a European Higher Education Area (EHEA) based on international cooperation and academic exchange that is attractive to European students and staff as well as to students and staff from other parts of the world. The envisaged EHEA will facilitate mobility of students, graduates and higher education staff. There are differing views on whether medical education is included or exempted from the Bologna process and what the impact may be.

A new awards scheme worth up to £100 million has been created by the Higher Education Funding Council for England (HEFCE) and the Department of Health (DH) to increase the number of qualified clinical specialists going into medical research and education. The move follows growing concern over a drop of some 500 clinical academic staff - one in eight - between 2000 and 2004 in medical disciplines (including specialities in anaesthesia, surgery, pathology, and psychiatry) and in clinical dentistry, as reported by the Council for Heads of Medical Schools in June 2005. HEFCE and the Department of Health will fund up to 200 new senior lectureships jointly over the next ten years as part of a broad programme to improve career pathways for researchers in medicine and dentistry, set up in response to recommendations in the Walport Report, arising from a joint working party of the UK Clinical Research Collaboration (www.ukcrc.org) and the NHS Modernising Medical Careers initiative (www.mmc.nhs.uk/pages/academic).

A National Academy of Medical Educators has recently been established to offer opportunities for medical teachers to demonstrate their expertise and achievements in medical education through a formal accreditation and re-accreditation process. The aims are to develop and sustain medical education as an

academic discipline; to support academic and professional leadership in medical education; and to develop and support a transparent career structure for specialist teachers in medical education.

4. Examples of innovations at three medical schools

4.1 Peninsula Medical School (PMS)

Peninsular Medical School was established as a partnership between the Universities of Exeter and Plymouth and the NHS in Devon and Cornwall in 2000 following a successful bid to the government. It is one of five new medical schools set up by the government as part of a national expansion in student numbers. It graduated its first cohort of students in 2007. The school has increased its intake of students annually (to 200 in 2009) and has seen an increase in applications compared to the national average. The school's stated ambition is not only to provide an innovative undergraduate curriculum designed to enable graduates to respond to rapidly changing health needs but to establish the Medical School as a research-led institution (target is to be in the top 15 of all UK medical schools in research terms by 2015). The school has an interdisciplinary clinical education research program focusing on curriculum design and innovative methods of assessment, the construction of professional identity and the processes of learning.

The first two years of the program are delivered at the university campuses of Plymouth and Exeter; in years 3 & 4 students are based at the hospitals in Plymouth, Exeter and Truro and in Year 5 students are also placed at hospitals in two other towns. The spiral curriculum integrates the basic science and clinical learning over all 5 years of the program. The students thought the clinical skills thread was the best part of the program; they said the progress tests did not tell them what they knew (only what they did not), and they were anxious about the boundaries of what they were supposed to know.

Some unique features of the medical school:

- Strong partnership between the universities and the NHS, and the funding of teaching through Service Level Agreements with the hospitals.
- Teaching is perceived to be a benefit and the majority of clinical teaching in hospitals is done by consultants.
- The medical school is organized into three institutes; there are no departments.
- Research and evidence-based education underpinning to curriculum and innovation.
- Mixed assessment methods including progress tests.
- Authentic clinical skills lab, set up to mimic ward environment. Clinical skills taught by non-specialists and in some cases by nurse practitioners.
- Vertical integration of basic sciences.
- Aspirations to move from paper PBL cases to PBL based on clinical cases the students have seen.

4.2 Manchester Medical School

Established in 1874, Manchester is one of the largest medical schools in the country with an annual intake of about 380 students, joined in Year 3 by approximately 100 students from St Andrew's University who transfer following completion of a B.Med.Sci. course. These large cohorts of students are managed in the clinical years by assignment to one of 5 base units (teaching hospitals), each with its own SubDean. In 2007, to emphasize the primacy of the research endeavour, the School of Medicine was restructured to form 4 Research Schools and the undergraduate Manchester Medical School.

