What is new in the third edition of the Foundation Programme Curriculum?

Introduction

The third edition of the Foundation Programme Curriculum (UK Foundation Programme Office, 2010a), produced by the Academy of Royal Colleges Foundation Programme Committee, was published in April 2010. This replaces the previous editions of 2005 and 2007. The simultaneously published Foundation Programme Reference Guide (UK Foundation Programme Office, 2010b) was produced by the national coordinating body for curriculum delivery, the UK Foundation Programme Office. Central to the new edition is the switch in emphasis from competencies to outcomes which form the basis of the curriculum. This article analyses the key messages in the revised curriculum.

General Medical Council requirements

The Foundation Programme is based on *Good Medical Practice* (General Medical Council, 2006), consisting of four revised domains (previously eight):

1. Knowledge, skills and performance
2. Safety and quality
3. Communication, partnership and teamwork
4. Maintaining trust.

The Foundation Programme Curriculum is mapped to these domains, illustrating where the standards have been met. Intelligent use of the curriculum needs to map all foundation teaching activity to these criteria.

Outcomes and competencies

Good Medical Practice forms the basis of the syllabus and competencies. The 14 broad areas are listed in *Table 1*. Importantly, the distinction between performance (i.e. what is done) and competence (i.e. capability) is explored throughout the document. In contrast with previous versions (Wall, 2005), the new edition lists the outcomes required of a foundation doctor, rather than merely listing competencies which need to be acquired. This is likely to be welcomed by medical regulators, patient safety groups and the public at large.

Dr KA Nathavitharana *is Consultant Paediatrician, Clinical Tutor and Sub-Dean, Lead Clinical Tutor, West Midlands Deanery, Worcestershire Acute Hospitals NHS Trust, Alexandra Hospital, Redditch, Worcs B98 7UB*

Personal development

Demonstrating professional knowledge, skill and judgment in the delivery of safe and effective health care, especially in the presence of clinical uncertainty, marks out a doctor. Learning during and from practice is the most effective way for professionals to develop expertise. Lifelong learning requires learning from practice through critical thinking and reflection. The curriculum guides the new doctor starting the Foundation Programme through a well-signposted syllabus (describing competencies needed to deliver outcomes) and assessments. The need to take charge of one's own personal development is emphasized.

Learning methods

A safe and supportive workplace with a varied case mix is the best place to learn. Structured learning based on clinical scenarios, as well as self-directed learning, receives due attention. In keeping with recent developments in medical education, the curriculum and operational guide recognize the value of high fidelity simulation and initial learning of practical and other skills in 'skills laboratories', now commonplace in many educational facilities in NHS trusts. However, new technologies should be seen as an adjunct to (not a replacement for) learning occurring in the workplace.

Table 1. Syllabus and competencies

Professionalism
Good clinical care
Recognition and management of the acutely ill patient
Resuscitation
Discharge and planning for chronic disease management
Relationship with patients and communication skills
Patient safety within clinical governance
Infection control
Nutritional care
Health promotion, patient education and public health
Ethical and legal issues
Maintaining good medical practice
Teaching and training
Working with colleagues

Clinical emphasis

Recognition and management of acutely ill patients

This topic receives due attention in the current edition. Demonstrating knowledge, competencies and skills to recognize critically ill patients, initiating resuscitation and participating in advanced life support, with increasing levels of competence and confidence, are among the expected clinical outcomes in the Foundation Programme. Leading teams where necessary and using local protocols for deciding when not to resuscitate patients is emphasized. Many trainers and trainees rightly regard these skills as being most important. While acknowledging this crucial aspect of a doctor's skills, the curriculum also focuses on medium and long-term patient care.

Discharge and planning for chronic disease management

Medical advances have enhanced life expectancy, despite increasing levels of obesity, type 2 diabetes and other chronic diseases. A significant proportion of acutely ill adult medical patients will have underlying chronic medical conditions. The new edition recognizes the importance of discharge and planning for chronic disease management, consistent with the current policy of care in the community and promoting self-care. Safe and rational prescribing, recognizing long-term complications of illnesses, working in multidisciplinary teams, better recognition of socioeconomic factors and family dynamics, providing patients with sources of information and community support in the voluntary sector are among the issues addressed.

Workplace-based assessments

Workplace-based assessments receive due attention. Specified assessments have been linked to each competence. Their use in providing evidence for the acquisition of competencies leading to outcomes is explained. The assessment tools are formative, i.e. designed to help foundation doctors improve their practice, so improvement in clinical practice needs to be monitored by regular assessment, integral to which is constructive feedback (Carr, 2006). This is not widely understood by trainees and some trainers.

The importance of 'continuous' assessment by day-to-day observation is a fundamental component of the Foundation Programme and beyond. *Table 2* lists the workplace-based assessments used in the Foundation Programme. While listing the numbers of different workplace-based assessments required, the document rightly emphasizes continuous assessment, constructive feedback and personal development. It is disappointing that direct observation of procedural skills, originally developed in the UK for assessing procedural skills, is now listed as an assessment of doctor:patient interaction in the Foundation Programme (Wilkinson et al, 2008).

Clinical assessments

Case-based discussions, mini-clinical evaluation exercises and direct observation of procedural skills are well described, both in foundation and many specialty training programmes. Sampling the subject matter in each placement, with a mix of acute and chronic management (as well as communication and other skills), forms part of the assessment. All assessments are trainee-driven. The new curriculum encourages assessors to conduct unscheduled assessments. Arguably, these are more representative of true performance than mere competence. Meaningful assessment requires properly trained assessors who are content experts, understand the curriculum and, more importantly, can give constructive feedback.

Table 2. Workplace-based assessments in the Foundation Curriculum and number required

Assessment	No. needed
Multisource feedback – team assessment of behaviour	1
Mini-clinical evaluation exercise	At least 6
Direct observation of procedural skills	3
Case-based discussion	6
Logbook – F1s only	
Teaching development assessment	

Multisource feedback

Team assessment of behaviour (Whitehouse et al, 2007) has replaced the mini-peer assessment tool and is recommended for multisource feedback (previously called 360° assessment) throughout the UK. Team assessment of behaviour is well validated and robust (Bullock et al, 2009). Multisource feedback should take place at least once in both the F1 and F2 years, and should be repeated in the last 4 months of training if there are concerns. Foundation doctors should nominate 15 raters to include doctors more senior than F2s, senior nurses, allied health professionals and other team members. A minimum of 10 returns is stipulated. Using a truly representative group of raters will enhance the validity of this tool.

Logbook of procedural skills

The F1 logbook is a new requirement from the General Medical Council which must be documented in the e-portfolio. Procedures included in the curriculum are listed in *Table 3*. Many foundation doctors will achieve competence in other procedures, including lumbar puncture (an omission in the curriculum), chest and ascitic drains which, surprisingly, are also not listed. It is not realistic to expect a direct observation of procedural skills for each of these procedures. The purpose of good clinical and educational supervision is to ensure not only competence, but also good outcomes in relation to these and other procedures, based on day-to-day observation.

Table 3. Practical procedures in which competence is required by the end of the F1 year

Venepuncture
Intravenous cannulation
Preparation and administration of intravenous medication and injections (except cytotoxics)
Arterial puncture in adults
Blood culture peripheral
Intravenous infusion including prescription of fluids
Intravenous infusion of blood and blood products
Injection of local anaesthetic to the skin
Subcutaneous injection
Perform and interpret electrocardiogram
Perform and interpret peak flow
Urethral catheterization (in adults)
Airway care, including simple adjuncts

Foundation Learning Portfolio (e-portfolio)

The UK Foundation Programme Office and NHS Education for Scotland have joined forces to update the 2010 version of the e-portfolio (www.nhseportfolios.org), based on the new curriculum. The paper-based portfolio is no longer available. The e-portfolio is a record of the foundation doctor's progress and development through the foundation years. It provides a transparent, verifiable record of the foundation doctor's training that can be mapped to the curriculum.

Insightful self-assessment, learning from experience and reflection as well as a plethora of printed and electronically available materials is actively promoted in the portfolio. It also provides a platform for documenting notable achievements or excellence and areas for development. The appraisals, assessments and end of placement feedback provide ample opportunity for foundation doctors to demonstrate progression.

The structured approach of the e-portfolio enables better documentation of the lack of engagement and/or lack of progress in a small minority. Further work is necessary to improve security, cross-reference component parts and link the foundation e-portfolio to specialist training. Critical evaluation of the e-portfolio at specialist entry and beyond should enhance engagement with e-portfolio.

Careers planning and management

Postgraduate medical education and training require effective career planning and management support. The curriculum advocates a pragmatic and realistic approach to choosing a desired path, both in the light of the job market and personal circumstances. Foundation doctors are encouraged to identify a 'plan B' specialty and deanery early in their careers. Greater awareness of related issues, including

health, disability, personal values and work:life balance, is discussed.

Reference is made to sources of information such as the Foundation Programme UK and careers websites, deaneries, colleges and medical publications. Each foundation school must have a careers lead. When first-hand experience of a given specialty is not possible, accessing local 'taster' programmes is actively promoted. The reference guide helpfully lists the requirements for a taster programme, including sample timetables. Good educational supervision should include careers discussions, advice and exploration (and referral, where necessary) which need to be documented in the e-portfolio.

'Trainers' (educational, clinical and academic supervisors)

The curriculum offers guidance to trainers. It emphasizes ensuring patient safety at all times as education and training cannot, and must not, take place in an unsafe environment. Good educational practice requires a blend of support, challenge, clarification of the standards to be achieved and, in a minority of cases, clarification of the consequences of non-achievement. There is increasing awareness that only appropriately trained and committed clinicians should be involved in educational roles. Appropriate training includes an understanding of the curriculum and the use of e-portfolio, and the ability to give constructive feedback and to appraise trainees as well as training in equality and diversity.

The distinction between educational and clinical supervisors is provided by the new curriculum and reference guide. In practice, implementation of modern rotas makes it impossible for every foundation doctor to always have the same educational and clinical supervisor. Providing effective departmental induction, medical devices training and creating a culture conducive to training, are essential.

Foundation doctors should never be asked to work beyond their competence without appropriate support (e.g. consenting patients for procedures which they cannot fully explain). Making time for workplace-based assessments and directing foundation doctors to appropriate colleagues for this purpose is integral to educational and clinical supervision. Foundation doctors in academic programmes can and should expect an academic supervisor with the necessary skills to support their academic development alongside their clinical progression.

Patient safety

The curriculum rightly emphasizes the importance of patient safety is central to health care. It recognizes that safe, high quality patient care is essential for the provision of education and training. Safe prescribing, clinical governance and audit (among others) form the key components of patient safety and quality improvement.

Ethical and legal issues

Ethical and legal issues receive detailed attention in the new curriculum. The foundation doctor is expected to have a working understanding of the ethical and legal issues underpinning medical practice. Areas covered include confidentiality, safeguarding the best interests of patients, human rights, ethics of medical research, child protection procedures, the Mental Capacity Act and the responsibilities of doctors in completing death and cremation certificates as well as liaising with external organizations, such as the Driver and Vehicle Licensing Agency. The reader is referred to General Medical Council (2008) guidelines on ethical issues and consent.

Both the foundation doctor and his/her supervisor need to be satisfied that the doctor understands the proposed intervention, its risks and is able to answer questions from the patient and/or carer. When this is not the case, the foundation doctor must have access to, and the support of, a supervisor with the required knowledge. The General Medical Council guidance on consent makes this very clear.

Professionalism and leadership

Professionalism and leadership in medicine have attracted much attention recently, as represented in *Tomorrow's Doctors* (General Medical Council, 2009a). Both topics, professionalism in particular, receive detailed attention in the syllabus and competencies listed in the current edition. Professionalism encompasses what were previously described as attitudes and behaviours.

Foundation Programme Reference Guide

Structures and systems

This document, previously referred to as the operational framework, has been renamed. It describes structures and systems required to support delivery of the Foundation Programme curriculum. The reference guide now follows a structure similar to the Gold Guide (Reference Guide for Postgraduate Specialty Training in the UK) (Modernising Medical Careers, 2009).

Importantly, this guide clarifies the foundation school structures, roles and responsibilities. It also provides job descriptions and time allocations for foundation school director, foundation school manager, foundation training programme director or tutor, educational supervisor, clinical and academic supervisor. However, the reference guide makes no mention of the time required for educational, clinical and academic supervisor roles; this needs to be addressed in future editions.

Quality assurance, quality management and quality control

Evaluation is necessary to ensure high quality delivery of the Foundation Programme. Quality assurance is carried out by the General Medical Council while quality management is the responsibility of the deanery. Local education providers (or trusts) need to have arrangements in place for quality control. This terminology will be familiar to those involved in postgraduate medical education (Postgraduate Medical Education and Training Board, 2007).

Foundation doctor perspective

Medical students preparing applications for foundation programmes and foundation doctors already in post should find both documents helpful in clarifying what is required of them and what they can expect once in post. The outcomes, knowledge and competencies required in F1, and the greater depth needed in F2, are made explicit in the curriculum. The sections on learning in acute care, investigations and procedures provide further specific guidance. The syllabus provides better focus on patient safety, clinical governance, the recognition and management of the acutely ill patient, safe prescribing, discharge planning, chronic disease management and professionalism. It emphasizes the importance of learning in the day-to-day clinical environment (i.e. experiential learning) and learning through reflection (i.e. reflective learning).

The Foundation Programme reinforces and develops the skills required for lifelong

learning. The outstanding foundation doctor may well achieve all the competencies and much more within the 2-year timeframe. However, the foundation doctor will not be signed off before the minimum timeframe of 2 years. Satisfactory completion of the F1 year enables application for full registration with the General Medical Council. Satisfactory completion of F2 results in the award of the Foundation Achievement of Competence document, required for entry into specialist training.

Trainer perspective

GPs, consultants and others contributing to foundation programmes will find helpful guidance on operational, teaching and administrative matters. Clearer definition of outcomes and competencies, and the assessments necessary, is useful. Mapping the curriculum against the four General Medical Council domains should help trainees, trainers and those involved in evaluating the quality of Foundation Programmes. Both documents have helpful appendices. However, those looking to 'dip in and out' of sections of text will be disappointed by the omission of an index. The authors fail to stipulate appropriate time in the job plans for trainers in educational, clinical and academic supervisory roles.

Lack of progress

An increasing minority of foundation doctors unfortunately fail to demonstrate satisfactory progress. The term 'doctors in difficulty' is often used to describe doctors who fall below the standards expected. Reasons for under-performance include problems with health, attitude, skills, lack of knowledge, or a combination of factors, as is often the case.

Workplace-based assessment, regular appraisals, feedback, day-to-day observation and the e-portfolio are useful mechanisms for identifying doctors at risk. Both the curriculum and the reference guide list procedures necessary for dealing with foundation doctors in difficulty. Concerns should be raised early and discussed formally with the foundation doctor. Due process should be followed both at trust and deanery level.

Protecting patients is paramount at all times, especially when under-performance is identified. Providing extra support and assessing performance, competence and knowledge with additional workplace-based assessments is recommended. Extended support (at the discretion of the deanery and foundation school), up to a maximum of 1 year, is available for doctors who do not make satisfactory progress. Further lack of progress, despite appropriate support, will result in failure to be signed off. Discussions in such circumstances should include consideration of alternative careers. The General Medical Council (2009b) provides further guidance in *The New Doctor*. *Table 4* lists circumstances faced by doctors in difficulty.

Table 4. 'Doctors in difficulty'

Concerns raised by the doctors themselves
Transfer of information from undergraduate schools to deaneries
Prolonged absence (as a result of illness or other reason)
Judgments about practice arising from workplace and assessment tools
Reluctance or failure to engage in educational processes (e.g. e-portfolio)
Reluctance or failure to engage in assessment processes
Concerns by educational and/or clinical supervisors
Serious incidents, events or complaints from patients, colleagues and carers

Conclusions

Much is new in the third edition of the Foundation Programme Curriculum and many will welcome the revised content. The educational framework of the curriculum sets out the ideals to guide the novice foundation doctor on a journey through practice, reflection, appropriate educational supervision and lifelong learning. Ownership of learning belongs to the foundation doctor. The role of the trainer consists of support and facilitation. As the Foundation Programme becomes established, future revisions should provide a critical appraisal of workplace-based assessments and time allocation in job plans for doctors engaged in educational roles. Foundation doctors disciplined in maintaining an e-portfolio should be well equipped as they face General Medical Council revalidation and licensing in later years. **BJHM**

Conflict of interest: none.

Bullock AD, Hassel A, Markham WA, Wall DW, Whitehouse AB (2009) How ratings may vary by staff group in multisource feedback assessment of junior doctors. *Med Educ* **43**(6): 516–20

Carr S (2006) The Foundation Programme Assessment Tools: an opportunity to enhance feedback to trainers. *Postgrad Med J* **82**(971): 576–9

General Medical Council (2006) *Good Medical Practice.* General Medical Council, London

General Medical Council (2008) *Consent: patients and doctors making decisions together.* General Medical Council, London

General Medical Council (2009a) *Tomorrow's Doctors.* General Medical Council, London

General Medical Council (2009b) *The New Doctor: guidance on foundation training.* General Medical Council, London

Modernising Medical Careers (2009) *Reference Guide for Postgraduate Specialty Training in the UK: the Gold Guide.* 3rd edn. Modernising Medical Careers, London (www.mmc.nhs.uk/pdf/Gold%20Guide%20--2009.pdf accessed 30 September 2010)

Postgraduate Medical Education and Training Board (2007) *The PMETB Quality Framework for Postgraduate Medical Education and Training in the UK.* Postgraduate Medical Education and Training Board, Cardiff

UK Foundation Programme Office (2010a) *The UK Foundation Programme Curriculum.* UK Foundation Programme Office, Cardiff

UK Foundation Programme Office (2010b) *The UK Foundation Programme Reference Guide.* UK Foundation Programme Office, Cardiff

Wall D (2005) Curriculum for Foundation Years in Postgraduate Education and Training. *Med Teach* **27**(4): 298–301

Whitehouse A, Hassel A, Bullock A, Wood L, Wall D (2007) 360 degree assessment (multisource feedback) of UK trainee doctors: field testing of team assessment of behaviour (TAB). *Med Teach* **29**(2-3): 171–6

Wilkinson JR, Crossley JGM, Wragg A, Mills P, Cowan G (2008) Implementing workplace based assessment across medical specialties in the UK. *Med Educ* **42**(4): 364–73

KEY POINTS

- The third edition of the Foundation Programme Curriculum signals a shift from competencies to outcomes.
- The well-signposted syllabus describes the competencies needed to deliver outcomes.
- Patient safety, safe prescribing, discharge planning, chronic disease management, careers planning, logbook of procedures (for foundation year 1 doctors), teaching and presentation skills, and professionalism receive emphasis.
- Team assessment of behaviour is the multisource feedback tool across the UK.
- The curriculum promotes learning and professional development through appraisal, assessment and constructive feedback, integral for optimum clinical and educational supervision in the workplace.