REVIEW

The Foundation Programme and the emergency department: a review of the curriculum and experience of a UK pilot

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The emergency department will have an important role within the *Modernising Medical Careers* Foundation Programme (FP) in the United Kingdom. Many of the key competencies required of Foundation training relate to acute medical care. However, the Foundation curriculum is a large and complex document. Some of the detail within it has particular implications for emergency medicine. Issues of curriculum content, teaching styles, and assessment have a potentially significant effect upon established working practices in a typical unit. This paper examines the FP curriculum to allow a clearer understanding of its key elements. Problems in relation to delivery of teaching and the quantity of assessment required are highlighted and solutions discussed. Experience from a UK pilot site for Foundation training in emergency medicine which began in August 2004 is used to illustrate how some of these issues have been addressed. The review concludes with a series of practical hints and tips which others may find useful as they prepare to incorporate FP trainees locally.

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The Chief Medical Officer's consultation paper *Unfinished Business*,[1] published in 2002, proposed that "… after graduating, doctors should undertake an integrated, planned 2-year Foundation Programme of general training … the second (post-registration) year incorporating a generic first year of SHO training." One of the primary aims of this programme would be to facilitate career decisions based upon exposure to a broader range of specialties than was previously possible in "traditional" senior house officer (SHO) training.

In 2003, a policy statement on *Modernising Medical Careers* (MMC)[2] was published by the four UK Health Departments. It outlined a series of reforms based upon issues of multidisciplinary teamworking, the European Working Time Directive, and quality of patient care. The Foundation Programme (FP) would encompass these and other important educational objectives and the highlights of it were listed as:

- a trainee centred, competency based approach to teaching;
- a strong element of quality assurance;
- exposure to a broader range of specialties at an earlier career stage;
- mapping of skills to align with *Good medical practice*;[3]
- safe management of the acutely ill patient.

The MMC Strategy Group published *The Next Steps* in 2004,[4] which discussed the practical implications of moving towards this new and different model of working and learning at SHO level. Mention was made particularly of the need to ensure a high quality *educational climate*, provide a robust and deliverable *curriculum*, and clear, unambiguous *assessment* tools with which to determine that FP trainees were being taught meaningfully and achieving suitable outcomes.

A key component of preparing the Health Service for implementation of the FP was a series of early pilots across the UK. Our emergency department (ED) began a Foundation Year 2 (FY2) senior house officer (SHO) pilot in August 2004, when we converted three of our 10 SHO posts into three-placement composite posts (see table 2). The curriculum for the pilot was locally constructed based upon drafts from the MMC Strategy Group as they emerged; the Foundation Year curriculum was published jointly by the Department of Health and Academy of Medical Royal Colleges in October 2004, after the start of our pilot. It has since been amended and republished in April 2005.[5]

In this paper, we review the national documents and outline the key features of the curriculum. We incorporate, where relevant, our local experiences, and provide some suggestions for other departments who are yet to embark upon the implementation process.

THE FP CURRICULUM AND EMERGENCY MEDICINE

The 2005 FP curriculum is a long (97 pages) and detailed document. Strikingly, despite its novel approach to early postgraduate education, the assertions it makes in relation to educational theory are almost entirely unreferenced. It is constructed in four sections plus appendices (table 1).

It quickly becomes clear on reviewing the curriculum that emergency medicine is a natural key learning environment for many of the clinical objectives of the FP. Year 2 doctors will be expected to demonstrate a wide range of "higher level" competencies in relation to managing acute illness and many of these relate to

Abbreviations: FP, Foundation Programme; MMC, Modernising Medical Careers; SHO, senior house officer.

Table 1 The format of the Foundation Programme curriculum

Section 1	Core competencies for Years 1 and 2
Section 2	Delivery of training
Section 3	Feedback and assessment
Section 4	Content and delivery of training
Appendices	Committee membership

typical patient presentations within the ED. Each section is now discussed individually to highlight issues of importance and concern to the specialty.

Section 1: core competencies

The opening section of the curriculum is structured around the domains of good medical practice:

- good clinical care;
- maintaining good medical practice;
- partnership with patients;
- working with colleagues and in teams;
- assuring and improving the quality of care;
- teaching and training;
- probity;
- health.

Each of these domains is then subdivided into aspects of competence which are to be achieved by the end of the first (FY1) and second (FY2) years of the FP.

Good clinical care forms the bulk of this section. The target competencies for FY2 trainees contained within this section are highly relevant to emergency medicine. In effect, they form benchmarks for safe clinical care within the department and could usefully be thought of as exemplars of best practice for all grades of medical staff. Three examples from section 1 are shown below:

Confusingly, the concluding part of section 1 does not correspond to a good medical practice domain. Instead it details the specific competencies expected within the management of ''acute care''. This part of the curriculum is extremely focused and structured around effective initial assessment, key procedural skills (for example, obtaining and interpreting an arterial blood gas sample), and the need to form a rapid management plan. The issues surrounding Do Not Attempt Resuscitation orders and Advance Directives also form a key competence within the acute care setting.

Although the many core competencies of section 1 are highly relevant to emergency medicine, assessing each one as written would be an impossible task. This reflects an important fundamental weakness of the educational methodology in that the curriculum has been drawn up using an ''objectives based'' model rather than a truly ''competency based'' one.[6] The end result is a list of lots and lots of objectives in an attempt to include all desirable attributes of a particular aspect of care. Although it is stimulating to see a long list of apparent competencies of this type, they actually represent examples of ideal practice rather than outcomes which are measurable in any practical sense. This is a key issue for implementation, as will be discussed later.

In broad terms, however, section 1 of the Foundation curriculum is a useful platform document to inform practice within the ED and has a useful, wider context than that of Foundation trainees alone.

Section 1.0 *Good Clinical Care*, subsection 1.1 (i-ii-iii):

- Demonstrates accomplished, concise and focused history taking & communication, including in difficult circumstances
- Incorporates clinical, social, cultural, nutritional and psychological factors
- Delivers a targeted examination
- On the basis of differential diagnosis, makes a judgement about prioritisation of actions
- Gives clear information to patients.

Section 1.0 *Good Clinical Care*, subsection 1.1 (v):

- Understands the medico-legal importance of good record-keeping and conveys this to others
- Structures (discharge summaries) clearly to communicate findings and outcomes.

Section 1.0 *Good Clinical Care*, subsection 1.2–1.3 (ii)

- Demonstrates appropriate decision-making even when under pressure
- Seeks help at an early stage
- Does not operate beyond own competency.

Section 2: delivery of training

The need for exposure to acute undifferentiated medical illness within the Foundation years means that EDs will have to feature in many of the FY2 programmes. It is only within this setting that trainees will be able to acquire the necessary breadth of competencies.

The FY2 rotations which we devised in our hospital are shown in table 2. One FP trainee occupied each track of the programme.

Foundation trainees nationally are to be provided with a professional development portfolio, which must be kept up to date. Importantly, the competency lists within the portfolio form the basis for personal review of progress.

The educational model underpinning section 2 is that of the ''spiral curriculum'' and this is the single referenced item within the whole Foundation curriculum document.[7] In this model, topics are revisited at increasing levels of complexity

Table 2 Foundation Year 2 placements

Post No	August 04	December 04	April 05
1	Paediatrics	Emergency medicine	Primary care
2	Emergency medicine	Primary care	Paediatrics
3	Primary care	Paediatrics	Emergency medicine
4	Paediatrics	Emergency medicine	Palliative care
5	Emergency medicine	Palliative care	Paediatrics
6	Palliative care	Paediatrics	Emergency medicine
7	Respiratory medicine	Emergency medicine	Primary care
8	Emergency medicine	Primary care	Respiratory medicine
9	Primary care	Respiratory medicine	Emergency medicine

as time goes by, each exposure allowing new learning to be integrated into existing knowledge. This is a learning style inherent to daily clinical life in the ED and has been widely practised, albeit without formal mention, for many years. In this respect the educational theory of the delivery of Foundation training is uncontroversial and does not pose a threat to established ways of teaching and working.

The teaching methods to be used for FP trainees are listed within the curriculum as follows:

- experiential
- small group
- one-to-one
- external courses
- personal study
- audit
- simulated clinical situations
- identification of role models.

Many of these are familiar. However, FY2 trainees must receive both *generic* and *specialty specific* teaching within these models. In real terms this will impact on shopfloor service delivery at SHO level. It also has the potential to generate conflict between ''FP'' and ''non-FP'' junior staff, since Foundation trainees will have to be released for teaching sessions over and above those of their ''traditional'' peers.

It also has significant implications for the timing, content and style of established departmental teaching programmes. Bearing in mind that FY2 trainees are most likely to rotate every four months, within which they will require a half day equivalent weekly release to attend generic teaching as well as that within the ED, it is highly probable that the traditional local teaching programme will require radical pruning and focus.

This is to be welcomed and reflects wider perceptions that postgraduate medical teaching programmes in general can evolve into ''comfort zones'', shaped by selected speakers and favoured topics, rather than being based upon actual educational need.[8] The real practical implication, though, is the need to devote considerable effort to the redesign of departmental teaching. This should take place now in anticipation of an influx of Foundation trainees in August 2006.

How should the required generic teaching be provided, and how much time does it actually take? The first thing to remember is that the *generic* teaching programme for years 1 and 2 is just that, and not the sole responsibility of the ED. The decision to provide generic teaching en bloc as stand alone modules throughout the FY2 year, or as half day or day release sessions will be a local one. Early evidence favours the stand alone model: group dynamics are enhanced and attendance rates are high.[9] Using this approach, the required annual generic content can be delivered in eight whole day equivalents. There will be organisational difficulties within this model for smaller hospitals, but there is nothing to prevent interhospital generic teaching programmes within the FP or, for that matter, interhospital emergency medicine teaching programmes.

One aspect of the delivery of teaching which will definitely be worth exploring locally is the potential contribution which the ED can make to FY1 teaching in particular: many of this year's objectives in relation to good clinical care are concerned with recognition and basic management of serious illness; ED staff are highly credible educators for these sessions, and will reap the rewards when the same trainees rotate into the department within FY2.

This in itself may reduce the burden now placed on the local weekly teaching programme.

It will be useful for ED consultants to liaise with FY1 tutors within their hospitals and identify suitable teaching sessions for this purpose. Again, now is the time to get involved as programmes are drafted and finalised through 2006.

The curriculum highlights the fact that educational credibility rests upon effective training of the trainers. What is lacking within it, however, is any concrete commitment to expand and fund the required courses. We would advise prospective clinical and educational supervisors to seek a place on a *Training the trainers* type course at the earliest opportunity.

Although the teaching methods listed in the FP curriculum are generally widely employed within emergency medicine, it is not stipulated that all trainees need exposure to all modalities. Some, such as simulator experience, will be impossible to access in high fidelity format for many units. For EDs, the fact that one-to-one and role modelling paradigms are formally included is a real acknowledgement of the role of traditional ''apprenticeship'' teaching. Postgraduate medical education has perhaps overemphasised the utility of problem based learning in recent years. Objective outcome measures for the success of PBL remain as elusive as ever,[10] and there will be no requirement for local FP directors to devise new problem based learning type packages.

Section 3: feedback and assessment

Concerns have already been raised nationally that there is to be ''too much'' assessment of FY2 trainees. Rather controversially, the curriculum quite clearly states that trainees will have a free choice of both the timing of workplace assessments and the assessor who will undertake them. This removes an important element of objectivity from the assessment philosophy. Although the assessment tools are admittedly still in a developmental stage, the fundamental components are well established (see box).

Clearly there is a significant burden attached to FY2 assessment and this mandates forward planning, particularly as the timings and assessor are ostensibly for each trainee to decide. Local experience in our unit suggests that an equivalent of 0.5 programmed activities *per week* is required from the consultant pool to facilitate the support and assessment process for three Foundation trainees. Putting this into practice will require robust discussion between

Components of assessment during the FY2 training year

Mini-PAT
- Peer Assessment Tool, one per four months
- ''360 degree assessment''
- Twelve independent raters to be used.

Mini-CEX
- Mini-Clinical Evaluation Exercise, two per four months
- Trainee chooses timing and observer (mix of CEX and DOPS).

DOPS
- Direct Observation of Procedural Skills
- Trainee chooses timing, skill, observer.

CBD
- Case based discussion, two per four months
- Structured discussion of real cases.

colleagues and the executive team at Trust level. Importantly, there may be a need to provide ''… additional tests of competence or knowledge … focused or additional training … (and) further assessments'' (p47) within a placement for those trainees failing to progress satisfactorily. The potential extra burden from this activity needs to be considered in job planning but is impossible to quantify. In our experience, however, the need for such input has been non-existent to date.

Familiarisation with the assessment tools certainly requires practice. ''Roadshow'' workshops have been established in the North West Deanery (for all hospital and primary care stakeholders, not just emergency medicine) which have been well attended and informative. Similar initiatives are taking place across the UK. It is important that as many staff attend as possible from the department, as we have found it difficult to appreciate the nuances of FP assessment second hand in local cascade workshops.

The role of effective feedback is strengthened in the curriculum and few would argue with its inclusion. Feedback must be immediate and structured; there should be an opportunity to reciprocate the feedback, and this must be facilitated without prejudice.

The assessments which each trainee must receive are to be collated into an individual Educational Supervisor's Report for each FY2 trainee. The quantity of assessment required demands tight administration: deadlines must be met, and it must be clear to whom paperwork is to be sent in order to allow for a smooth transition between placements. In particular, trainees who have experienced difficulties must have a clearly documented account of each aspect of the relevant assessment.

Section 4: foundation programme syllabus

This last, and large, part of the FP curriculum outlines the generic formal teaching which is expected to occur at both F1 and F2 levels, then quickly goes on to detail the good medical practice which trainees should demonstrate by the end of each year. The ''knowledge/skills/attitudes'' model employed in this section is rather educationally dated and has been superseded by the competency based approach mentioned earlier. As a result the same limitations arise as before: it is impossible to think of a way in which the content of pages 54 to 89 of the curriculum—all of which lists objectives in the form of a syllabus—could realistically be assessed.

This part of the curriculum is therefore interesting but not especially meaningful. It almost forms a ''wish list'' of best clinical care. Curiously, ''attitudes'' are omitted from the last 10 pages of the syllabus, even though the objectives within this section refer to management of acutely ill patients, resuscitation, and other attitudinally important topics. At the very least, however, these lists serve as discussion documents with which to inform best practice within the ED, and form a useful platform on which to base reformed departmental teaching.

REFLECTION: OUR EXPERIENCE SO FAR

Within our unit we have learned a great deal in a short space of time. The FY2 rotations (see table above) were constructed to allow all trainees to experience emergency medicine as it forms such an important component of the FP curriculum. Likewise, care was taken to incorporate general practice and an option to work within palliative care, as both of these environments were felt to have powerful learning opportunities within them.

Our trainees have felt enthused by the programme and have been well motivated. They are aware of the fact that they are guinea pigs, but have been pleased with the extra teaching and assessment activity which has been provided for them. Trainees do not seem to have found the FP particularly beneficial in terms of making career choices so far, despite this being a primary aim of the whole initiative.

The FY2 pilot doctors have been released for generic teaching on Monday afternoons in addition to Wednesday afternoon departmental teaching. This has had to be accommodated into the rota; we have provided an additional middle grade shift from Monday lunchtime to backfill FP teaching so as to avoid any extra burden on remaining SHOs. The departmental teaching programme has not been revised thus far, but we are now comprehensively overhauling the topics and timings. We are minded to dismantle the established system in favour of ''teaching groups'' comprising a consultant ''leader'', a specialist registrar ''assistant'', and three FY2 trainees. Each group leader will be responsible for ensuring that a core amount of learning occurs over the four month cycle; the assistant will help in the provision of one-to-one teaching. The timing of this teaching, together with other appropriate learning tools, is for each teaching group to decide. Assessment will also take place in this format. The whole FY2 cohort will meet only on a monthly, not weekly, basis to deal with departmental issues and concerns and to allow some external speakers to maintain their involvement.

In terms of clinical competency, our FY2 trainees have been perceived by nursing staff and colleagues to be essentially equivalent to ''traditional'' SHOs, although the fact that they work with us for a shorter time has meant that relationships have less time to develop. Importantly, we have not found any reduction in competency associated with a four month rotation, and it has been our belief that the learning curve for SHO skills achieves its plateau at month 3 for the majority of trainees in any case, beyond which the proficiency of practice may improve, but not at a rate sufficient to justify a six month FY2 placement. Others may disagree with this assertion.

It has been difficult to plan and carry out the assessments. We have taken the tools within the FP curriculum as a workable document and adapted the detail to retain key elements while making them simpler. This was undoubtedly made easier by the fact that one of us (SAS) is also the Trust postgraduate tutor, but was necessitated by the fairly scant information which had been published centrally at the time we embarked upon the pilot. Finding sessional time to assess and feed back is an ongoing issue and has to a large degree rested upon goodwill and flexibility; we are not anticipating any formal PA funding to allow us to make this a more rigorous commitment. Others may have a different experience.

We have all, as a consultant body, attended the regional FP workshops and found them invaluable. It is important, however, that specialist registrars and staff grades receive local cascade even if they are not be involved directly in FP assessment, as they will meet FY2 trainees on a daily basis and need to be familiar with the scheme. The curriculum and its implications are an ideal management type teaching scenario for senior trainees approaching the FFAEM.

Mention was made earlier of the role of emergency medicine in FY1. We have agreed to provide some key teaching sessions for the Trust's FY1 programme and within these sessions we hope to deliver much of the ''acute clinical care'' content of the curriculum. We feel well placed to do so, and feel that the time spent at FY1 level will reap rewards when we work with the trainees in FY2. Again, though, this demands a commitment of time and resources which not all units will wish to take on. We plan to input into FY1 teaching on a monthly basis.

SUMMARY: KEY POINTS FOR SUCCESS IN IMPLEMENTATION

The Foundation Programme represents a major leap forward in the teaching and training of junior medical staff. The

FP in the ED: top tips for a smooth transition

1. Sign up to the ideology: it is heading your way and cannot be avoided.
2. Force yourself to read the Foundation curriculum (DoH website, http://www.dh.gov.uk).
3. Know who will be leading the Foundation Programme within your Trust and enter into early discussion regarding the role of emergency medicine.
4. Agree a model for release of trainees to attend generic teaching.
5. Draw up some workable placement tracks (see our examples).
6. Maximise the opportunities for your allocation of FY2 trainees—they may help you with overall staffing issues—but beware the burden placed by support and assessment. Allow for one PA per six FY2 trainees overall.
7. Do not be afraid to radically alter—or even disband—your traditional teaching sessions. There are many other imaginative ways to allow learning.
8. There will be problems and mistakes—expect these.
9. Contact others (we include ourselves) to find answers to specific questions, however trivial or obvious they may seem.

curriculum is a long and detailed document. It has some inherent flaws which weaken its impact, primarily in relation to lack of referencing and reliance upon a model of development which translates into hazy measures of competence.

The major implications for EDs are:

- planning suitable rotational programmes
- ensuring all staff are familiar with the Curriculum
- identifying trainers and supervisors
- finding sessional time for training and assessment
- reworking the rota to allow for generic and specialty teaching
- refining the specialty teaching to reflect changing emphases.

Based on our experience to date, we have drawn up some tips for success. These are shown in the box. Other departments may think differently; one of our general perceptions is that the FP curriculum, although a fundamentally new way of working, works best when it is seen as a living document and discussed openly and honestly across specialties. It cannot be implemented successfully in the ED without extensive dialogue across the hospital. It will not be possible to implement it with any hope of perfection, but its key elements are—we believe—manageable.

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REFERENCES

1 **The Chief Medical Officer**. *Unfinished Business: Proposals for the reform of the Senior House Officer grade*. London: Department of Health, 2002.
2 **The Four UK Health Departments**. *Response of the four UK Health Ministers to the Consultation on Unfinished Business: Proposals for reform*. London: Department of Health, 2003.
3 **General Medical Council (GMC)**. *Good medical practice*. London: GMC, 2001.
4 **The Four UK Health Departments**. *Modernising Medical Careers: The next steps*. London: Department of Health, 2004.
5 F2 Curriculum Committee of the Academy of Medical Royal Colleges: Core Curriculum for the Foundation years in Postgraduate Education & Training 2005. Available at www.mmc.nhs.uk.
6 **Harden RM**, Crosby JR, Davis MH, *et al*. From competency to meta-competency – a model for the specification of learning outcomes. *Med Teach* 1999;**21**:546–52.
7 **Harden RM**, Stamper N. What is a spiral curriculum? *Med Teach* 1999;**21**:141–3.
8 **Hesketh EA**, Bagnall G, Buckley EG, *et al*. A framework for developing excellence as a clinical educator. *Med Educ* 2001;**35**:555–65.
9 **Beard J**, Strachan A, Davies H, *et al*. Developing an education and assessment framework for the Foundation Programme. *Med Educ* 2005;**39**:841–51.
10 **Smits PBA**, Verbeek JHAM, de Buisonje CD. Problem-based learning in continuing medical education: a review of controlled evaluation studies. *BMJ* 2002;**324**:153–6.