

Shape of Training: a view from the specialties

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Introduction

The Shape of Training report contains many different proposals.¹ Some of these proposals are not new, but are worth repeating in any report on training; for example the value of apprenticeship in training, the need for an excellent training environment and the lifelong nature of learning. However, there are also new proposals – in particular relating to training within specialties – which require critical analysis.

The main proposals state that there should be an increased amount of generalism within training during the same overall timeframe, and some specialist elements should be moved to ‘credentialing’ after completion of the organised training programme. These changes are illustrated in Table 1.

The ‘friends and family’ test is being applied to patient care in the National Health Service (NHS).² It is a simple and immediately transparent test with high face validity based on the question ‘would you recommend this for your friends and family?’ We can apply the ‘friends and family’ test to these suggested changes: would I be happy for a specialist trained as the Shape of Training report proposes to look after my friends or family? The answer would be a resounding no. At least, not without supervision, as they will have only achieved the level of specialist expertise of a middle grade trainee. If one applies a less emotionally charged test, would I be happy to employ them as a locum to look after my patients? No, again – the amount of specialist training they would have completed would not make them equivalent to a final year trainee in the current system. These are ‘gut reactions’ – an intrinsic feature of this test. Let us explore the proposals further and, after some digressions, make some suggestions.

What is the training for?

The training we provide will determine the range of competencies and expertise that will be available within the workforce in the future. Thus, training defines the shape of specialties in the future. The shape of training defines the shape of the service. It would seem sensible to determine what competencies and expertise you will need to provide the most efficient and effective patient care and *then* design training to meet this need.

The Shape of Training report¹ proposes changes to the structure and content of training for medical specialties (Table 1), without having worked out what will be needed in the future. A major theme running through the report is that there should be more generalism. The reasons given for this change focuses on the fact that patients are becoming increasingly older and have an increasing range of comorbidities. However, the report does not provide any evidence that increased generalism improves patients’ outcomes. Indeed, there is widespread evidence to the contrary, with better patient outcomes when looked after by specialists, be this survival of stroke patients in stroke units³ or patients with heart failure.⁴ Within their own review of the evidence⁵ they comment that ‘...any changes...that promote increasingly generalist slant to the profession should be accompanied by primary research and evaluation’. In other words, the Shape of Training committee do not know which is better.

Their argument for more generalists is simplistically based on the notion that, as patients have increasingly more comorbidities, this needs to be addressed by generalists. Patients do need competent generalists, for example when admitted through the general medical take, but as management of specific disorders has become more complicated they need access to specialists who can best manage these disorders. There is an argument that training within some specialties needs to be prolonged to meet the increasing demands within those specialties (for example cardiology and neurology). Most patients, even those with multiple comorbidities, will be admitted with a deterioration in one of their disorders, which will fall within the remit of a specialist.

What is generalism?

If ‘generalism’ is going to increase we ought to have some agreement about what it might mean. Generalism is a widely used term with a wide range of meanings both within and across different healthcare systems. For example, a doctor in general practice would argue the general physician – who eschews surgery, paediatrics, obstetrics and psychiatry (among other things) – is not a generalist at all. However, within the Shape of Training, the term is elastic.

Let us consider how generalism might be interpreted within hospital medicine in the UK. ‘Generalism’ in medical specialties in the UK could be reasonably interpreted as any of the following:

- the ability to look after general medical complications in patients under your care – for example, managing hospital-acquired infection in a patient with neurological disease

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Table 1. The dilution of specialist training proposed by the *Shape of Training* report; a year by year comparison.

Current situation	Shape of Training proposals
> Foundation year 1	> Foundation year 1
> Foundation year 2	> Foundation year 2
> CMT1	> CMT1
> CMT2	> CMT2
> ST3 specialty	> CMT3
> ST4 specialty	> ST4 (three-quarters specialty training plus one-quarter GIM training)
> ST5 specialty	> ST5 (three-quarters specialty training plus one-quarter GIM training)
> ST6 specialty	> ST6 (three-quarters specialty training plus one-quarter GIM training)
> ST7 specialty	> (Option: 1 year of these years could be spent in management or teaching)
> Option of additional out of programme experience	> Option of 1 year credentialing

CMT = core medical training; GIM = general internal medicine; ST = specialty training.

- > the ability to run a general medical take with appropriate specialist support, or
- > the ability to run a general medical take alone.

The structure of training needed to develop and subsequently maintain these standards will be different.

The old model of generalism, where a district general hospital would have a handful of general physicians running the take and providing the limited range of medical interventions then available, cannot be recreated in the much more complicated medical environment of today. General physicians doing the occasional endoscopy or pacing could not meet the quality standards set for performance of such procedures today. Given that the evidence suggests that specialist medicine produces better outcomes we need to ensure that we preserve the improvements that have been achieved for patients.

The relationship between 'generalism', however defined, and specialism will vary across different specialties. There are some specialties where there is a major overlap, for example respiratory medicine with acute respiratory illness, taking up a large part of the acute medical take and, as such, much of the knowledge and many of the skills will overlap. For other specialties, such as dermatology or genitourinary medicine, there will be little overlap with the elements of general medicine presenting in the acute take. For these specialists to continue general acute medicine they would have to maintain a largely separate and parallel set of competencies – setting aside the reduction in the capacity of their specialty services.

Neurology is a specialty that, historically, has had very limited capacity in the UK.⁶ Once trainees move from core medical training into their specialist roles, they no longer work outside the specialty, and usually only take part in specialty on-call rotas. If there were any transfer of trainee or consultant time into general medicine this would inevitably reduce the workforce available to do neurology. This would compromise the aspiration of the specialty to see patients with neurological disorders in a timely fashion in the outpatients clinic or would decrease the likelihood of patients with acute neurological disorders being seen within 24 hours of admission.⁷ In other

words, the diversion of workforce capacity from neurology to general medicine would reduce the access for patients with a neurological disorder, an already disadvantaged group of patients, to a scarce specialty service.

Interestingly (at least for a neurologist) the only time neurology is mentioned specifically in the Shape of Training document¹ is as a 'core specialty' distinct from internal medicine in the United States. This highlights the fluidity of the definitions of core specialty.

The elephant in the room: the general medical take

There is undoubtedly a crisis in running the medical take (that is, the management of patients presenting to hospital) and some have seen a revival of generalism as part of the solution to this.

Extraordinarily, the Shape of Training has not analysed the impact of the dramatic changes in training following Modernising Medical Careers (MMC) to help them shape their recommendations.^{8,9} Given the radical nature of these changes and their relatively recent introduction it is unimaginable that there is not scope for improvement. Let us consider the medical specialties.

There are considerable difficulties in staffing within specialties involved in the general medical take. Table 2 is taken from the 2013 recruitment round (Bill Burr, personal communication, 2014). As you can see, there is a deficit of 288 post-MRCP trainees, mostly in acute medical specialties. This in turn arises because of a deficit in the numbers of core medical trainees. The impact of these unfilled posts cannot be underestimated. The training experience for those trainees already in post is compromised. With patchy locum cover for gaps in difficult rotas it is difficult to get good training. This makes these posts appear even less attractive which exacerbates the problem for the next year.

If the deficits in the number of unfilled posts and core medical trainees needed to fill them were addressed this would convert into an average of 6–8 additional medical trainees per district general hospital. What a difference that would make to training, service provision and the status of

acute medicine! This estimate would require some additional funding, even though it includes unfilled but funded posts, and there would need to be additional posts. However, many trusts are already spending large amounts on locum posts and this could be more effectively diverted to fund these trainees.

If the Shape of Training proposals are introduced, 25% of specialist medical trainees would be diverted from specialties that do not dually-accredit general medicine towards the general medical take – and necessarily away from time training within these specialties. Again, using the Royal College of Physicians' data for 2013 (Bill Burr, personal communication 2014), reallocation of trainees to more generalist medicine would provide an additional 296 trainees for general medicine (and away from specialist medicine). This number almost exactly mirrors the number of currently unfilled posts. This filleting of specialist medicine – which as well as substantially compromising daytime training would eliminate the possibility of running specialty rotas – would achieve the same as filling the posts that are already funded.

Competence and expertise

The Shape of Training review¹ constricts the duration of training, while increasing the amount of generalism in the training. The proposition is that the additional skills (which are currently acquired during organised training) could be acquired subsequently through credentialing. Whether this deconstruction will work is unproven. The funding and organisation of this process is unclear to date. There is much uncertainty.

The timings mentioned in the Shape of Training are fairly specific. You will see from Table 1 that currently after 2 years of core medical training there is a 4–5 year specialty training programme. This, it is proposed, will be replaced by 3 years of core medical training followed by 2.25 years of specialty training and 9 months of generalism (and a year could be lost to non-specialist training in management or education). This is a greater than 50% reduction in specialty training. It appears that the training proposed by Shape of Training would not meet the standards of Union Européenne Des Médecins Spécialistes Charter on Specialty Medical Training¹⁰ and, if so, would not be recognised across the European Union (EU) as specialty training.

These trainees will not have attained competence in their specialty as we currently define it. They would certainly not be expert. It is probably worth briefly reflecting on the difference between competence and expertise. Our current training schemes aim to ensure competence – that the trainees will be able to practice safely and appropriately – while encouraging development of expertise. Expertise is more difficult to define and is less accessible to short-term training, with evidence suggesting that long-term deliberate practice being needed to acquire it.¹¹ However, as difficult as it is to acquire, it is something that patients need, and the current system of training has demonstrably been effective in encouraging the development of expertise in many trainees, even though this has not been its primary intention. We must ensure that the environment that has facilitated the development of expertise is not lost with the dilution of specialist training with generalism

Table 2. Recruitment figures from the JRCPTB for 2013.

	Number	Filled	Unfilled
Core medical training	1,555	1,555	0
Specialty training 3 NTN	1,045	947	98
Specialty training 3 LAT	460	270	190
Specialty training 3 All	1,505	1,217	288

LAT = locum appointed for training; NTN = national training number; JRCPTB = Joint Royal Colleges of Physicians Training Board.

and with the fragmentation of training that credentialing will bring.

Changes in the future

If the Shape of Training 'rules' were to be imposed for medical specialties several things might happen. For my own specialty there seem to be three possible outcomes:

- 1 If neurology became diluted, as proposed, then it would effectively disappear; there would be no general neurologists but general physicians with an interest in specific diseases (for which they have credentialed).
- 2 If the increase in generalism was linked to longer training it would allow competent neurologists with greater competence in general medicine.
- 3 If neurology split from general medicine altogether trainees would no longer complete core medical training but use this time for neurological training. This would produce competent neurologists but with fewer general skills (though this would be more in line with international training programmes).

The first possibility would produce a workforce without the competence to independently manage general neurological disorders. Both of the first two of these options would lead to a reduction in the neurological workforce – by dint of transfer to general medicine. The last would lead to a reduction in 'generalism' but would preserve what is a limited and in demand resource for patients. Surely we should work out which of these will work best for our patients now, and in the future, rather than introduce changes to make the best of an arbitrary set of rules?

Change has costs and risks

Change costs money, time, effort and opportunity (doing one thing prevents you from doing another). The whole of Shape of Training comes without any costings – financial or otherwise. The generation of doctors that experienced the introduction of MMC will not need reminding that change comes with risks and unintended consequences.^{9,12} The biggest concern is that the wholesale changes proposed by Shape of Training for medical specialties could lead to significant consequences for patients if they do not have access to specialists with the skills they need.

Medical practice changes all the time and thus so must training. But changes should be made for the better. The benefits and likelihood of achieving intended consequences should exceed the risks of unintended consequences. The Shape

of Training provides an interesting, as yet un-costed, starting point for discussion. It is a long way from providing a case for change.

One argument for limiting the duration of training is based on cost. However, this is an artifact of the funding mechanism. Trainees are currently funded centrally so that all their time in training appears as a training cost, despite trainees providing substantial contribution to the provision of many services. If you take a wider perspective, you could argue that prolonging training would be cheaper for the health service as a whole. Given that doctors typically work within the NHS for their whole career, a longer period would be paid as trainees and a shorter period as consultants, and so would be cheaper. The way funds are allocated should not be the determinant of the best way to organise training. Rather we should define what mix of generalists and specialists patients will need and then work out the most successful and cost-effective way to provide it.

The anxieties that the Shape of Training has caused in many of those involved in specialty training probably reflects their all too recent experiences following the introduction of MMC. You would imagine that others who were involved – politicians, administrators or educationalists – would be similarly affected and the memory would be fresh in their minds. However, as they say ‘those who do not remember the past are doomed to repeat it’. ■

Disclaimer

Dr Geraint Fuller is president of the Association of British Neurologists.

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