



SHAPE OF TRAINING

Securing the future of excellent patient care

Final report of the independent review

Led by Professor David Greenaway

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Foreword

Across the four countries of the UK, we are well served by our medical profession. Our doctors undergo rigorous training and development and deliver both primary and secondary care to a high standard. It is a workforce that makes a fundamental contribution to the effectiveness of our health service.

So why was it necessary to undertake this review of the way in which we educate and train our doctors?

Put simply, our doctors are trained for a purpose, to care for patients. However, the needs of patients in the UK are changing fast. Doctors have to care for many more patients with chronic illness and with multiple co-morbidities. This is partly driven by our ageing population, is partly driven by the success of earlier intervention, which has lowered mortality rates in many diseases, and is partly driven by lifestyle.

To ensure our doctors have the appropriate skills, competencies and aptitudes to meet our changing needs, we have to re-think current arrangements for postgraduate medical education and training. In particular, we need a better balance between doctors who are trained to provide care across a general specialty area, and those prepared to deliver more specialised care.

In undertaking this review, I completed an extensive consultation across the four countries of the UK. I discovered a wide recognition of the need for change among doctors in training, trainers, employers, regulators and patients. There was also a clear consensus about what change should deliver: greater flexibility, better preparation for working in multi-professional teams and more generalists.

This report sets out a framework for delivering change and for doing so with minimum disruption to the service. It offers an approach that will ensure doctors are trained to the highest standards and are prepared to meet changing patient needs. It also offers an approach that will be fit for purpose for many years to come.

During the consultation, analysis and preparation of this report, I have received outstanding support and advice from a specially assembled Expert Advisory Group and a dedicated executive team. My sincere thanks go to both.



Professor David Greenaway
Chair, Shape of Training Review

Executive summary

The Shape of Training Review aims to make sure we continue to train effective doctors who are fit to practise in the UK, provide high quality care and meet the needs of patients and the public. As part of this review, we looked at the desired outcome of training – what kinds of doctors are needed, and the means by which we get there.



The main thrust of the Review is to put in place a structure that will produce doctors who are able to work in general areas of their specialties (the approach is described below). The report's recommendations will help doctors to continue to meet patient and service demands now and in the future.

Key messages in the report:

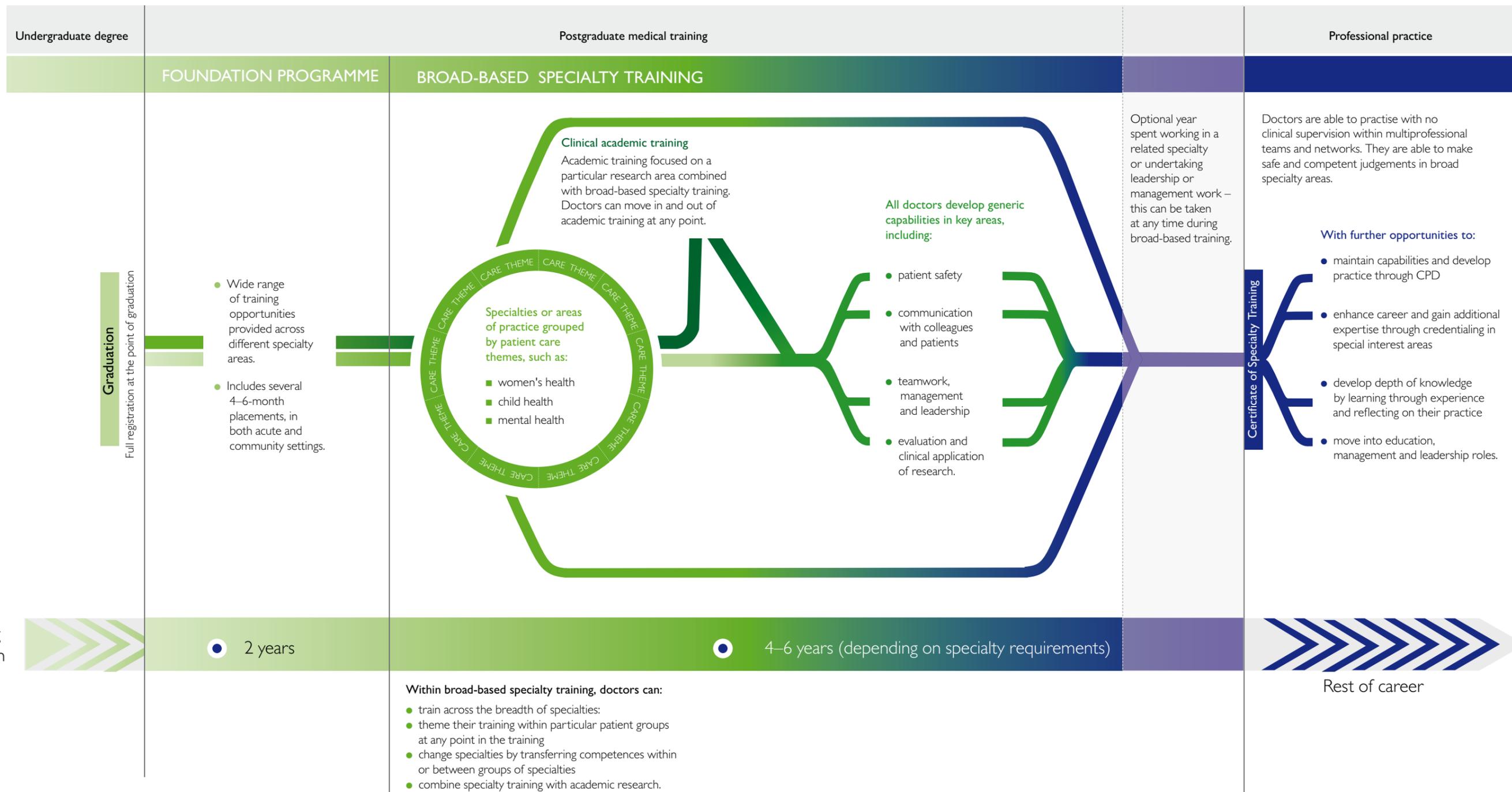
- Patients and the public need more doctors who are capable of providing general care in broad specialties across a range of different settings. This is being driven by a growing number of people with multiple co-morbidities, an ageing population, health inequalities and increasing patient expectations.
- We will continue to need doctors who are trained in more specialised areas to meet local patient and workforce needs.
- Postgraduate training needs to adapt to prepare medical graduates to deliver safe and effective general care in broad specialties.
- Medicine has to be a sustainable career with opportunities for doctors to change roles and specialties throughout their careers.
- Local workforce and patient needs should drive opportunities to train in new specialties or to credential in specific areas.
- Doctors in academic training pathways need a training structure that is flexible enough to allow them to move in and out of clinical training while meeting the competencies and standards of that training.
- Full registration should move to the point of graduation from medical school, provided there are measures in place to demonstrate graduates are fit to practise at the end of medical school. Patients' interests must be considered first and foremost as part of this change.
- Implementation of the recommendations must be carefully planned on a UK-wide basis and phased in. This transition period will allow the stability of the overall system to be maintained while reforms are being made.
- A UK-wide Delivery Group should be formed immediately to oversee the implementation of the recommendations.

Training structure for the future

In the report, we describe an approach to training in the future that will develop more broadly trained specialists. The key milestones in this model are outlined below:

- Full registration should happen at the point of graduation from medical school. Measures will need to be put in place to make sure graduates are fit to work as fully registered doctors. They will also be restricted to working in approved training environments.
- Following graduation, doctors will undertake the two-year Foundation Programme. Doctors must have opportunities to support and follow patients through their entire care pathway, both during medical school and in the Foundation Programme.
- After the Foundation Programme, doctors will enter broad based specialty training. Specialties or areas of practice will be grouped together. These groupings will be characterised by patient care themes (such as women's health, child health and mental health), and will be defined by the dynamic and interconnected relationships between the specialties. They will have common clinical objectives, set out in the specialty curricula. How these patient care themes will bridge the boundary between hospital and community care needs to be considered by the UK-wide Delivery Group.
- Across all specialty training, doctors will develop generic capabilities that reinforce professionalism in their medical practice.
- Broad based specialty training, after Foundation Programme, will last between four and six years depending on specialty requirements (and depending on how individuals progress through the curricula).
- During postgraduate training, doctors should be given opportunities to spend up to a year working in a related specialty or undertaking education, leadership or management work (similar to specialty fellowships). This year, which can be taken at any time during training, will allow them to gain wider experiences that will help them become more rounded professionals. It will be included in the timeframe of between four and six years.
- When doctors want to change specialties, either within or between specialty groups, they will be able to transfer relevant competencies they have acquired in one specialty to their new area of practice, without having to repeat the same learning in the new specialty. This will include learning during the optional year and generic capabilities. By recognising previous learning and experiences, retraining in new areas should be shorter.

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- Nationally funded clinical academic training will be a flexible training pathway. Doctors on this pathway would be able to focus their academic training in their academic or research area, while also undertaking broad based training. Time spent in academic experiences will be counted within training, but these doctors may occasionally take longer to reach the exit point of postgraduate training, if for instance they spend further time undertaking doctoral research studies. In exceptional circumstances, doctors in clinical academic training may be able to restrict their clinical practice to narrow specialty, special interest or subspecialty areas.
 - The exit point of postgraduate training will be the Certificate of Specialty Training. It marks the point at which doctors are able to practise in their identified scope of practice, with no clinical supervision, while working in multi-professional teams.
 - Most doctors will work in the general area of their broad specialty, based on patient and workforce needs, throughout their careers. They will be expected to maintain and develop their skills in their specialty area and their generic capabilities through continuing professional development (CPD), and to meet the requirements of revalidation. Learning through experience and reflection on their practice and patient outcomes will help to give them the depth of knowledge and skills necessary to master their specialty area. Doctors will also have options at any point in their careers to develop their education, management and leadership roles.
 - Doctors may want to enhance their career by gaining additional expertise in special interest areas and subspecialty training through formal and quality assured training programmes, leading to a credential in that area (credentialing). These programmes will be driven by patient and workforce needs and may be commissioned by employers as well as current postgraduate education organisers. These areas need to be approved and quality assured by the regulator to ensure appropriate standards and portability.



Recommendations

1. Appropriate organisations* must make sure postgraduate medical education and training enhances its response to changing demographic and patient needs.
2. Appropriate organisations should identify more ways of involving patients in educating and training doctors.
3. Appropriate organisations must provide clear advice to potential and current medical students about what they should expect from a medical career.
4. Medical schools, along with other appropriate organisations, must make sure medical graduates at the point of registration can work safely in a clinical role suitable to their competence level, and have experience of and insight into patient needs.
5. Full registration should move to the point of graduation from medical school, subject to the necessary legislation being approved by Parliament and educational, legal and regulatory measures are in place to assure patients and employers that doctors are fit to practise.
6. Appropriate organisations must introduce a generic capabilities framework for curricula for postgraduate training based on *Good medical practice* that covers, for example, communication, leadership, quality improvement and safety.
7. Appropriate organisations must introduce processes, including assessments, that allow doctors to progress at an appropriate pace through training within the overall timeframe of the training programme.

* In the recommendations, appropriate organisations must include the Sponsoring Board organisations, the four UK departments of health, employers, and both patient and professional interests.

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8. Appropriate organisations, including employers must introduce longer placements for doctors in training to work in teams and with supervisors including putting in place apprenticeship based arrangements.
 9. Training should be limited to places that provide high quality training and supervision, and that are approved and quality assured by the GMC.
 10. Postgraduate training must be structured within broad specialty areas based on patient care themes and defined by common clinical objectives.
 11. Appropriate organisations, working with employers, must review the content of postgraduate curricula, how doctors are assessed and how they progress through training to make sure the postgraduate training structure is fit to deliver broader specialty training that includes generic capabilities, transferable competencies and more patient and employer involvement
 12. All doctors must be able to manage acutely ill patients with multiple co-morbidities within their broad specialty areas, and most doctors will continue to maintain these skills in their future careers.
 13. Appropriate organisations, including employers, must consider how training arrangements will be coordinated to meet local needs while maintaining UK-wide standards.
 14. Appropriate organisations, including postgraduate research and funding bodies, must support a flexible approach to clinical academic training.
 15. Appropriate organisations, including employers, must structure CPD within a professional framework to meet patient and service needs, including mechanisms for all doctors to have access, opportunity and time to carry out the CPD agreed through job planning and appraisal.
 16. Appropriate organisations, including employers, should develop credentialed programmes for some specialty and all subspecialty training, which will be approved, regulated and quality assured by the GMC.
 17. Appropriate organisations should review barriers faced by doctors outside of training who want to enter a formal training programme or access credentialed programmes.
 18. Appropriate organisations should put in place broad based specialty training (described in the model).
 19. There should be immediate consideration to set up a UK-wide Delivery Group to take forward the recommendations in this report and to identify which organisations should lead on specific actions.

The review's purpose

“ My hope is that any doctors who treat me do so with competence and kindness and always professionally. I want to be treated as a thinking person and not to be talked down to or over. I would like to be treated holistically and humanely and not just as a representative of a particular complaint. ”

Patient

1. The purpose of the Shape of Training Review is to make sure that over the next 30 years, we continue to train doctors who are fit to practise in the UK, are able to meet patient and service needs, and provide safe and high quality care.
2. We were asked to focus on postgraduate medical education and training across the UK from the transition from medical school to the Foundation Programme and through to specialty training and CPD. We also considered doctors' expectations and opportunities when they begin a medical career, and their decisions about what they want to specialise in during postgraduate training.
3. Our recommendations apply to all four UK countries. It is crucial that reforms to medical education and training produce doctors who have reached standards common across the four countries and are able to address the rapidly changing health needs of the UK population. We recognise that the four UK governments are taking forward the delivery of health services differently and we need to educate and train doctors flexibly to respond to these challenges.
4. The image* on the next page shows the career structure of most doctors and you can read more about how medical education and training is organised currently in the UK in annex A. We have also included a glossary of key medical education and training terms in this annex.
5. Clinical academic medicine fits within the current career pathways. Annex B describes the current arrangements for clinical academic medicine in the four UK countries and how the recommendations in this report will fit with this.

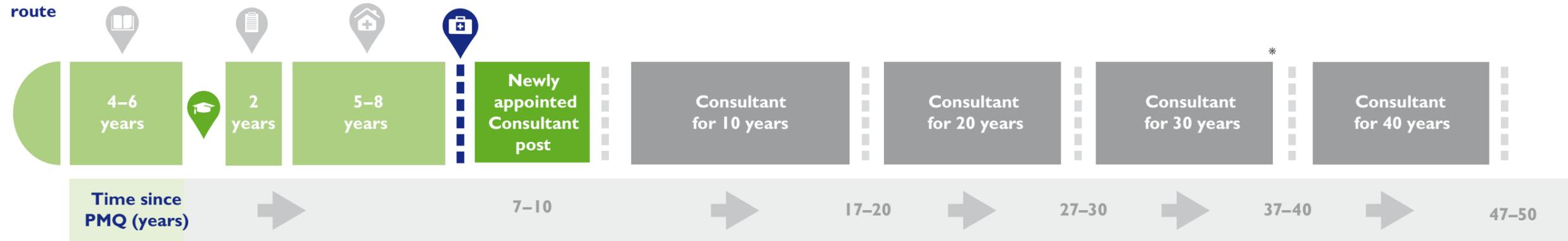
What was learned from previous education and training reviews?

6. Over the past decade, there have been six major inquiries considering aspects of the structure, function and effectiveness of medical education and training in the UK. These reviews, as a whole, concluded the current system is slow to adapt to patient and service needs. The training structure limits opportunities for doctors to change specialties, develop knowledge and skills outside their specialty curricula, or move in and out of training. A recurrent theme in all the reviews was a call for more flexibility in the way we train doctors. Annex C sets out a summary of some of these reviews.
7. The Sponsoring Board asked us to consider these previous reports' recommendations, and give particular attention to *Aspiring to Excellence – Final Report of the Independent Inquiry into Modernising Medical Careers*. Sir John Tooke called for a more flexible and broad based approach to training, integrating both training and service into workforce planning.† Tooke also said there must be more clarity about the contribution of doctors in training to service delivery and how doctors work in multi-professional teams. These elements featured strongly within our review's themes.

* General Medical Council (2012), *The State of Medical Education and Practice*. The chart on the next page shows GP training is between 3 and 4 years. GP training is currently 3 years although a number of 4-year programmes exist, but the additional experiences is not a requirement for a Certificate of Completion of Training.

† Tooke, J. (2008) *Aspiring To Excellence: Final Report of the Independent Inquiry into Modernising Medical Careers*, led by Sir John Tooke.

Specialist route



GP route



* The current NHS retirement age is 65 years old

Descriptions

- Undergraduate medical education
- Foundation training
- Specialty training
- Primary medical qualification (PMQ)
- GP training
- Appointment to post

These timings are indicative so can vary. For example, extensions to training, less than full-time training and periods of absence will all extend this.

8. The Scottish Medical and Scientific Advisory Committee in the September 2008 report – *Promoting Professionalism and Excellence in Scottish Medicine* – set out plans to improve the quality of patient care in Scotland. It focused on training doctors to work in an integrated and multi-professional team in both primary and secondary care settings. Like Tooke, the report called for a more general approach to training with fewer specialties and subspecialties. It also highlighted the need for doctors to gain broader training experiences and to work in general areas of their specialties for longer before deciding to specialise further. *Together for Health - the five-year vision for the NHS in Wales* by the Welsh Government identified a similar need for a medical workforce with more generalist skills to meet their expected demographic changes.
9. In 2011, the report – *Transforming Your Care: A review of health and social care in Northern Ireland* – again called for healthcare to take place near to people's homes with more reliance on multi-professional teams. The report particularly called for doctors to have more training in community settings and in providing acute care.
10. The NHS Future Forum (England), in its report to the Government on education and training in January 2012, re-emphasised the need to develop a more flexible career pathway for doctors and a means of fostering generalism in the community and the hospital. These issues were core to the Shape of Training Review.

How the Review was structured

11. The Review was launched through an agreement between the following organisations responsible for the regulation, commissioning and delivery of medical education and training:
 - Medical Education England (MEE) – whose function was subsumed into Health Education England (HEE)
 - the Academy of Medical Royal Colleges (AoMRC)
 - the General Medical Council (GMC)
 - the Medical Schools Council (MSC)
 - the Conference of Postgraduate Medical Deans of the UK (COPMeD)
 - NHS Education Scotland (NES)
 - the Northern Ireland Medical and Dental Training Agency (NIMDTA)
 - Wales Deanery
12. Collectively these organisations formed the Shape of Training Sponsoring Board. It was responsible for setting the Review's strategic direction including its scope, timelines and outputs. These were agreed in the Review's Terms of Reference on 22 March 2012.
13. Professor David Greenaway, Vice-Chancellor of the University of Nottingham, was appointed by the Sponsoring Board to lead this independent review. He assembled an Expert Advisory Group (EAG) to help him identify issues and potential options for changes to postgraduate training. Members of the group were selected for their independent expertise and advice rather than as representatives of their organisations.
14. More information about the Review's governance can be found in annex D.

What did the Terms of Reference set out?

15. Building on earlier work led by Medical Education England, and involving key groups including the four UK departments of health, the Terms of Reference identified five themes as well as some cross-theme issues for the review to consider. Box 1 summarises the key issues in each theme and area we considered. You can read the Terms of Reference in annex D. In addition, the UK Scrutiny Group asked the Review to consider the needs of academic training and the transition from medical school to the Foundation Programme

16. We considered this review against the backdrop of rapidly changing medical and scientific advances, evolving healthcare and population needs, changes to healthcare systems and the information and communications technology (ICT) revolution. Doctors' roles and responsibilities will have to accommodate new technologies, systems and professions.
17. We recognise that the medical profession does not exist in isolation and other health and social care professionals are fundamental in delivering a safe and high quality service. But we were commissioned to review medical education and training. There is no doubt that doctors must be trained to work in multi-professional teams and respect the roles and responsibilities of their colleagues.

Box 1: A summary of the key issues in the themes and areas set out in the Terms of Reference

Patient needs

- Clarity about the competencies attained by doctors at different stages of their careers.
- Roles and responsibilities of all doctors.

Workforce needs: specialists or generalists

- Balance between generalists and specialists needed to deliver care and implications for medical training.
- Timing of the CCT, the content and length of training, exit points, the timing of subspecialty training, recognition of competencies.
- Role for CPD and credentialing.

Breadth and scope of training

- Support needed for right mix of knowledge, skills and behaviours to prepare doctors for the different contexts in which they work.

- Balance between sufficient exposure to acutely ill patients and emergency interventions and care in the community.
- Time to reflect on practice and learn from experiences.

Training and service needs

- Role of doctors in training in the service and competing needs of the service and training.

Flexibility of training

- More flexible training to allow doctors to move more easily between specialties and into and out of training.
- Support for doctors pursuing academic or management careers.

Transitions throughout medical career

- Advice about medical career.
- Support for doctors through transitions.

Methodology

What was our review process?

18. The Terms of Reference defined the key themes and areas and we undertook a comprehensive process of consultation and evidence gathering to address these.
19. We engaged with patients, medical students, doctors in training, trainers, employers and organisations involved in delivering training. We consulted in England, Northern Ireland, Scotland and Wales, including rural and urban settings. Box 2 describes some of our engagement activities.
20. In the first phase, we did a literature review, desk-based research and site-visits, and held five large seminars. These activities helped us scope out the key issues.
21. In the second phase, we explored key issues through a written call for ideas and evidence, which resulted in almost 400 submissions. We used this information to develop principles and possible approaches to medical education and training.
22. Finally we tested these principles and frameworks through workshops, discussions and 54 oral evidence sessions.
23. This extensive consultation process provided opportunities for individuals and organisations to express ideas, judgements and experiences. Responses were not formally weighted or quantified, but we acknowledged that some organisational responses represented the views of a large number of individuals.
24. We received feedback from over 1,500 individuals and organisations in England, Northern Ireland, Scotland and Wales. You can read more about our engagement activities, who we engaged with and the evidence collected in annex E as well as summaries of the activities in the appendices.

Box 2: Our engagement activities

- Monthly web and e-updates
- Nine site-visits
- Five large seminars
- 16 targeted workshops
- Over 65 meetings and discussions
- 54 oral evidence sessions
- Call for ideas and evidence (written responses)

Discussion of findings within themes

Theme One: Patient needs drive how we must train doctors in the future

Changing population needs

25. Our assumptions are based on what experts currently believe will happen to the UK population and future healthcare structures. Some of these trends are unpredictable.* We need to create a training structure that makes sure the medical workforce can respond to this uncertainty. Reports from the four UK countries show a move towards more integrated care across primary and secondary care boundaries in response to changing population demographics. For example, the Scottish Government's *2020 Vision for Health* sets out a strategy to deliver integrated health and social care with the majority of care taking place in the community.[†] The population over 75 years old in Scotland is expected to increase by 60% by 2033, resulting in a 70% increase in health expenditure.

26. We examined the impact of changing demographics as a means of understanding how patient needs may change and how doctors' training will be shaped by this.

27. Drivers of change that will impact on medical training and practice include the following:

- More people in all age groups are living with multiple illnesses. A recent report found 42% of the population in Scotland had at least one long term condition and 23% had two or more.[‡]

- There is a growing number of older people across the UK, many with multiple conditions including dementia.[§] Even though they make up a relatively small group compared with the population as a whole, many older people require more medical interventions.
- Older people will make up a high percentage of rural populations in the UK.
- The onset of co-morbidities occurs 10-15 years earlier for those living in deprived areas.[¶] They are more likely to experience mental health problems alongside their physical conditions than more affluent groups.^{**}

* A scenario-based report that forecasts possible demographic trends based on changes in socioeconomic conditions in the UK is available in appendix 6.

† NHS Scotland (September 2011). *2020 Vision: Strategic Narrative, Achieving Sustainable Quality in Scotland's Healthcare*.

‡ Barnett K et al. (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet online*.

§ Older people are defined differently across the UK. The British Society of Gerontology and Age UK prefer a broad term rather than a specific age cut off.

¶ Barnett K et al. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet online*, 2012.

** Office for National Statistics
http://www.ons.gov.uk/ons/dcp171766_310300.pdf

28. To meet these demands, most doctors, working in multi-professional health and social care teams, will be expected to care for patients with complex conditions, including the particular health requirements of older people. The four UK governments have reported that more doctors trained in a broad spectrum of care (such as emergency and acute care and mental health) are needed to meet future healthcare demands. This means we must train doctors who are flexible enough to care for a range of patients in diverse circumstances, and are able to adapt as local patient needs change. The broad, generalist nature of the early years of medical training, during medical school and the Foundation Programme, should continue into the later stages of training, to help doctors gain a broader understanding of disease. But we also heard that patients value being cared for by specialists, and indeed some research suggests that patient outcomes improve with specialist care (particularly in single issue conditions). Although we must move towards more holistic general care, this should be within broad specialty areas to make sure patients continue to get the best possible care. A key element of postgraduate training will be to produce doctors capable of caring for patients more holistically, even if they end up working in focused practice areas (currently defined as special interest and subspecialty areas).

29. Patients will continue to want and expect to be involved in their own care. Health and social care teams, including doctors, will need to build partnerships with patients through shared decision making.* Patients will also expect a more personalised approach to their care. Numerous reports suggest doctors will increasingly take on more proactive roles to help patients understand care options, to teach them how to manage their own health and, where necessary, to help them access the best possible care within tight financial constraints. Good communication skills will continue to be a training and professional priority.

“ Doctors will have to work in teams and be prepared to listen. Doctors will have to communicate well with one another, other members of the team and patients, and be prepared to treat all members of the team with respect and dignity. ”

Patient representative group

30. We know, through the work with National Voices, that patients expect 'person focused coordinated care' based on good communication and team work.† This includes helping them to understand their care and navigate different services across health and social care boundaries. With a more integrated approach, doctors will have to work differently. Patients expect support to help them understand their treatment options and to be involved in decisions about their care.
31. To deliver this, doctors must have a broad enough understanding of the different aspects of patients' needs and be able to manage and communicate these within a multi-professional team and across different care settings.

* Office for National Statistics (June 2013). *Measuring National Well-being – Health 2013*.

† National Voices. *A narrative for person-centred coordinated care*. Commissioned by NHS England, 2013.

32. The GMC's core guidance, *Good medical practice*, which sets out the professional duties and values expected by all doctors, must be put at the heart of doctors' training and CPD. It must become an explicit framework within which doctors are trained and evaluated. Postgraduate medical education and training will have to focus more on these generic capabilities to meet these needs – discussed in paragraphs 71–75. Embedding a professional framework (defined by *Good medical practice*) into medical education and training will reinforce key aspects of good care, such as cultural awareness, understanding patients' individual circumstances and communication skills.

“ *We live in an increasingly diverse and educated society with a range of beliefs. Whether a particular intervention achieves a certain effect is a technical issue, but whether the effect is desirable is an ethical one. Trust is also of paramount importance.* ”

Doctor

Blurring the boundary between primary and secondary care

33. The Review also explored wider issues of how care might be delivered in the future and its implications for training. Locally delivered care will require more doctors trained in broad specialties, including general practice. They will have to be able to manage acute situations in the community with the goal of keeping people out of hospitals as much as possible. Evidence suggests that involving specialists in community care and involving GPs and doctors trained in general areas of a specialty in co-ordinating hospital and community care lead to:

- improved patient outcomes;
- higher levels of patient and staff satisfaction;
- shorter hospital stays;
- fewer emergency readmissions of acutely ill patients.*

34. If an integrated approach is developed, more doctors (including hospital specialists) will work within community-based teams away from hospitals.† Specialised centres (in hospitals) will continue to employ doctors trained in particular specialties, but possibly in fewer numbers. GPs will develop GP and healthcare networks where patients can access more targeted and specialised care in the community when needed. To deliver safe care in any setting, all doctors will need generic knowledge and skills coupled with the ability to diagnose, initiate treatment and manage the interface between different services and specialists. (The summary of the written call for ideas and evidence has more details about changes to service delivery in annex E). Box 3 sets out an example of a more integrated approach to care.‡

* Ham.C et al. (2012). *Transforming the delivery of Health and Social Care, the case for fundamental change*, King's Fund.

† Royal College of Physicians (2012). *Hospitals on edge: Time for action*; And N Timmins (2012). *Tomorrow's Specialist: The future of obstetrics, gynaecology and women's health care*, Royal College of Obstetrics and Gynaecology.

‡ Health and Social Care Board, Health Minister; Northern Ireland (2012). *Transforming your care: A review of health and social care*.

Box 3: An example of an integrated approach to care

In Northern Ireland, *Transforming Your Care* is an example of how care in the future will be delivered by multi-professional teams working across primary and secondary care areas. Services will be provided across hospitals and the community, with some provision moving from hospitals to the community. Implementation will include six key features:

- Every individual will have the opportunity to make decisions that help them maintain good health and wellbeing. Health and social care will provide the tools and support people need to do this.
- Most services will be provided locally, for example diagnostics, outpatients and urgent care, and local services will be better joined up with specialist hospital services.
- Services will regard home as the hub and be enabled to ensure people can be cared for at home, including at the end of life.
- The professionals providing health and social care services will be required to work together in a much more integrated way to plan and deliver consistently high quality care for patients.
- Where specialist hospital care is required it will be available, discharging patients into the care of local services as soon as their health and care needs permit.
- Some very specialist services needed by a small number of people will be provided on a planned basis further afield.

35. To meet these challenges, postgraduate training will have to train all doctors to provide care in community and acute care settings. Barnett and colleagues called for medical education to produce ‘*generalist clinicians to provide personalised, comprehensive continuity of care*’* Doctors may want to further specialise in areas of special interest or subspecialty through credentialed programmes. This is discussed further in paragraph 134.

Recommendation 1: Appropriate organisations must make sure postgraduate medical education and training enhances its response to changing demographic and patient needs.

Patients want to be more involved in training doctors

36. The Terms of Reference required us to consider what patients expect to know about doctors’ roles and responsibilities throughout their careers, and how they should be involved in postgraduate training. We found patients and members of the public had little understanding of doctors’ career pathways. Patients are often not aware of the expertise and seniority of those treating them. But they should, and indeed want to, know how their doctors fit within the multi-professional team. More clarity about the way doctors in training are supervised at different points in their career will reassure patients. We discuss different points in doctors’ careers in paragraphs 87–90.

* Barnett K et al. (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet online*.

37. The Health Foundation recommends that patients are involved in evaluating the quality and safety of their care, making clinical decision and developing services.* Similarly, there is growing evidence that subjective experience can impact on patient outcomes. There is a drive to help patients take more responsibility for their own health. If patient care is improved by involving patients, then doctors have to learn explicitly how to develop partnerships with patients. We heard about several initiatives that are successfully involving patients in training doctors, including teaching and giving feedback – an example is outlined in box 4.† We recognise that learning from patients and carers is difficult to implement, but it is the best way for doctors in training to gain experience in patient-centred care. It must be an explicit part of postgraduate curricula and assessment systems, and should be part of a review of curricula details in paragraphs 92–95.

Recommendation 2: Appropriate organisations should identify more ways of involving patients in educating and training doctors.

“ We recognise as patients that providing a service can itself be a learning opportunity but this only happens when individuals are given the time and support to learn from what they are doing and provided with feedback on their activities. ”

Patient representative group

* Christmas and Milward, (October 2011). *New medical professionalism: A scoping study for the Health Foundation*.

† Guy's and St Thomas' NHS Foundation Trust / Burdett Trust for Nursing (2012). *Barbara's Story: Delivering dignity for older people and those with dementia- A training guide for staff*.

Box 4: Examples where patients have been used in training doctors

A number of Trusts, such as Musgrove Park in Taunton, University College London Hospitals and Guy's and St Thomas', have integrated patient experiences and stories into training programmes. These programmes aim to help doctors better understand the impact of care on patients, their needs and what they expect from their doctors.

Barbara's story

Guy's and St Thomas' NHS Foundation Trust has introduced a new campaign for all staff, including doctors in training, to raise awareness of what it feels like to be a patient with dementia who is in hospital. Through this educational initiative, they hope staff will provide better support and care for these patients.

So far 11,700 of 12,500 staff members have taken part in the mandatory innovative training session, the main focus of which is a short film about Barbara and her experiences during a hospital visit.

Impact of Barbara's story

Barbara's story has made a huge difference to the workforce of the Trust. Feedback from staff includes: *'Barbara's Story is profound and a stark reminder of the importance of understanding things from the patient's point of view'*. It has been described by staff as the best thing the Trust has ever done. Changes to behaviour have included staff stopping in the corridors to help patients, moving furniture to make the wards more accessible and creating a calmer hospital environment for patients. With the support of the Burdett Trust, six further episodes are in production, which will follow Barbara's journey as her condition progresses.

Theme Two: Changing the balance between specialists and generalists

38. The Review's Terms of Reference required us to look at the balance of generalists and specialists. We were not asked to review the current medical workforce or suggest the numbers of doctors needed in the future. Instead we have looked at the tensions and pressures that will change the balance between different categories of doctors over the next 30 years.

Pipeline into medicine

39. We must explicitly tell potential and current medical students what they should expect from a medical career. Patient and service demands will drive the specialties in which they will work. This advice should set out the kinds of doctors needed in the future to deliver the service and how this will affect their careers. For example, employers are likely to recruit more broadly trained doctors to work across hospital and community care boundaries. Workforce planning will need to be done better to ensure we are not training people for roles for which there is no service demand. We will also need to train people in a way that gives them more flexibility to change what they do if service demands shift in their field of practice.
40. Medical schools and other organisations must provide realistic advice about a career in medicine. The Sponsoring Board organisations and the departments of health must publish recruitment and retention rates, information about progression and the kinds and numbers of doctors needed now and in the future.

Recommendation 3: Appropriate organisations must provide clear advice to potential and current medical students about what they should expect from a medical career.

The current medical workforce

41. Organisations that employ doctors in training face several challenges when managing their responsibilities for medical training, service delivery and patient care. Their aim is to have the right kinds and numbers of medical staff to provide safe and effective care.
42. But some of the more generalist specialties are struggling to fill posts. Other specialties attract fierce competition, often in areas where there is a need for smaller numbers. For example, psychiatry and emergency medicine have reported lower competition rates for training places than surgery.* We heard that this was shaped by perceptions of heavy and intense workloads as well as limited career development (including working in private practice), stigma and burnout. Difficulty in recruiting into specialty training has resulted in an overdependence on existing or locum doctors to fill rota gaps, and in some cases raising patient safety issues.†

* *Medical Specialty Training (England) Competition Information 2012*. Available at: http://www.mmc.nhs.uk/specialty_training/specialty_training_2012/recruitment_process/stage_2_-_choosing_your_specialty/competition_information.aspx [Accessed on 9 August 2012]

† General Medical Council (2012). *The State of medical education and practice*.

“ *If future pathways will not meet expectation[s] for all who wish to take up senior appointment, this will need clear explanation starting with school career services to ensure expectations are managed from the earliest opportunity.* ”

HEE Career Planning subgroup

43. Encouraging doctors to work in general areas of broad specialties will only happen when employers place more value on doctors with a broader scope of practice, who are able to provide more acute care and be much more integrated into multi-professional teams. They must make these broader roles more attractive through career support and development. If more jobs require doctors trained in the general areas of their specialty, then more doctors will train to fill these roles. The structure of postgraduate training must be adapted to provide broader specialty training to support the service better.

44. A move towards a medical workforce with a broader approach to patient care will mean more doctors will be capable of working in rural and isolated areas. With a bigger recruitment pool, these areas should be able to attract more doctors. For example, in the box 5, we with describe an initiative to develop and retain a rural and remote workforce in Scotland.* A broadly trained medical workforce may encourage more doctors to work in different settings or even volunteer overseas to share vital knowledge and skills within the global healthcare community and improve global health.†

Box 5: An initiative to retain a rural medical workforce

The Remote and Rural Healthcare Educational Alliance (RRHEAL) has developed a number of initiatives aimed at developing a NHS workforce to care for people in rural and remote communities in Scotland. These include training opportunities for doctors.

Feedback on this programme so far has been positive with many doctors reporting that their training opportunities have been excellent with a strong focus on communication and teamwork. They have also had unique experiences like being part of search and rescue helicopter teams. As one doctor described: *‘Living in a close community, as well as being “on call” for most of the time, can bring reward as well as occasional frustration. Rural GPs need to be generalists – last week I treated a chap with SVT, sutured some minor injuries and incised and drained an abscess. That’s on top of the usual GP presentations seen in any practice. It’s a stimulating career choice.’*

* NHS Education for Scotland (2012). *Rural and Remote Platform*.

† All Party Parliamentary Group on Global Health (July 2013). *Improving health at home and abroad: How overseas volunteering from the NHS benefits the UK and the world*.

The medical workforce in the future

45. We heard that employers want doctors who provide care in different settings and in a range of ways depending on local service needs. To meet this demand, postgraduate training must focus on preparing doctors with generic clinical and professional competencies that can be adapted and enhanced to support local workforce and service requirements.
46. Making the training structure more flexible will benefit both doctors and employers. Doctors will be able to change specialties or enhance their scope of practice through mechanisms like transferable competencies and credentialing, both of which will be driven by local workforce and patient needs. Flexibility is discussed further in paragraphs 109-131. Like patient needs, service and workforce needs will be better addressed by doctors whose training is broader within their specialty, and does not narrow down their scope of practice as early or as much at the specialty training stage. They will be better prepared to take on various roles and responsibilities to meet local requirements at the end of the training programme, and flexible enough to later change their scope of practice as service and patient needs change over time.

“ While healthcare practitioners might specialise in one area they retain / develop the ability to see that area within the whole care area... [they must] take responsibility for coordinating their actions with those of others in the healthcare team. ”

Patient representative group

Theme Three: A broader approach to postgraduate training

47. The Terms of Reference required us to look at the context in which training is delivered, including length of training, exit points and recognition of competencies. We also considered the impact of training transitions on doctors, the service and patients.

Supporting transitions in the medical career

48. Doctors are expected to take on more responsibilities and work with less supervision and support as they move through their training and into the early years after training. These transition points include the move from medical school to the Foundation Programme and initial employment, from the Foundation Programme into specialty training, and from specialty training into unsupervised practice. Doctors may also experience transitions throughout their career when they change jobs, roles or take on more responsibilities. Professional judgement, working as an employee in a pressurised environment and taking on more management and leadership responsibilities are often cited as concerns during transitions.*

49. Risks to patient safety and care increase when new medical graduates move into their first Foundation Programme placements, and many other doctors already in training move to new placements (often called the August changeover). Although recent changes may have improved patient care, studies have suggested that patients admitted on the first Wednesday in August have a higher early death rate than patients admitted on the previous Wednesday.† Similarly, 90% of respondents to a Royal College of Physicians survey rated the impact of this changeover as negative.‡

50. Medical students are now required to complete a period of clinical experience before graduation alongside shadowing at the site of their first placement. These experiences should be extended to give students more opportunities to work in multi-professional teams in different care settings. Activities should focus on what to expect in the first few years of training, including practical experiences of working through professional and ethical issues.

51. Medical students and doctors in training learn to care for patients in fragmented ways. They will see patients at particular points in their care but rarely see the contribution of other health and social care professionals or the outcome of that care. For example, FI doctors told us they sometimes spend hours completing discharge summaries and other administrative paperwork for patients they have never met or treated. They did not value this as a way of communicating with the wider multi-professional team or providing continuity of care. This compartmentalised view undermines-patient centred care and encourages doctors to think of patients as conditions rather than the whole patient.

52. If we want to train well rounded doctors who understand patient care more broadly, they must see the impact of their care – from the patient's perspective. This approach recognises the value of involving patients in training and enhances doctors' understanding of other members on the multi-professional team. It also provides practical experience of patient-centred care.

* General Medical Council (2013). *Reviewing the impact of Tomorrow's Doctors (2009): Summary of interim findings and research on professionalism.*

† Jen et al, 2008 in Vaughan, L et al. (2011) 'August is always a nightmare': results of the Royal College of Physicians of Edinburgh and Society of Acute Medicine August transition survey. *Clinical Medicine*, 11 : 4.

‡ Ibid.

53. An approach that allows students and doctors in training to follow patients through their care pathway would benefit doctors – an example is described in the box 6. There will be practical challenges in implementing this. But a longitudinal approach would sit best during medical school or possibly as part of the Foundation Programme when doctors could have supernumerary roles for short periods of time. Medical students and Foundation doctors should be able to follow a small number of patients through their care pathway within each phase of study or placement.
54. The relevant organisations should extend clinical opportunities for medical students and Foundation doctors to focus on how patients are cared for through their whole experience.

Box 6: Longitudinal integrated clerkships

Several medical schools in the USA, including Harvard Medical School, have introduced longitudinal integrated clerkships. For one year, students work continuously with doctors in core specialties (internal medicine, neurology, obstetrics and gynaecology, paediatrics, surgery, radiology and psychiatry) while simultaneously following a panel of patients representing a wide spectrum of medical conditions. Students reported that they felt better prepared for practice, including professional aspects of involving patients in decision making and understanding the impact of social context on patients.

Variation between medical schools

55. All medical students have to meet the outcomes in the GMC's *Tomorrow's Doctors* – the standards medical students are expected to achieve before they graduate. How they demonstrate these outcomes has to be more transparent to give assurance to patients and employers. In this context, the decision by medical schools to include common questions in their final examinations is welcomed.
56. Respondents raised issues with the variability between medical schools of graduates' perceptions of preparedness.* We recognise the difference between doctors feeling prepared for medical practice and being competent to provide that practice. But studies have shown over the past decade that both trainers and doctors in training are concerned about some doctors' preparedness.
57. Research based on self-perceptions by doctors in training found that about 50% feel that medical school prepared them adequately for their first jobs.† Similarly a 2012 trainer survey by Clare van Hamel found that 52.9% of F1 doctors were adequately prepared for their role. But it seems doctors are more confident in particular clinical areas, such as diagnosis and prescribing. More than 70% of foundation doctors feel confident in practical procedures and in recognising a critically ill patient.‡ However, Michael Goldacre found that three years after graduation, the proportion of doctors who perceived that they were prepared at graduation dropped to just 28%.§

* Goldacre, MJ, et al. (2012). Foundation doctors' views on whether their medical school prepared them well for work: UK graduates of 2008 and 2009. *Postgrad Med J*: December 8.

† Ibid.

‡ Clare van Hamel – personal correspondence with Professor Stuart Carney, 2013.

§ Goldacre MJ et al (2010). Views of junior doctors about whether their medical school prepared them well for work: questionnaire surveys. *BMC Medical Education*.

58. This should however be considered alongside evidence from assessments taken by UK graduates in 2013.* For example the results of the Situational Judgement Test show that 88% of those who took the assessment across all UK schools achieved between 35.0 and 45.0 points (scale 0-50). Results from the 2013 Prescribing Safety Assessment pilot, which was taken by students at 29 UK medical schools show that 98% of students passed. This suggests that the level of attainment of students across UK medical schools is broadly similar.
59. Work has already started to understand the reasons for these variations and their implications for education and training and on patient safety.

Recommendation 4: Medical schools, along with other appropriate organisations, must make sure medical graduates at the point of registration can work safely in a clinical role suitable to their competence level, and have with experience of and insight into patient needs.

Implications of the Foundation Programme on postgraduate training

60. We were not asked initially to consider changes to the Foundation Programme. But respondents, including Sponsoring Board organisations, pointed out a pressing need to consider it in light of future postgraduate reforms.
61. The Foundation Programme enables medical graduates to consolidate and develop their capabilities to care for the whole patient and make a more informed decision about their future career direction. It provides generic professional training to bridge the transition from medical school into specialist and general practice training.

All trainees should have the opportunity to spend time in community/primary care and hospital/secondary care settings, both during foundation, and subsequently. ”

NHS Scotland

62. Overall the Foundation Programme is viewed very positively. Doctors in training welcome the chance to try out different specialties before making a career choice and they move into the work environment in a more supported way. Placements give doctors opportunities to train in broad specialty areas and most doctors have opportunities to work in both primary and secondary care settings. Evidence suggests they are using these experiences to inform their decision about their specialty choice for the future.
63. The Foundation Programme should continue for the time being as a two-year introduction to medical practice in both community and hospital settings.
64. In paragraphs 92-95, we discuss introducing broad based training in specialties as a new postgraduate training structure. When this is in place, the relevant organisations should consider undertaking a review about whether the broad experience of the F2 year could be delivered in the early stages of a broader based specialty training programmes.

* Correspondence from Medical Schools Council, Oct 2013.

A case for moving full registration

65. We were asked to consider the case for moving full registration to the point of graduation. Currently the support and management of FI doctors is fragmented. Medical schools are responsible for considering their fitness to practise and making recommendations to the GMC about full registration. But FI training can take place anywhere in the UK. FI doctors have little or no supervisory relationship with their medical school, while postgraduate organisations face challenges in managing FI doctors who have fitness to practise concerns due to complex governance arrangements. By moving full registration to the point of graduation, responsibility for FI doctors will clearly be with postgraduate institutions.
66. Unless changes to the Foundation Programme are UK-wide, there is a risk that training will be developed and delivered differently across the four countries. There would be less flexibility for doctors to train across borders, in part because of how Foundation Programme posts are funded within England, Northern Ireland, Scotland and Wales.
67. Moving the point of full registration will have to be fully examined. This must include the complex legal and regulatory implications for this change. Patients and the service are likely to expect graduates who have full registration to meet the same competence level as the current threshold. This change will inevitably have a knock-on effect on undergraduate medical education, which will have to ensure graduates meet more advanced outcomes.
68. Before taking this proposal forward, we would expect the relevant organisations to put in place rigorous, consistent and accountable measures to demonstrate that graduates are fit to practise to the standard of a fully registered doctor at the end of medical school.
69. We should also move towards limiting where doctors train following graduation to places that provide high quality training and supervision, and that are approved and quality assured by the GMC. They must not work in places just because there is a service need for doctors in training. Doctors in training already have to link to a responsible officer and meet the requirements for revalidation, including regular reviews by their postgraduate deans. These safeguards will give further reassurance to patients and employers that doctors in training are working safely. Other doctors who are not in training but have not reached the level of the Certificate of Specialty Training must also be supervised and supported appropriately – this is discussed in paragraphs 128–131.
70. Professional examinations (also called college and faculty examinations) should be reviewed to make sure they demonstrate doctors have met specialty requirements at the end of training and are safe to work outside of approved training environments.

Recommendation 5: Full registration should move to the point of graduation from medical school, subject to the necessary legislation being approved by Parliament and provided educational, legal and regulatory measures are in place to assure patients and employers that they doctors are fit to practise.



Generic capabilities

71. Medical education goes beyond learning the technical aspects of medicine. It is fundamentally about becoming a dedicated doctor. The development of doctors' professional values, actions and aspirations should be a major focus of medical education and training.
72. More doctors in the future will need to care for patients with complex health needs and across different settings. Postgraduate curricula should be shaped by professional values and judgements and the generic capabilities expected for all doctors. We also heard that curricula are rigid and no longer fit for purpose. We discuss this further in paragraphs 94–95.
73. Many of the qualities of good educators, leaders and clinicians could be characterised as core capabilities. The ability to communicate effectively, empathise, lead, follow, and be diligent and conscientious could be included in the list of capabilities that doctors must possess or be expected to develop. These illustrate the kinds of knowledge, skills and behaviours that are complementary to doctors' clinical skills, but which, crucially, are integral to professional practice. Work is already underway to develop and embed in curricula these generic capabilities based on *Good medical practice*.
74. We also heard that well rounded doctors need to have an understanding of, and experience in, both the physical and mental health needs of patients. This has implications for curricula. For example, psychiatrists need more training in medicine. Other specialties need more training in caring for patients with mental health concerns, especially dementia. But it also suggests that all doctors need to have a general understanding of different aspects of healthcare, including prevention.
75. Advances in science, technology and medicine will lead to dramatic changes over the next 30 years. Medical research pushes forward innovative developments, and future generations of doctors have to be encouraged to do this kind of work. To meet these challenges, all doctors should be able to apply research and critical thinking to their clinical work. Doctors with the desire and aptitude for a career in academic medicine should be able to develop it through a flexible training pathway – see paragraphs 115–120 for more details.

Recommendation 6: Appropriate organisations must introduce a generic capabilities framework for curricula for postgraduate training based on *Good medical practice* that covers, for example, communication, leadership, quality improvement and safety.

Training based on competence and capability measures

76. In the UK, postgraduate curricula already require doctors to demonstrate knowledge, skills and abilities through measurable and observable assessments. But time is still strongly featured in our current structure, underpinned by minimum time requirements in the relevant legislation. It is used as a proxy measure for many competencies and overall progression is based on an annual review of how doctors have met their training requirements. For many craft specialties, time is important in terms of moving beyond competence into mastery. The time component means the length of training is relatively predictable, although many doctors take longer than the predicted length of training. The postgraduate training structure should focus on standardising outcomes but allowing doctors to have more tailored training pathways.*
77. We agree training must continue to be bound by the timeframe of the training programmes (between four and six years after the Foundation Programme depending on specialty). Extending training excessively will not lead to better trained or prepared doctors and will put unnecessary strain on the system. But the current approach to progression is too rigid. Doctors should be able to progress through their training at an appropriate pace based on assessments of competencies and capabilities – which might be faster or slower than current arrangements. Indeed doctors may move quickly through some curricular aspects and take longer on others depending on their personal learning needs. We recognise that a greater shift towards outcomes and competencies might increase tension between service continuity, delivery and training. Ultimately, it will give patients, doctors, trainers and employers more assurance that they have met the necessary requirements to work safely and competently with appropriate supervision.

78. We also heard that assessment and evaluation throughout postgraduate training is becoming increasingly bureaucratic – ticking boxes – and is not necessarily demonstrating capabilities or showing that a doctor is consistently working safely. Trainers told us their relationships with doctors in training have been eroded over the past decade. Changing the way doctors are supervised will help address this concern as well as professionalising the role of educational and clinical supervisors. But assessment and assessment systems, as well as the evaluation of progression, must be considered in light of reforms to postgraduate education and training. The annual review of competence progression (ARCP) will still be necessary, but it should be focused even more on learning outcomes rather than on some of the time based requirements..

Recommendation 7: Appropriate organisations must introduce processes, including assessments that allow doctors to progress at an appropriate pace through training within the overall timeframe of the training programme.

Making supervision and support central to training and service delivery

79. We learned that doctors sometimes struggle to put into practice the patient-centred learning from medical school.† This was attributed to a lack of support and learning opportunities with supervisors, coupled with too much administrative work. A shift to an approach that puts supervision and support at the centre of training and service delivery would address many of the challenges in the current structure.

* Cook, M et al. (2010). *A Summary of Educating Physicians: A Call for Reform of Medical School and Residency*. San Francisco: Jossey-Bass.

† Oates, J. (2013). *Evidence to inform the Shape of Training review of UK postgraduate medical education: a synthesis and analysis of relevant published literature*. Shape of Training Review.

Doctors should have longer placements

80. Concerns about confidence and preparedness (discussed in paragraphs 48-59) might be mitigated by doctors training longer in one place. Employers have reported doctors in training sometimes struggle to integrate into teams.* Most specialty doctors in training rotate through different posts every six to 12 months once they have completed the Foundation Programme. These doctors benefit from this work pattern because they get more experiences and learning opportunities. But short timeframes make it difficult to plan workloads, rotas and development opportunities for the rest of the team or unit. Employers also raised concerns that constantly changing key team members affects the way the team works. Research has found that where teams are functioning poorly, there is less cohesion, leadership, innovation and quality of care.†
81. Longer time in a placement would help doctors integrate better within teams, to have closer relationships with trainers, GPs, consultants and other team members gain support during career and training transitions. This longer time in a stable work environment would give doctors more bespoke training opportunities, resulting in some being able to demonstrate competencies and capabilities rapidly while building their confidence.

“ We all, and all our programme directors, strongly support reducing the frequency of rotations...people need to bond with a big multi-professional team that works and so reducing the frequency of rotations, provided you can have appropriate quality of service and quality of training. ”

Postgraduate Institution

82. We recognise that clinical knowledge and skills can be learned in shorter placements – like in the current structure. And the service benefits when doctors in training share new practices and techniques between organisations. Doctors in training are also likely to raise concerns because they are not as invested in the workplace. But this has to be balanced against the recognition that building up professional capabilities and learning to manage critical relationships takes longer. Doctors could, for example, in the early stages of specialty training benefit from placements lasting six months, while doctors towards the end of their training could stay in one place for at least a year (exact placement timings would be determined by the relevant specialty). We heard that some employers already keep their doctors in the same team or department for at least six months when they move into their next training stage with the same employer. This gives them time and space to consolidate new responsibilities and requirements while still relying on team support and relationships built up from the previous year.

* Medical Education England, Employer workshop for Phase 1 Shape of training project, 2011.

† Borrill, C. (2001) *The Effectiveness of Health Care Teams in the National Health Service Birmingham* : University of Aston.

Doctors and their trainers should have an apprenticeship based relationship

83. We need to create a much closer link between service and training so that all service delivery provides meaningful learning and training experiences rather than just filling rota gaps. A more apprenticeship-based approach to training would give patients more confidence that their doctors are working competently at their level of training and that they are supervised appropriately.
84. Doctors would train and work alongside a small number of trainers and within specific teams. This arrangement would allow trainers to better assess training progress and areas for development. This would inevitably put pressure on employers to manage rotas. But doctors must have more personal supervision, by a named supervisor for at least a year, to get the best training opportunities and build up confidence in trainers about the competence of their doctors in training. As doctors progress through training, supervision will become less hands-on. They will also provide more service coverage as their responsibilities increase, including providing acute and emergency care. Box 7 sets out a definition for apprenticeship-based training.

“ Clear networks of clinical and educational supervision are needed to ensure that support is available and actively sought from the multi-disciplinary team when a doctor encounters challenges beyond their current level of competence. ”

Organisation employing doctors

Box 7: Definition of apprenticeship arrangements between doctors in training and trainers

- one educational supervisor assigned for at least a year
- a core group of trainers and named clinical supervisors for each placement
- supervisors and trainers developed and supported explicitly in role
- working together on days, nights and weekends and in both primary and secondary care settings
- personalised supervision and support to meet learning outcomes
- mentoring and coaching
- explicit commitments to teaching sessions by supervisors and trainers
- training sessions by, and as part of, a multi-professional team
- focus on patient-centred care and patient experiences

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85. Individual training placements may not give doctors access to the full range of experiences and opportunities to meet the curricula outcomes and requirements. Those organisations providing training would have to work together to make sure there are regional and national mechanisms to address these shortfalls. Employers will also have to put in place arrangements to make sure negative role modelling, undermining and personality conflicts do not derail the training relationship.
86. In view of the resource implications of an apprenticeship based arrangement, not all doctors should be trainers. Training should only take place where it can be supported through high quality training arrangements. Not every workplace should be involved in training.

Recommendation 8: Appropriate organisations, including employers, must introduce longer placements for doctors in training to work in teams and with supervisors, including putting in place apprenticeship based arrangements.

Recommendation 9: Training should be limited to places that provide high quality training and supervision, and that are approved and quality assured by the GMC.

The outcome of postgraduate training

87. In the next section, we define broadly the level of competence expected from doctors at different points in their careers. Doctors must continue to be able to make difficult judgements in complex and complicated situations and often outside of recognised protocols. Other healthcare professionals might increasingly provide large amounts of care, including diagnosis and prescribing. But ultimately doctors will still make, and be responsible for, critical medical decisions. There is no appetite for postgraduate training to produce a less trained doctor – a ‘sub-consultant’.
88. The outcome of postgraduate training must recognise and value doctors who are well grounded in the broad areas of their specialty. Further specialisation or subspecialisation should be determined by workforce and patient needs. Training does not end with the CCT. The current CCT should be changed to a Certificate of Specialty Training (CST) for all doctors who complete postgraduate training. It should recognise the general specialty area in which they have been trained. For example, a GP would get a Certificate of Specialty Training (general practice) or a general surgeon would get a Certificate of Specialty Training (general surgery).
89. Relevant organisations will have to put in place the necessary arrangements for the regulatory recognition of this exit point, including a review of the implications for the current Specialist and GP Registers.

Levels of competence

90. We believe there are three broad levels of competence that would clarify the roles and responsibilities of doctors for patients, employers and others – discussed in paragraphs 36–37
- a. Doctors who are capable of providing safe and effective care for patients in emergency and acute situations with support. These doctors need some support, but are able to safely assess patients in emergency and acute situations without direct or hands on supervision. Doctors generally would still lack experience and the breadth of knowledge and skills needed to deal with complex and riskier cases. This broad level of competence is expected from doctors who have completed the Foundation Programme but have not achieved the Certificate of Specialty Training.

b. Doctors who are able to make safe and competent judgements in broad specialist areas. They would be accountable for their professional decisions. Doctors work in multi-disciplinary teams and rely on peer and collegial groups for support and advice (which they are doing already and should continue to do). We expect them to provide leadership and management, not only for the patient in front of them, but for the team, unit and system in which they work. They would oversee and be able to make judgements on risky and complex cases and would have enough experience, confidence and insight to holistically manage patients with several problems across specialty areas, playing a part in different teams. This is the outcome of postgraduate training and would result in a Certificate in Specialty Training. This is the same level of competence as doctors who are currently awarded a CCT that allows them to work as consultants.

c. Doctors who are able to make safe and competent judgements but have additionally acquired more in-depth specialty training in a particular field of practice. They would still have to assess and treat patients with multiple co-morbidities. This is not necessarily a move away from working in the general areas in a broad based specialty. Indeed, doctors should be expected to provide general care in their broad specialty area even after they further their training within a narrower field of practice. This training would be recognised through credentialing and would be driven by workforce and patient needs.

91. Doctors would benefit from training in themed areas relevant to patients rather than in specialties. They would train, for example, in caring for women, children, elderly people, disabled people or people with long-term illness. We support the idea that specialties should be bundled into groups – an approach recommended by John Tooke in *Aspiring to Excellence*.

Training in general areas of broad based specialties

92. We would expect groups of specialties to be characterised by patient care themes, and to be defined by the dynamic and interconnected relationships between those specialties. These broad specialty areas will have common clinical objectives that will form a core part of specialty curricula. But to make sure doctors have an understanding of other areas of medicine, they must have opportunities to train in other specialties or fields of practice. This time would still count towards their training and could be taken at any point during training. There should be consideration of how these themes bridge the boundary between hospital and community care. A description of a future model for training is described in paragraphs 132–134.

93. Some specialties have started to move towards this approach. General medicine, psychiatry, general practice and paediatrics are piloting a broad based programme. Doctors train in areas across all specialties in the first two years of the programme and then narrow down into one of these specialties. The first cohort on this programme started in August 2013 so it is too early to draw conclusions.

Recommendation 10: Postgraduate training must be structured within broad specialty areas based on patient care themes and defined by common clinical objectives.

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94. We anticipate that some specialties such as general practice will have to be longer – at least four years after the Foundation Programme. Other specialties may have shortened training times when curricula are adapted to deliver a broader specialty approach. More narrow areas of specialty training, including current subspecialties, will take place after the Certificate of Specialty Training.
95. Details about levels of competence and capability and length of training will need to be considered through a review of curricula by the relevant organisations. It should define the broad specialty areas and determine how specialties in these areas interact. It must consider questions around broader and more general training, including what aspects can move into credentialing. It should look at embedding generic capabilities and aligning competencies across specialties to aid their transferability. We would expect a review of curricula to consider how to make patient involvement more explicit in training. Changes to curricula must also fit with employer arrangements, requirements and opportunities.

Recommendation 11: Appropriate organisations, working with employers, must review the content of postgraduate curricula, how doctors are assessed and how they progress through training to make sure the postgraduate training structure is fit to deliver broader specialty training that includes generic capabilities, transferable competencies and more patient and employer involvement.

Theme Four: Tension between service and training

96. The role of doctors in training within the service and the competing needs of the service and training were key issues set out in the Terms of Reference.
97. Robert Francis' *Report of the Mid Staffordshire NHS Foundation Trust Public Enquiry* and Sir Bruce Keogh's Review into the quality of care and treatment provided by 14 hospital trusts in England, raised concerns about staffing levels as well as support and supervision within healthcare teams.* The GMC, while positive about the overall quality of training, has identified substantial concerns about the training environment, especially where it overlaps with demands in the workplace.†
98. To help with these challenges, the Academy of Medical Royal Colleges Trainee Doctors' Group has developed a charter for postgraduate medical education and training. It emphasises training priorities, such as time to learn and reflect on learning, while recognising the employment responsibilities of doctors in training – read it in annex F

Time to learn

99. All doctors are now limited in the number of hours they work. Both doctors in training and employers have found it challenging to comply with these restrictions, particularly when managing rotas, gaps in rotas and intense workloads for all doctor grades.‡ We know doctors also have less access to senior doctors and consultants during evenings and on weekends.§
100. A training structure that is more flexible around how doctors meet training outcomes will relax some of the pressure on doctors and employers. We discussed in paragraphs 76 – 86 how changes to the training structure and content might improve the quality of training through longer placements, apprenticeships and more emphasis on outcomes. Revised curricula that deliver broader specialty training, more targeted supervision and a more personalised outcome based approach to assessment and progression would take away some of the pressure on training hours.

* Francis, R *The Mid Staffordshire NHS Foundation Trust Public Enquiry*, chaired by Robert Francis QC, February 2013 and Keogh, B *Review into the quality of care and treatment provided by 14 hospital trusts in England: overview report*, July 2013.

† GMC *National Training Survey 2012*.

‡ *Working Time Regulations research by GMC* http://www.gmc-uk.org/04___Working_time_regulations_research_update___report_of_the_primary_study.pdf_49994882.pdf.

§ Temple J (2012), *The Benefits of Consultant Delivered Care*, Academy of Medical Royal Colleges. *Time for training, A Review of the impact of the European Working Time Directive on the quality of training* May 2010, GMC *National Training Survey 2012*.

Doctors will have to provide emergency and acute care

101. Although the Review is looking at producing a medical workforce to meet future needs, restructuring training to produce a more broadly trained specialist might ease some of the current workforce pressures. Employers that currently rely on locum doctors and doctors in training to meet service needs, raising patient safety concerns and providing poor levels of supervision, would have other options.*

102. The UK government has reported that the crisis in emergency care will likely deepen and may put patients at risk.† The GMC has also identified concerns with training in emergency medicine, including poor staffing levels, a lack of supervision by senior doctors and a high and intense workload. We were told that many doctors do not want to train in acute and emergency care because it is perceived as too stressful – ultimately resulting in few doctors able to cover acute care.

103. By training more doctors capable of managing acute and emergency cases, there will be a larger pool of medical staff to cover acute care. This will reduce the stress and intensity of the workload currently experienced by those providing acute care, it will also break the vicious cycle of unattractive areas of medicine failing to recruit staff and so becoming more understaffed, more stressful and more unattractive. We must ensure that caring for acutely ill people is embedded in all specialty training as a core feature and should cover both community and hospital settings.‡ To meet current issues with emergency and acute medicine, some specialties might introduce broader training through piloting and early adoption of broad based postgraduate training. The UK-wide Delivery Group should consider how to take this forward immediately.

104. We expect doctors to be able to demonstrate quite early in their training that they are capable of dealing with the patient in front of them – see paragraphs 87–91. Many doctors are likely to become more specialised through credentialing to meet demand for specialists. These doctors will continue delivering general care in their broad specialty area throughout their careers – and will need to keep up to date in these areas through CPD.

Recommendation 12: All doctors must be able to manage acutely ill patients with multiple co-morbidities within their broad specialty area and, continue to maintain their skills in the future.

* GMC National Training Survey 2012 <http://www.gmc-uk.org/education/surveys.asp>, AoMRC, The Benefits of Consultant Delivered Care, January 2012.

* House of Commons Health Committee report on Urgent and emergency services, July 2013, GMC Medical education's front line: A review of training in seven emergency medicine departments, July 2013.

† Royal College of Physicians (2013), *Future Hospitals Commission*.

‡ Academy of Medical Royal Colleges (2012) *The Benefits of Consultant Delivered Care*.

Valuing a trained medical workforce

105. The Academy of Medical Royal Colleges suggests a service delivered by consultants would mean better management of day to day rotas, patients having access to senior doctors at all times and better support for doctors in training.⁵ But there are implications for this approach, such as the loss of training opportunities as trained doctors take on more responsibilities currently undertaken by doctors in training. Regardless of how the service is structured, every activity and experience by doctors in training must be meaningful to their learning and development.

106. Employers have raised the idea of introducing a more flexible approach to employing trained doctors through different employment contract arrangements.* Evaluation of this or any other contractual model falls outside this review.

Training and education driven by service needs

107. As of April 2013 in England, employers have been playing a greater role in commissioning and managing the education and training of the local healthcare workforce across all healthcare professions. Providers now have greater accountability to plan and develop their workforce within multi-disciplinary teams. Local organisations, linked to Local Education and Training Boards (LETBs) for strategic oversight, are responsible for deciding what learning is necessary to make sure their staff are competent and meet the needs of the local community.[†] Discussions are happening in the other UK countries about linking medical education and training more closely to employers. A training structure driven by employers and linked to local needs is one mechanism for potentially injecting more flexibility into the medical workforce.

108. However, there are potential risks. Doctors may not be able to transfer competencies if training is devolved entirely to meet local needs. Training must be within a UK regulatory framework to maintain standards and make sure doctors are fit to practise anywhere in the UK. When implementing the recommendations, the relevant organisations should consider how employers will coordinate and fund training within regions in the UK countries while continuing to meet standards and requirements set by the GMC. Doctors may have to work with different employers to gain adequate training experience or for credentialing.

Recommendation 13: Appropriate organisations, including employers, must consider how training arrangements will be coordinated to meet local needs while maintaining UK-wide standards.

* Centre for Workforce Intelligence (2012) *Shape of the Medical Workforce*.

† Department of Health (2012), *Liberating the NHS: Developing the healthcare workforce*.

Theme Five: More flexibility in training

109. We were asked by the Sponsoring Board to consider how to make postgraduate training more flexible – a key recommendation from previous reports.

110. Dame Julie Moore, Chair of the NHS Future Forum's education and training group, summed up one of the main difficulties facing employer organisations:^{*}

'The problem with workforce planning is I can say next year that I need more ENT surgeons, but it takes 10 or 12 years to make one and by the time you make one somebody might have invented a cure. There has always been that tension in the system and we have never been very good at workforce planning. One of the ways to get round that is that we believe there should be more flexibility in training so that, if somebody did invent a cure that meant you did not need a certain specialist, or you needed far fewer, then it would not take forever to retrain somebody.'

111. Some specialty training becomes focused very quickly, which makes it difficult for doctors to change specialties. Doctors who need or want to move into other areas take a long time to retrain – during which they may not be providing service delivery. Pressures on the service will be lessened if we adopt a training structure that allows doctors to transfer more easily across specialties and programmes. As workforce needs change, doctors could retrain relatively quickly to fill any potential gaps.

112. The medical workforce has to be much more adaptable to local pressures and to changes in service delivery. A move towards broad based specialty training will result in a larger number of doctors being able to deliver frontline services – the areas that tend to struggle with frequent gaps in staff coverage.

Changing work patterns

113. A more flexible training structure would also meet the changing nature of the medical workforce. The medical profession is shifting towards more flexible working patterns and part-time working. This trend, driven to some extent by increasing numbers of women becoming doctors, will become more prominent. Flexible working helps keep highly trained doctors working effectively in health service throughout their careers.[†] A more flexible approach to training will allow doctors to train in ways that suit their work/life balance better. For example, doctors in less than full-time training will be able to focus their training more on achieving outcomes than on time served.

“ A more easily adaptable system with recognition of core skills and competencies between specialties (so when we get our workforce planning wrong, as we inevitably will, a trainee does not have to start all over again). ”

Employer

^{*} Dame Julie Moore giving evidence to the House of Commons Health Committee, 24 January 2012.

[†] Royal College of Physicians (2009), *Women in medicine: The Future*.

I 14. But the current, rigid training structure is unable to cope with growing numbers of people seeking flexible working arrangements and career breaks.* For example, some specialties, particularly those with a higher proportion of female doctors in training, face workforce difficulties. The Royal College of Paediatrics and Child Health has reported problems in filling rotas, with consultant paediatricians increasingly having to cover middle grade duties as a result.†

More flexibility to support clinical academic training

I 15. Support for clinical academic training must continue. Clinical academic training arrangements across the four countries have helped integrate academic training into the wider postgraduate structures. Doctors in these training pathways are key to building innovation and continuous improvement into medicine and patient care.‡

Box 8: Perceptions and experiences of flexible training by clinical academics

The National Institute of Health Research (NIHR) is exploring clinical academics perceptions and experiences of flexible training. The case studies that they shared with the Shape of Training team emphasised the need for flexibility in both clinical and academic training. Some of their comments are below:

- The key thing for GPs is the ability to provide continuity of care, and an academic GP who was unable to achieve that would not be providing adequate clinical care. One could argue the need to step away from clinical work entirely for a period, but the issues with revalidation and the reality of day-to-day practice would be significant. *(Post Doctoral Fellow in General Practice)*
- The main issues were around (ARCPs) where there was never university representation and clinical colleagues didn't seem to think this was important. The two halves of the post were seen as completely separate'. *(Clinical Fellow in Paediatrics)*
- The main barrier I faced was one of time. If the Clinical Lectureship had been strictly organised in 50% rotation blocks of laboratory versus clinical time, I would have completed my clinical training without substantial improvements to my academic CV. *(Clinical Fellow in Renal Medicine)*
- I have found it difficult to obtain training in some highly specialist areas. Only one trainee can attend a clinic so priority is given to fulltime NHS trainees in formal placement. The requirement to be on-call for one year was difficult. As all clinical work has to be done outside of research time, I often had to use annual leave to be on-call. *(Doctoral Fellow in Community Paediatrics)*
- I think there has to be recognition that some trainees (such as me) will chose academia later on in specialty training. There should still be opportunities for more senior specialist trainees to start academic training. *(Doctoral Fellow in Community Paediatrics)*

* Walker, V Dimitri, P Roland, D. et al. (2010) The extent and effect of the recruitment crisis in the UK trainee paediatric workforce. *Internet Journal of Healthcare Administration*.

† Royal College of Paediatrics and Child Health (2009) *Modelling the Future III: Safe and sustainable integrated health services for children, young people and adults* London, RCPCH, p94

‡ Carruthers, I (2012) *Innovation Health and Wealth Implementation Plan*.



I 16. Academic doctors need a training structure that is flexible enough to allow them to move in and out of clinical training while meeting the competencies and standards of that training. They must develop broad enough knowledge and skills to allow them to undertake clinical work competently as well as opportunities to specialise in their academic area. Box 8 below sets out some of the issues faced by clinical academic doctors in training.

I 17. To make sure doctors are able to work more flexibly in this pathway, and to encourage more doctors to think about building academic and research into their careers, they should be able to move in and out of academic training at any point in their training.

I 18. Current clinical academic training will fit easily in broad specialty areas as a specific pathway that gives doctors scope to pursue both academic and clinical training. Annex B describes current arrangements for clinical academic training in the four UK countries. Doctors on this pathway would be able to focus their academic training in their academic or research area while also undertaking broad based training. Where possible, they will also deliver general care in their broad specialty area. Time spent in academic experiences will still be counted within training. It will have to be recognised that some of these doctors may occasionally take longer to reach the exit point of postgraduate training, in particular those training in craft specialties such as surgery.

I 19. In exceptional circumstances, a small number of clinical academic doctors should be able to restrict their clinical practice to narrow specialty, special interest or subspecialty areas. However, in these cases, doctors will have less flexibility in their career to move into new specialties or areas of practice.

I 20. This group also accounts for many doctors who decide to take a break from training, often to give them time to consolidate their skills. With a more flexible approach to progression, longer placements and apprenticeships, most doctors should no longer need to be out of programme or leave training.

Recommendation I 4: Appropriate organisations, including postgraduate research and funding bodies, must support a flexible approach to clinical academic training.

A more structured approach to CPD

I 21. We need to foster and encourage a culture of learning throughout doctors' careers. To do this, employers must make sure doctors have access and opportunities to carry out their CPD, including protected time for that learning explicitly agreed in their job plans.

I 22. As part of their professional obligations doctors must keep up to date and maintain their competence in all areas of their practice. Although doctors are personally responsible for their CPD, the GMC expects professional learning to address patient and service needs that are identified through appraisal and job planning. This is set out in *CPD Guidance to all doctors*. It could include learning about research, leadership and management, education or other professional opportunities.

123. As generic capabilities become more explicit in postgraduate training, CPD should be used to maintain and enhance these generic areas, alongside clinical and technical specialty knowledge and skills. Doctors and employers must structure this learning within the *Good medical practice* framework. This structure will give confidence to patients in their doctor. It will also help doctors meet the GMC's requirements for revalidation.

124. The GMC, in conjunction with other organisations, should develop mechanisms to help doctors and employers evaluate possible areas where CPD would benefit their patients or the service. This facilitative role should be evidence based.

Recommendation 15: Appropriate organisations, including employers, must structure (CPD) within a professional framework to meet patient and service needs. This should include mechanisms for all doctors to have access, opportunity and time to carry out the CPD agreed through job planning and appraisal.

125. In our proposed approach to training, some specialty training and all subspecialty training will be acquired through credentialed programmes once doctors have completed their postgraduate training and doctors who are not in a formal training programme. These programmes will be regulated and quality assured. They will have to meet specialty standards and requirements necessary for that credential. Box 9 below discusses some of the pilots recently commissioned by the GMC to look at the feasibility of credentialing*

Box 9: Credentialing pilots

The GMC looked at the feasibility of credentialing through three pilot projects in medical areas where there was no formal specialty recognition leading to a CCT or subspecialty. The three areas were breast disease management, forensic and legal medicine, and musculoskeletal medicine.

The three pilots followed very different approaches, reflecting the different nature of the specialty areas. Each identified challenges specific to their disciplines. In forensic and legal medicine, for example, there were issues relating to the sort of security settings in which doctors practice, which may affect the assessments carried out. The musculoskeletal medicine pilot reported logistical problems arranging appropriate workplace based assessments (WPBA) and highlighted the potential costs of the process. These, however, seem likely to be surmountable problems. More importantly, the pilots have shown, for the specialties involved, the feasibility of developing credentialing using different methods based around the evaluation of an individual's knowledge, skills and performance.

* Details about these pilots are available http://www.gmc-uk.org/04___Credentialing_pilot_studies.pdf_48818844.pdf.

126. Credentialing is defined as a process that formally accredits a doctor attaining competence (including knowledge, skills and performance) in a defined area of practice. They should achieve a level of competence that gives confidence that they are fit to practise in that area with effective clinical governance and appropriate supervision.

127. Employers, along with other relevant organisations such as medical royal colleges, will develop these qualifications to meet local requirements, but also within a UK-wide framework, to allow the qualification to be transferred between employers. There must also be clear oversight of the medical workforce and its training needs to make sure there are enough appropriately trained and credentialed specialists to meet patient and workforce needs. Credentialed programmes will encourage flexibility by allowing doctors to enhance their careers in specific specialty areas. It also encourages cross-specialty development.

Recommendation 16: Appropriate organisations, including employers, should develop credentialed programmes for some specialty and all subspecialty training, which will be approved, regulated and quality assured by the GMC.

Staff grade Associate Specialist doctors and locum doctors

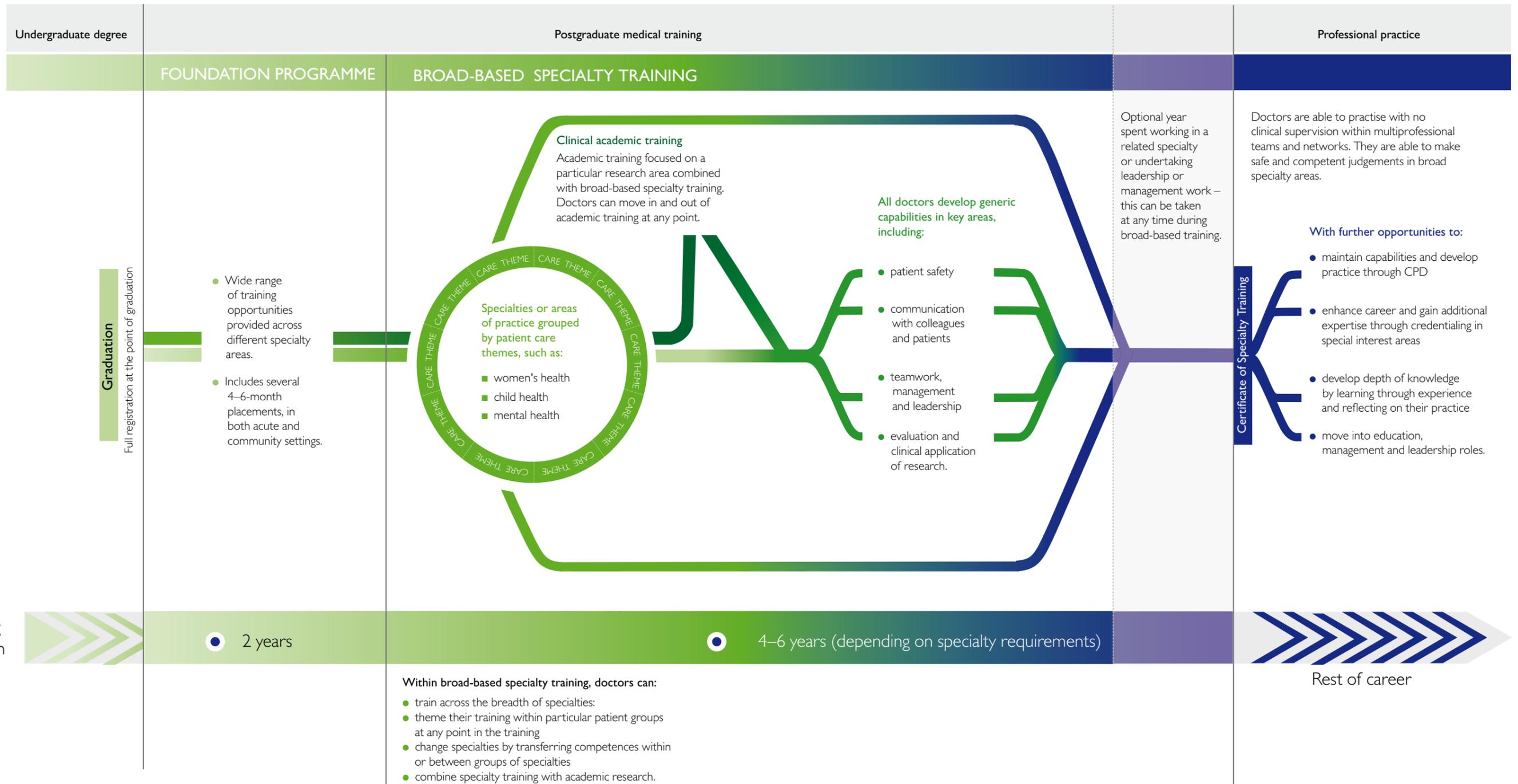
128. About 20% of the medical workforce is made up of doctors who are not in training or on the GP or Specialist Register. These doctors range from some who are only safe to work in supervised situations to highly trained and specialised doctors. There are many reasons why doctors work in these roles, for instance, they may not have met the requirements for entry onto the GP or Specialist Register, or they may have decided to work in staff or trust level jobs for a better work/life balance.

129. Many of these doctors should be supported and supervised at the level appropriate for their competence and skills similar to doctors in training. They should also be offered opportunities to enter or return to training throughout their careers. They should also be given access to credentialed training.

130. Credentialing will give opportunities to SAS doctors to further develop in their specialty or move into other practice areas.

131. There will continue to be a need for an equivalence route onto the appropriate registers.

Recommendation 17: Appropriate organisations should review barriers faced by doctors outside of training who want to enter a formal training programme or access credentialed programmes.



Reforms to postgraduate medical education and training

132. So far we have discussed the current state of postgraduate training and possible implications for a new structure based on the themes set out in the Terms of Reference. Many of the issues also cut across themes, and brought together, shape how training should change over the next 30 years.

Characteristics of a new structure of training

133. Regardless of how training is reformed, the system must incorporate certain characteristics and achieve certain objectives for doctors to meet the needs of patients and the service in the coming decades. Box 10 sets out some guiding principles for the reform of postgraduate medical education and training.

Box 10: Principles for changes to postgraduate medical education and training

- The overarching objective of the system of medical education and training must be to equip doctors, and to instil in them the professionalism needed to deliver safe and high quality care that will meet the future needs of patients and the service.
- Any new model of training must be designed to deliver this objective through the minimum structural change necessary.
- Education and training should be based on the demonstration of capabilities, not simply time served, although time and experience remain important elements.
- Any new model of training must incorporate the elements of flexibility which acknowledge the uncertainties of future healthcare and workforce needs and the aspirations of doctors in training.
- The outcomes of training must provide transparency for patients, the public and the service about the levels of capability doctors have attained.
- The principles for implementation of any new model should enable the existing workforce to be incorporated into the new system so as to avoid coexistence of parallel systems.

New approach to postgraduate training

134. Postgraduate training should be changed to deliver broad based specialty training. The narrative and model below describe our recommended way to take this forward.

- Doctors will complete medical school after four to six years and enter the Foundation Programme.
- Full registration will happen at the point of graduation. Rigorous and consistent measures will need to be put in place to make sure graduates are fit to work as fully registered doctors. They will also be restricted to working in approved training environments.
- Doctors will complete the two-year Foundation Programme. The Foundation Programme will continue to give a wide range of training opportunities in different specialty areas. Doctors must have placements in both hospital and community settings. Each placement should aim to be between four to six months long. Doctors must have opportunities to support and follow patients through their entire care pathway during medical school and the Foundation Programme.
- After the Foundation Programme, doctors will enter broad based specialty training. Specialties or areas of practice will be grouped together. These groupings will be characterised by patient care themes – such as women's health, child health and mental health – and be defined by the dynamic and interconnected relationships between the specialties. They will have common clinical objectives, within those specialty curricula. There should be consideration about how these themes bridge the boundary between hospital and community care.
- Across all specialty training, doctors will develop generic capabilities that will make sure professionalism is embedded into their medical practice. With more personalised evaluation and assessment linked to progression, training will be less driven by the need to meet lists of competencies, described as 'box-ticking exercises'.
- Broad based specialty training will last between four to six years, after the Foundation Programme, depending on specialty requirements (and individual's progress through curricula). For example, GPs will probably need at least four years of training to meet their outcomes and enter professional practice. Other general specialties (like anaesthesia) and craft specialties may need longer to develop the necessary technical knowledge, skills and experiences (within the timeframe of between four and six years). The specific duration of training for different specialties will have to be developed by the UK-wide Delivery Group.

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- During postgraduate training of between four and six years, doctors should be given opportunities to spend up to a year working in a related specialty or undertaking education or management work (similar to specialty fellowships). This year, which can be taken at any time during training, will allow them to gain wider experiences that will help them become more rounded professionals. Doctors will be able to train across the breadth of a broad based specialty. But they will be able to theme their training within patient groups at any point in the training. During training, doctors will provide general care in their broad specialty in both hospitals and in the community.
 - When doctors want to change specialties either in or between specialty groups, they will be able to transfer relevant competencies they have acquired in one specialty to their new area of practice without having to repeat the same learning in the new specialty. This will include learning gained during the optional year and generic capabilities. By recognising previous learning and experiences, retraining in new areas should be shorter.
 - Nationally funded clinical academic training will be a flexible training pathway. Doctors on this pathway will be able to focus their academic training in their academic or research area while also undertaking broad based training. Where possible, they will also deliver general care. Time spent in academic experiences will still be counted within training, but some of these doctors may occasionally take longer to reach the exit point of postgraduate training, particularly those training in craft specialties. The optional year could also be dedicated to research. In addition, most doctors on the academic pathway are likely to need further time to complete doctoral research (PhD) studies. In exceptional circumstances, clinical academic doctors may be able to restrict their clinical practice to a narrow specialty, special interest or subspecialty areas. To make sure doctors are able to work more flexibly in this pathway, and to encourage more doctors to think about building academic and research into their careers, they will have opportunities to move in and out of academic training at any point during their training.

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- The exit point of postgraduate training will be the Certificate of Specialty Training. It marks the point when doctors are able to practise within their identified scope of practice with no clinical supervision while working in multi-professional teams. This means they must be able to make safe clinical and professional judgements.
 - Most doctors will work in the general area of their broad specialty based on patient and workforce needs throughout their careers. They will be expected to maintain and develop their scope of practice and generic capabilities through CPD, and meet the requirements of revalidation. Learning and reflecting on their practice and patient outcomes will help to give doctors the depth of knowledge and skills necessary to master their specialty area. Doctors will also have options at any point in their careers to develop their education, management and leadership roles.
 - Doctors may want to enhance their career by gaining expertise in areas equivalent to some special interest areas in a specialty, and subspecialty training through formal and quality assured training programmes leading to a credential in that area (credentialing). These programmes would be driven by patient and workforce needs, and may be commissioned by employers as well as current postgraduate education organisers. These areas would need to be approved and quality assured by the GMC to ensure appropriate standards and portability.

Recommendation 18: Appropriate organisations should put in place broad based specialty training (described in the model).

Delivery of recommendations

135. The departments of health working with the relevant and appropriate organisations are responsible for leading in delivering the recommendations set out in this report. A UK-wide Delivery Group should be set up immediately with representation from the Sponsoring Board organisations (including the Academy of Medical Royal Colleges), the four UK departments of health, employers and other key professional and patient groups.

136. Due to the time constraints of this review, we were not able to evaluate funding arrangements or undertake an economic evaluation of the recommendations. The UK-wide Delivery Group will have to consider the value for money and cost implications for the new structure in the long term.

Outline of Delivery plan

Change needed	Possible timescale
Formation of UK-wide Delivery Group to coordinate and oversee changes; Evaluate value for money of changes.	Immediately
Clarify and agree position of specialties in broad based, patient centred training programmes, how patient care themes fit within the structure and how specialties may be grouped together; this must include specialty input and feedback.	Immediately
Review curricula to determine: timing for transition to broad based training for specialties; moving to a more competence based structure in the timeframe of a training programme, generic capabilities, areas for credentialing and how to ensure sufficient skills and experiences are obtained by the end of Certificate of Specialist Training, and how curricula should be quality assured and regulated.	Immediately
Make regulatory changes necessary for the Certificate of Specialty Training and review the GP and Specialist Register.	Immediately
Review educational, legal and regulatory requirements to move Full registration to the end of medical school.	Immediately
Review assessment and progression to meet the requirements of broad specialty training.	Immediately
Review how to quality assure training environments and limit where training can be delivered	Immediately
Consider how to develop career advice and outreach to secondary schools around medical careers.	Immediately
Develop mechanisms for transition to a broad based model of training including piloting and opportunities for early adopters.	Immediately
Develop approach to credentialing including framework and begin piloting credentialed areas; introduce transitional arrangements.	Immediately
Shift all curricula towards broad based training within patient care themes and put in place necessary requirements for the new training structure based on broad based training.	2–5 years
Fully implement generic capabilities within curricula.	2–5 years
Legally award Certificate of Specialist Training which recognises that doctors are able to make safe judgements and to practise safely in clinical teams.	2–5 years
Demonstrate that effective processes are in place to assure the GMC that students are capable of working safely in a clinical role on graduation.	2–5 years
Doctors will have longer placements and different supervision arrangements.	2–5 years
Put in place a structure of local and regional arrangements to support specialty training and credentialing including agreements on funding and release from work.	2–5 years
Demonstrate in a measurable way that training is meeting patient and service needs. Have a systematic way of managing medical workforce numbers.	5–10 years and beyond

Recommendation 19: There should be immediate discussion about setting up a UK-wide Delivery Group to take forward the recommendations in this report and to identify which organisations should lead on specific actions.



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