Draft Version 24 July 2013

SHAPE OF TRAINING

The Shape of Training Review

Forward

Executive summary

What was the purpose of the review?

1. The UK is faced with an aging population, more people with increasingly complicated and chronic health conditions, service reconfigurations, rising patient expectations and changes to the medical and healthcare workforce. Moreover, rapid changes in technology in general and ICT in particular are likely to change healthcare delivery. In future doctors will have to work quite differently than they do now if they are to continue to meet these challenges. Good medical education and training are fundamental to making sure doctors are able to adapt to these uncertainties and to ensuring good medical practice.

2. There is much to be positive about in UK medical education and training. Nearly 81% of doctors in the General Medical Council National Training Survey 2013 were satisfied overall with the quality of their training.[1] Recent years have seen significant developments in UK medical education and training following recommendations made in a number of previous reviews. But those reports also pointed to the pressing need for further reform if education and training is to support society's rapidly changing needs.

3. The purpose of the Shape of Training review is to ensure we continue over the next 30 years to train doctors who are fit to practise in the UK, able to meet patient and service needs and provide safe and high quality care. That means at its core, this review is looking at how people will be cared for and want to be cared for in the future and how medical training should be designed to meet those needs. As a patient said to us in oral evidence: '*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*'.

[1] General Medical Council National Training Survey 2013 - http://www.gmc-uk.org/National_training_survey_key_findings_report_2013.pdf_52299037.pdf

4. In considering these issues our remit has been to focus on postgraduate medical education and training across the UK. However, to fulfill this brief it has also been necessary to look at the pipeline of supply into postgraduate training provided by undergraduate education and the Foundation Programme.

What was learned from previous education and training reviews?

5. Over the last decade, there have been no less than six major inquiries considering aspects of the structure, function and effectiveness of medical education and training within the UK. The reviews, as a whole, concluded that the current system is slow to adapt to the changing needs of patients and the service. The training structure limits opportunities for doctors to change specialities, develop skill areas outside of specialty expertise or move in and out of training. Many of their recommendations continue to be relevant to the Shape of Training review.

6. In 2007, the independent inquiry into Modernising Medical Careers, led by Sir John Tooke, called for a more flexible and broad based approach to training, integrating both training and service objectives into workforce planning. [2] It also raised profound issues about the role of doctors in training, Staff, Associate Specialists and Specialty (SAS) doctors and consultants within the service and the implications of the Certificate of Completion of Training (CCT) on training and practice. It recommended more clarity and a shared understanding of the role of all doctors within the multi-professional team, including the contribution to service delivery by doctors in training.

7. Following on from Tooke, other inquiries highlighted the need to develop the current structure of postgraduate medical training so it continues to provide consistent, high quality and fit for purpose training for doctors throughout the UK.[3] They too pointed to the need for more flexibility in order to equip doctors to respond better to the changing needs of patients and the service.

8. [implications of Future Forum?]

What are the main issues and themes of the review?

9. The Terms of Reference of the review covered five key themes:

- Patient needs
- Workforce needs: Specialists or generalists
- Breadth and scope of training

[2] Aspiring To Excellence: Final Report of the Independent Inquiry into Modernising Medical Careers, led by Sir John Tooke, January 2008, http://www.mmcinquiry.org.uk/Final_8_Jan_08_MMC_all.pdf

[3] High quality care for all: NHS next stage review final report, Professor Lord Darzi, June 2008; Foundation for Excellence: An evaluation of the Foundation Programme, Professor Jon Collins, October 2010; Scottish Foundation Programme Review Report, Dr Alistair Cook, November 2010;Time for Change: A review of the impact of the European Working Time Directive on the quality of training, Professor Sir John Temple, May 2010.

- Training and service needs
- Flexibility of training

10. These were based on findings from previous inquiries and work by Medical Education England (now Health Education England). The themes are discussed at section XX:

11. We also looked at other challenges to medical education and training in the course of the review, including medical students' career expectations, implications for transition from the Foundation Programme into specialty training, career development post CCT and sustaining the clinical academic pathway.

Review Governance

How the Review was structured

12. The Review was launched through an agreement between Medical Education England (MEE) – now Health Education England (HEE), the Academy of Medical Royal Colleges (AoMRC), the General Medical Council (GMC), the Medical Schools Council (MSC), Conference of Postgraduate Medical Deans of the UK (COPMeD), NHS Education Scotland (NES), the Northern Ireland Medical and Dental Training Agency (NIMDTA) and NHS Wales.

13. Collectively these organisations encompass the key stakeholders. They form the Sponsoring Board whose role was to set the strategic direction including setting the scope, timelines and outputs of the review.

14. Professor David Greenaway, Vice-Chancellor of Nottingham University, was appointed by the Sponsoring Board to lead this independent review. He put together 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 organisation. Membership is set out in Appendix X.

15. The terms of reference for the review have further information about the way it was governed. You can read them on the Shape of Training website: http://www.shapeoftraining.co.uk/static/documents/content/SHoT_Terms_of_Reference_22_March_2012_1_0.pdf_49242585.pdf

Methodology

How evidence for the review was collected

16. We engaged with over XXX individuals and organisations in England, Northern Ireland, Scotland and Wales to gather evidence and ideas about postgraduate training and how we might improve on the current structure. Our

engagement activities included web and e-updates, nine visits to sites where training takes place, five large seminars, seven workshops and more than 50 meetings.

17. We also held a public call for ideas and evidence from 8 November 2012 to 8 February 2013, which was open to anyone and advertised widely through the Sponsoring Board organisations' communication mechanisms. For example the GMC placed a piece about the call for ideas and evidence in its e-newsletter for doctors with a circulation of XXX and within its education update with a circulation of XXX. We received over 380 responses to this written call for ideas and evidence.

18. We also gathered evidence through 40 oral evidence sessions with experts in medical education and training including doctors in training, key thought leaders and researchers, government bodies and patient groups.

19. These engagement activities formed one of the main evidence streams for the review. They were opportunities for interested individuals and organisations to tell us about their ideas, opinions and experiences through a consultative process. They were not intended to provide research data. The responses weren't weighted or quantified but we recognise that some organisational responses represented a large number of individuals. The information from these activities helped us gather a range of views and ideas as well as identify trends and any particular patterns in the responses, especially if they showed consensus or differences between groups.

20. Across all these activities, respondent numbers (combining organisations and individuals) were:

Employers/ LETB	**370**
Doctors in Training	**112**
Patients	**41**
Trainers	**91**
GPs	**43**
Medical Students	**17**
Academics	**30**
Government	**16**
SAS doctors	**105**
Bodies/people related to medical education	**621**
Bodies representing doctors	**34**
Healthcare staff	**12**
Other	**4**
TOTAL	**1496**

21. Alongside these consultative processes, we commissioned work to test the various assumptions within the review, including:

a. A literature review to evaluate research and other literature about postgraduate medical education and training based on the review's themes.

b. A forecasting and modelling exercise to develop scenarios, quantitative data and a Delphi exercise to build consensus about the drivers of change.

c. An economic analysis of recommendations to consider the value and effectiveness of the proposed approach to training.

22. Detailed analysis of these data streams is available at http://www.shapeoftraining.co.uk/reviewsofar/1783.asp

Drivers of change

23. We considered this review against the backdrop of rapidly changing medical and scientific advances, evolving healthcare and population needs, changes to healthcare systems, the information and communications technology (ICT) revolution and ever changing patient and public expectations. Doctors' roles and responsibilities will change to accommodate new technologies, systems and professions and so we looked at how this needed to be reflected in doctors' training.

Changing population demographics

24. [Explanation of quantitative data and how this might impact on care in the future. This section will refer to the assumptions tested in the scenarios and Delphi exercise. And links to other sources and evidence from literature review, call for ideas and oral evidence.]

25. As with many other reports, we think the UK population will become increasing elderly and frail as well as continue to be affected by lifestyle diseases. More people will need to manage one or more health conditions, requiring more complex treatment and care. For example:

a. According to the King's Fund, the combination of increasing life expectancy and the ageing baby boomers means the population aged over 65 is growing at a much faster rate than those under 65. By 2030, the population aged 65-84 will rise by 39%, those over 85 by 106% and the number of older people with care needs is expected to rise by more than 60%. [4]

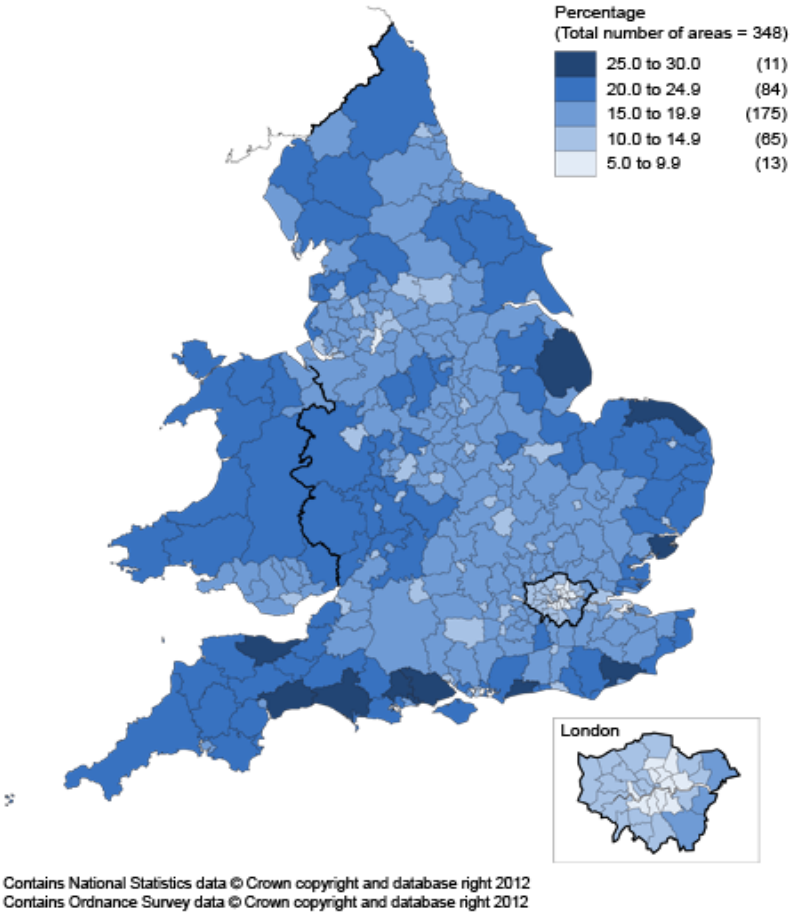
[4] The King's Fund analysis of Office for National Statistics 2010-based National Population Projections

b. The Department of Health (England) suggests the number of people with three or more long-term conditions is predicted to rise from 1.9 million in 2008 to 2.9 million in 2018.[5] Research indicates the number of conditions can be a greater determinant of a patient's use of health service resources than the specific diseases.[6]

26. These trends suggest we will need different kinds of doctors working in different ways in the future.

Current population demographics

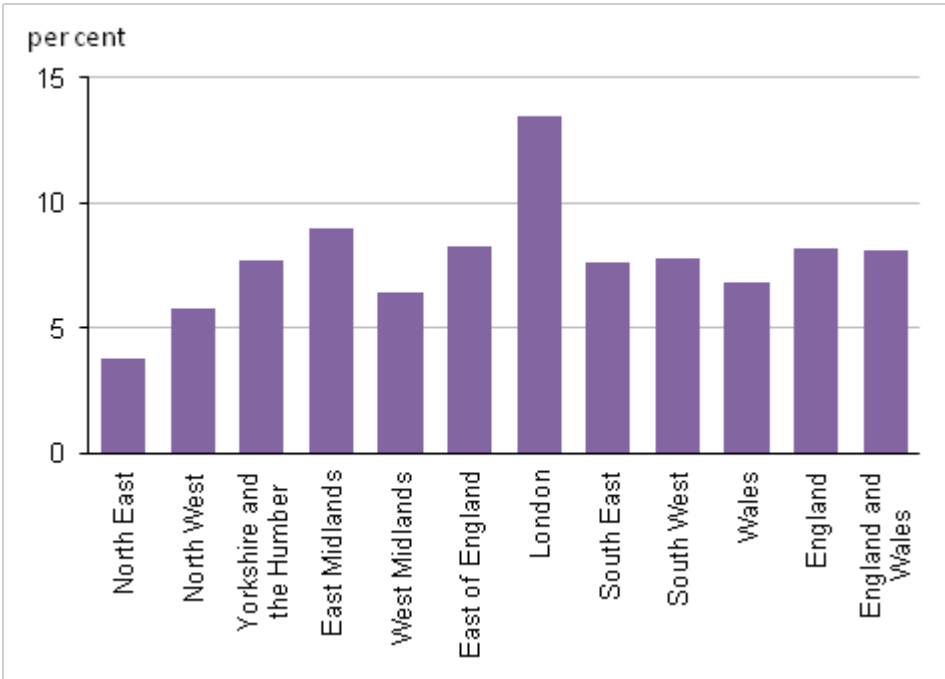
Population aged 65 and over, 2011



Population change in number of residents aged 0 to 14, 2001 - 2011, Wales, English regions

[5] Department of Health (2012). Report. Long-term conditions compendium of Information: 3rd edition
[6] Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B (2012). Research paper. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study The Lancet online

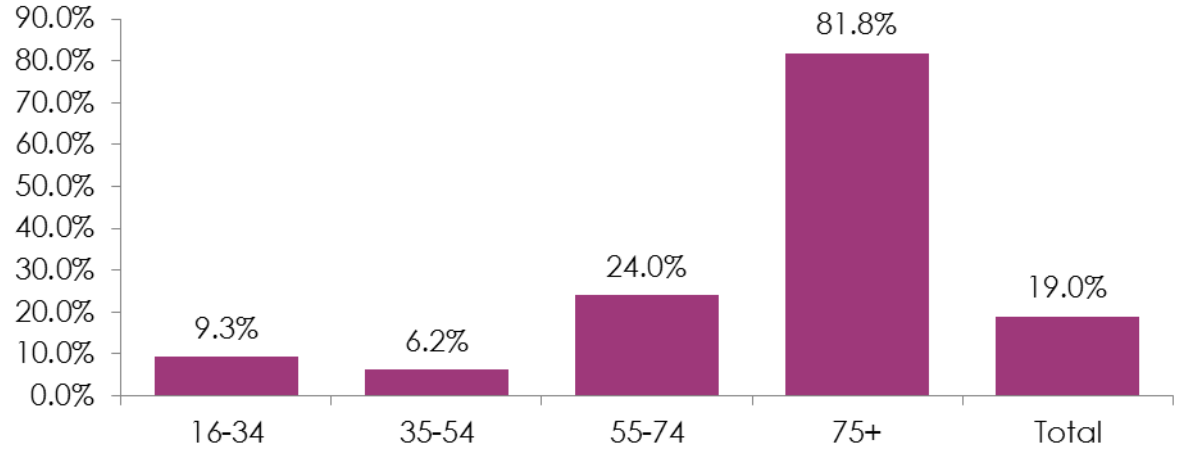
Population change in number of residents aged 15 to 64, 2001 - 2011, England Regions, Wales



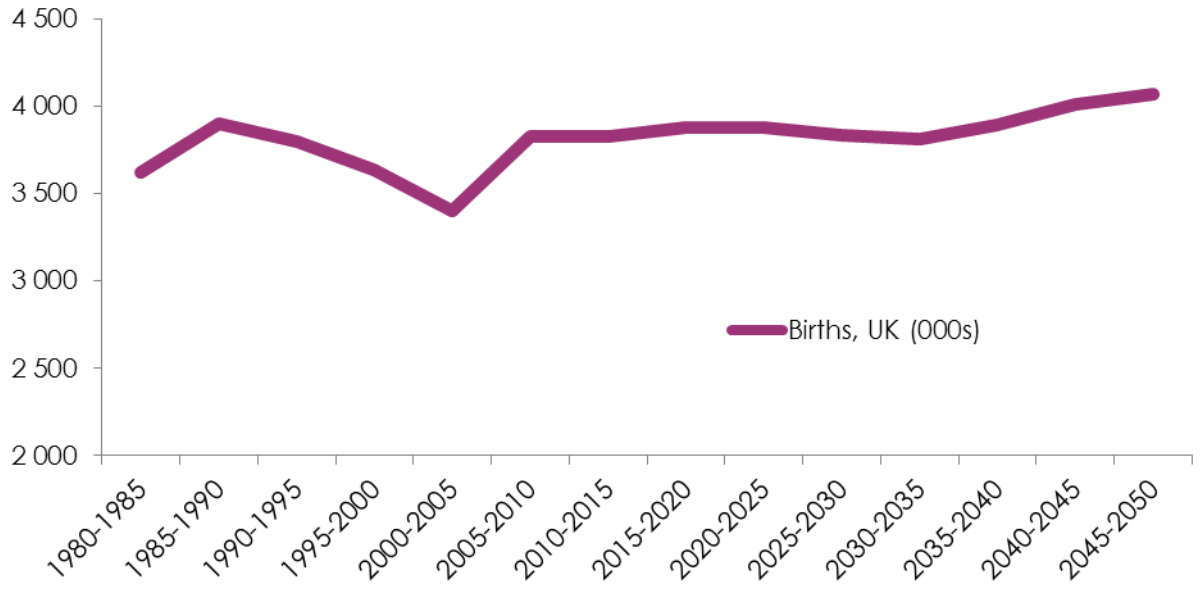
[Scotland and NI population data to be added; ethnicity data]

Forecast for how the population is expected to change over next 30 years

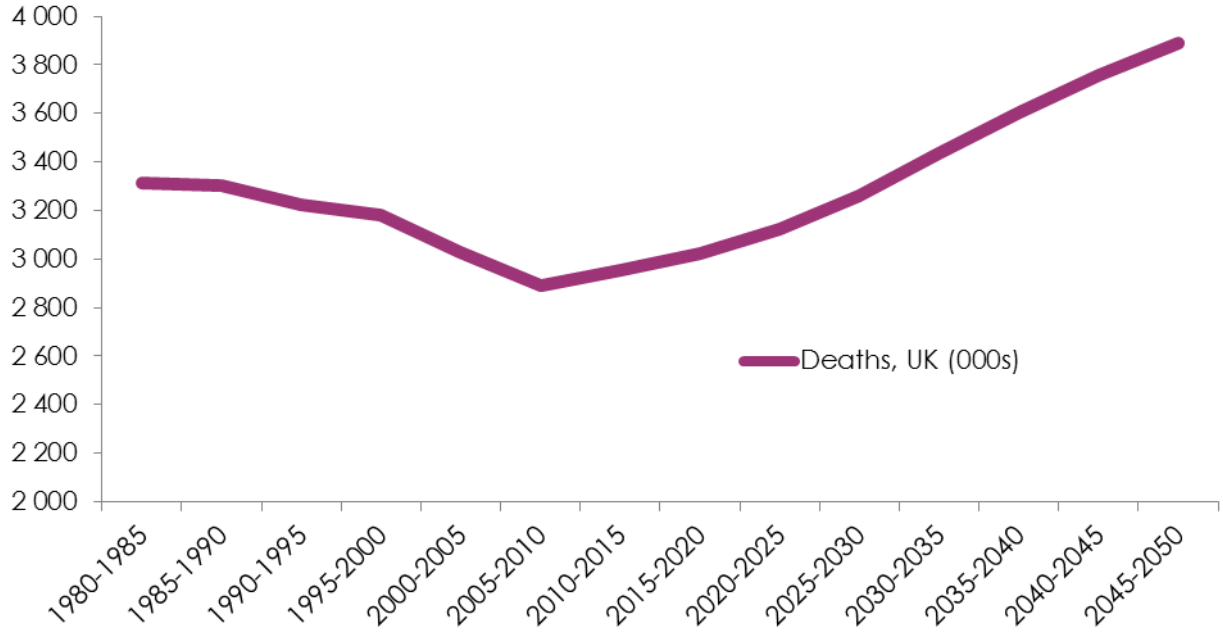
Change in size of population, by age group (2010-2035)



Number of births, 1980-2050 (000s)



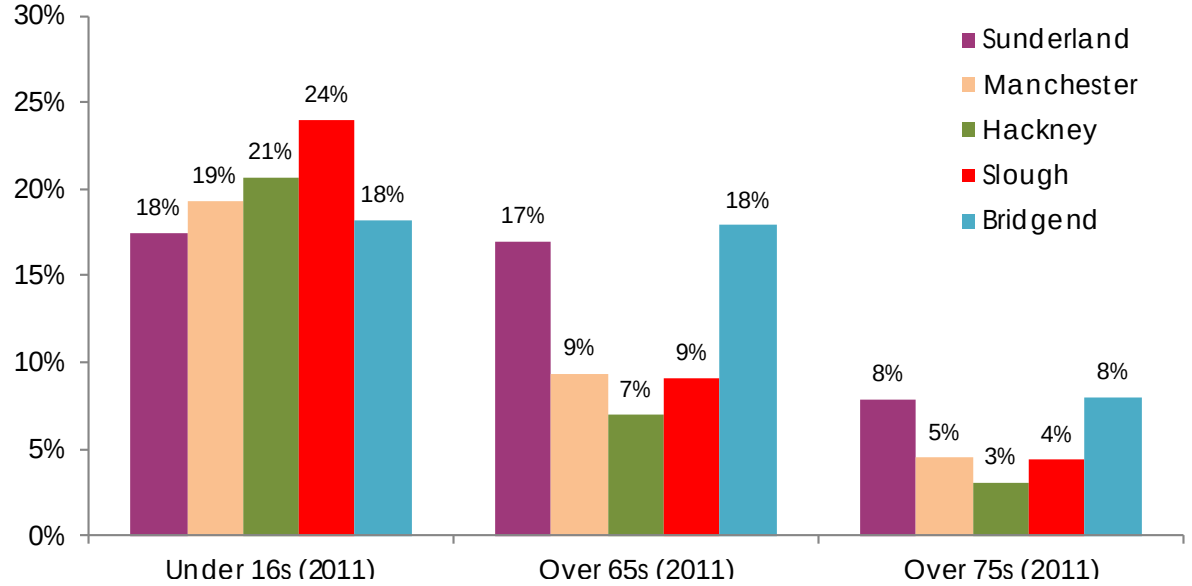
Number of deaths, 1980-2050 (000s)



27. The data below explores some of the regional variations that are currently present in different locations in England and Wales. The chart below reveals the sharp contrasts that appear in different areas in terms of age structure. Places such as Slough and Hackney have a high proportion of younger people – who have one set of healthcare needs – and a low proportion of older people. In contrast, areas such as Bridgend and Sunderland have a much higher proportion of older people – whose healthcare needs are very different.

28. [what this might mean for future training and where this is explored later in report]

Proportion of local authority in each age group, 2011 (%)



Source: Census 2011

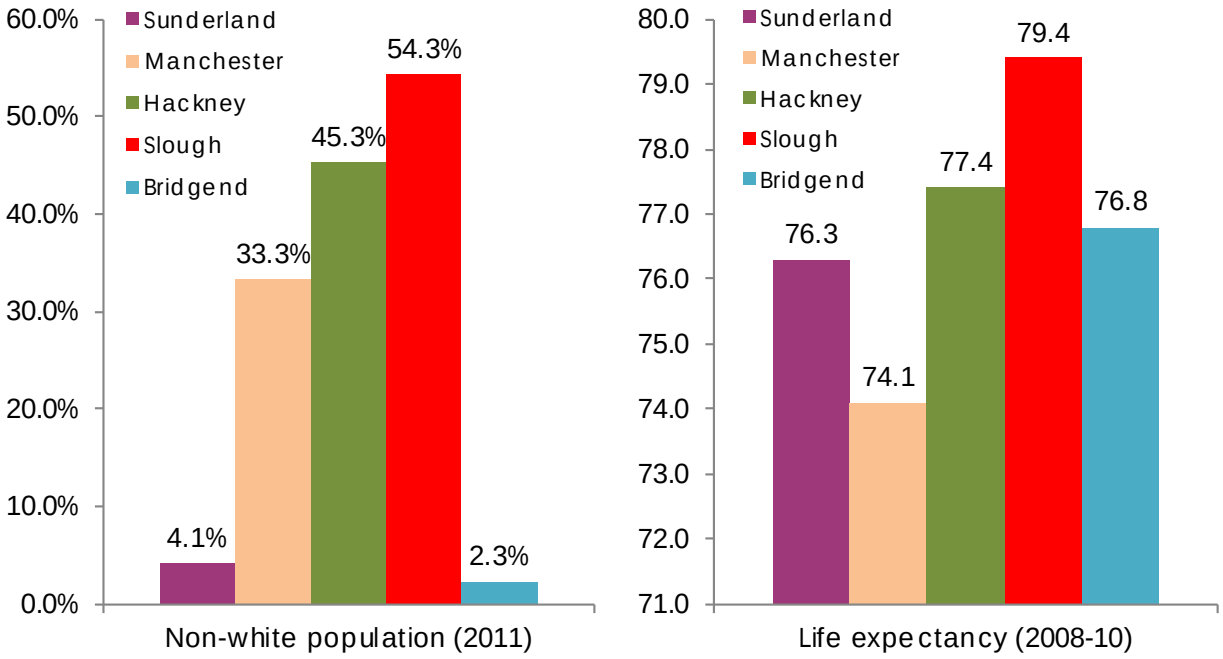
29. [Research on effects of deprivation on health outcomes and indication for kinds of doctors eg better outreach and prevention]

Source: ONS Labour Market Statistics, June 2013

30. Ethnic diversity varies sharply across the country, affecting demands on doctors in terms of illness prevalence (for certain diseases) and service delivery. In Manchester, Hackney and Slough the proportion of non-white residents dwarfs the proportion in Bridgend or Sunderland. There are also considerable variations in life expectancy at birth; residents in Slough can expect to live over five years longer than those in Manchester.

31. [Work on impact of ethnically diverse population on access and healthcare needs. Link to research on widening access and improved health outcomes for some populations]

Proportion of non-white population, 2011 (%) and life expectancy at birth



(2008-10) Source: Census 2011 / ONS 2008-2010

Changing health in the UK

32. [changing health needs with more frail, elderly living longer and people with multimorbidities; with increase in elderly in some areas and more children in others, implication for kinds of doctors and service delivery;

33. [Vignettes and comments by patients; doctors; others about their current perceptions of their care and where it could be improved]

34. The chart below indicates perceptions of general health. Most people consider themselves to be in relatively good health. Places where there are higher levels of perceived poor health tend to align with areas with a higher elderly population or where there is social deprivation.

35. [more detail about health of population]

36. In a large scale survey by the Office of National Statistics (ONS) about people's satisfaction with health, about 66% of respondents aged 16 and over reported that they were satisfied with their health in 2010–11. As people aged, their satisfaction in their health dipped downwards. But there was a slight increase in satisfaction around the time of retirement. Health satisfaction declined notably after the age of 69. About half (53%) of those aged 80 and over said they were happy with their health. About 77% of men were satisfied compared to 73% of women in the 16 to 24 age group. In the 80 and over age group 57% of men were satisfied with their health compared to 50% of women.

37. The survey also found that roughly 18% of people suggested they suffered from anxiety and depression.

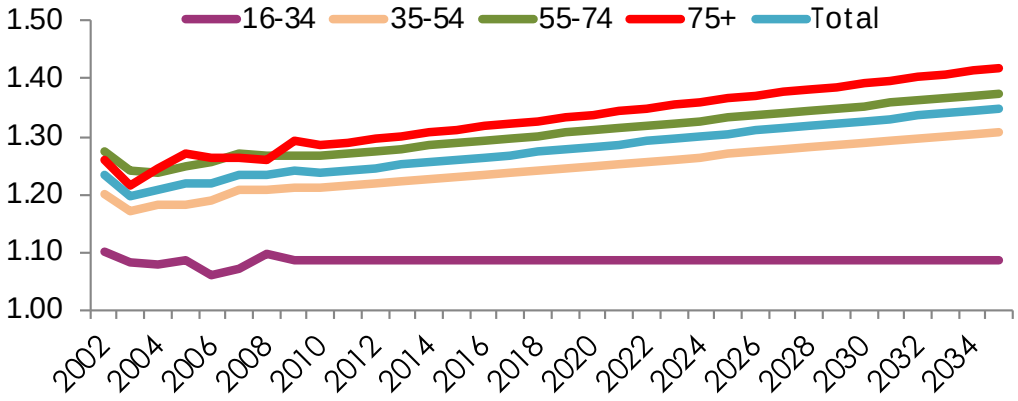
Forecast for health over the next 30 years

38. [Purpose of forecasts, what it can tell us and the limits; side box with scenario to help illustrate uncertainty of future and need for flexibility]

39. One of the major challenges facing doctors over the next 30 years is the anticipated rise in the number of people who have more than one health condition.

40. The chart below examines the growth in the comorbidity ratio (the number of illnesses per person with at least one of heart disease, cancer, diabetes and depression/anxiety have) based on the trends since 2002.

Illnesses per person with at least one of cancer, heart disease, depression or diabetes, by age

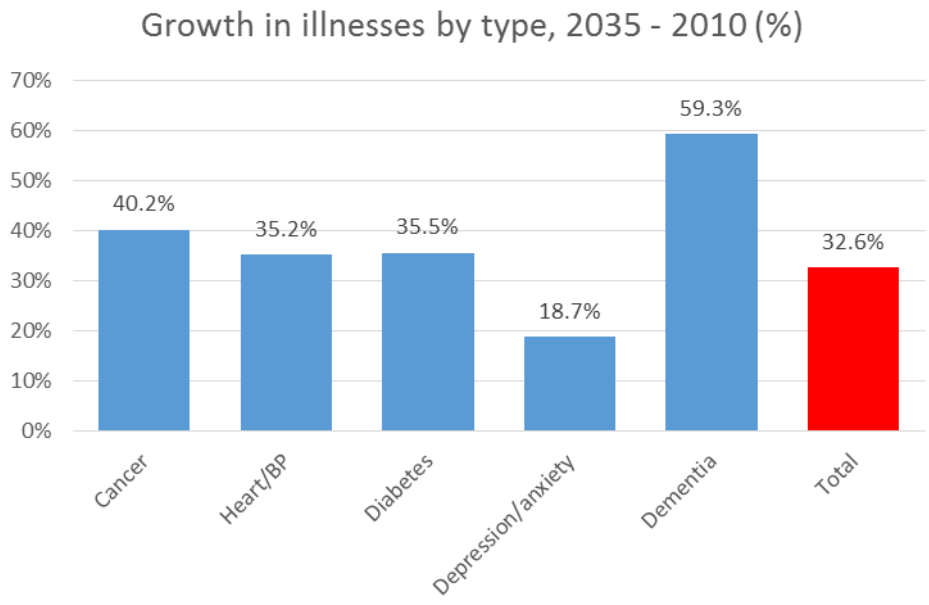


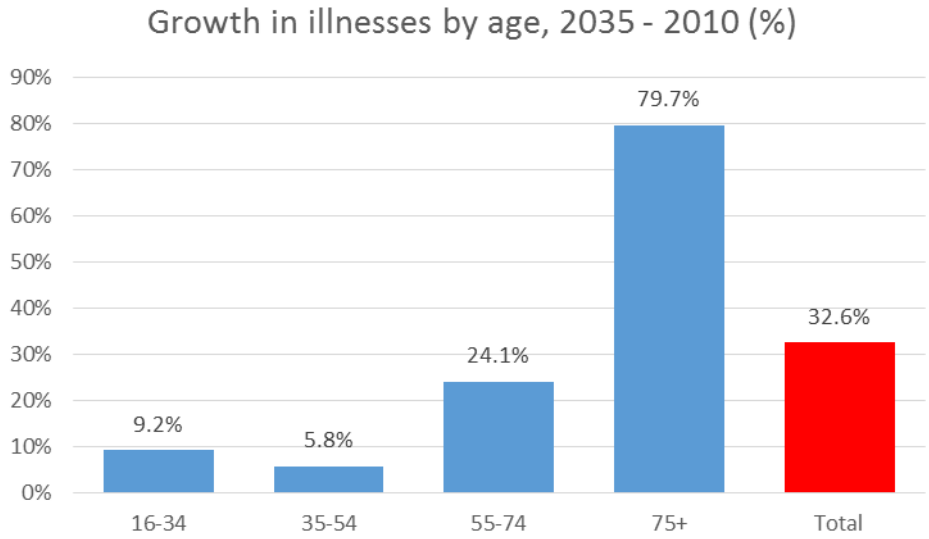
Source: British Household Panel Survey/Trajectory

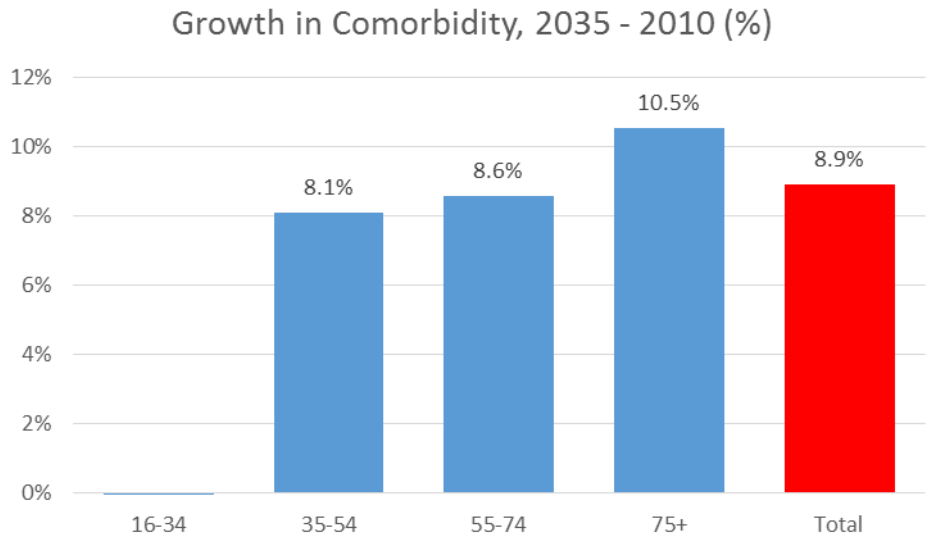
41. These forecasts for comorbidities reveal a consistent rise for all age groups, with the exception of the 16-34s, where the rate is flat. For the oldest group, the comorbidity ratio will rise from 1.28 in 2010 to 1.42 in 2035.

42. The following charts assume an incidence rate at average level based on 2010 to 2013 changes. You can look at different forecasts and scenarios at [weblink].

43. [Need to explain and link each chart and set out why it is significant for review]







[INSERT Scotland and NI data where possible]

44. [Refer to Scotland long term health plan]

Patient identified need and expectations

45. Alongside changing patient demographics, what people expect from doctors and the healthcare service is changing. [Evidence from King's fund report; literature review;]

46. Patient expectations and the future health needs of a population that is living longer but with more long-term disease and co-morbidities will require a system that can provide care within different environments and in different ways. The United Nations and World Bank recommend more attention should be given to strengthening primary healthcare, increasing preventative medicine, along with palliative and long-term care[7]. These trends will change the kind of care needed by patients.

47. People want a healthcare system that mirrors their understanding and experiences of their conditions. Barriers between primary and secondary care result too often in people being bumped around the system.. Patients and carers need a more integrated, holistic and multi disciplinary approach with communication, caring and professionalism at its heart. The Patient Liaison Group for the Royal College of Surgeons confirmed this in their written response to our call for evidence and ideas: '*Patients are not interested in the lines of demarcation between professionals, such as the boundaries between primary and secondary care, health and social care. What they want are integrated healthcare teams that can meet all their health and social care needs effectively without letting something slip through the cracks*.'

48. Our literature review found that 'patient centred, patient involved and patient engaged practices are on a continuum and that increased patient involvement, engagement and patient centred- ness are to be strived for in all healthcare settings'.[8] Indeed work by the Health Foundation suggests patients must be involved in quality, safety and care evaluation, clinical decision making and service development and through being enabled to increase their health literacy and self care.[9] This is important for a number of reasons including growing evidence that subjective experience can impact on outcomes and the expectation that patients take responsibility for their own health.

49. [Implication for training]

50. Primary care / secondary care boundaries and integrated healthcare – King's Fund; Nuffield workshop; literature review esp integration paper;

51. Treat near home and willing to travel for specialist care. But evidence pointing towards patients increasingly want to see specialists with more and more demand for direct access to specialists.

Information and Communication technology

52. [Move towards more innovative use of technology especially telemedicine. Use case example to illustrate point.]

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[7] UN Summit on Non-Communicable Diseases July 2011 http://www.un.org/ga/search/view_doc.asp?symbol=A/66/83&Lang=E

[8] Oates, J. Shape of Training literature review, Paper 4: Patient expectations. May 2013.

[9] Christmas and Milward, New medical professionalism: A scoping study for the Health Foundation. October 2011.

Medical and scientific advances

53. [Discussion of potential impact of big changes eg genomics; link between patient expectation and advances; evidence from Call for ideas and evidence; importance of all doctors understanding research and how to apply it if necessary]

Demand side assumptions

54. [Summary of drivers and assumption about kind of healthcare needed in future to meet these needs; refer to Delphi exercise and CFIE, King's Fund report]

55. [What do these drivers mean for training in the future]

What kind of doctors do we need to train to meet future demands?

56. [This section will test these assumptions against evidence/information that we have gathered from key groups and how this will impact on training; need to pull through written/oral evidence and literature review]

Patient perspective

57. Patient expectations will change depending on service they have

58. Expand on what patients want in future – literature review eg communication, integrated healthcare, involvement

59. With more focus on patients identifying their own care needs and expecting to be included in care decisions, doctors will have to work differently. They will have to work more and more within multi professional teams and within increasingly complex organisations and systems. National Voice in their oral evidence describe it as '*a different picture is one where that doctor is working with and trusting other people in a multi disciplinary team and … the expertise that others might bring to that picture is valued, sought and respected*.' This was reiterated and supported by the National Dignity Council in their written response: '*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 with patients and be prepared to treat all members of the team with respect and dignity*.'

60. Evidence is also pointing towards the need for a kind of doctor that can take a more holistic and broader role in caring for patients. Barnett et al. sums it up nicely by a call for medical education and practice to produce '*generalist clinicians to provide personalised, comprehensive continuity of care, especially in socioeconomically deprived areas*.'[10]. The Patient Liaison Group of the Royal College of Surgeons in their written response to us also highlighted that '*As patients*

[10] Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B (2012). Research paper. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study The Lancet online

our interest lies in seeing healthcare practitioners who understand that we are a whole person not a collection of parts to be looked at in turn by different professionals. This means that while healthcare practitioners might specialise in one area they retain / develop the ability to see that area within the whole and take responsibility for coordinating their actions with those of others in the healthcare team'.

61. But MenCap warned that a move towards training doctors more generally would also require more emphasis on the wider team to make sure patients receive specialist care when necessary: '*steps [should be] taken to ensure that a move towards a more general approach to training does not result in trainees being unaware of the specialist care needs of people with a learning disability and other vulnerable groups and therefore less equipped to meet their needs …As part of this, doctors should establish a stronger working relationship with colleagues in social care to ensure that nobody slips through the gaps'.* Rather the National Association of Patient Participation in their written response thought doctors and in particular GPs '*need to be signposting patients for the appropriate treatment which may not necessarily be medical*.'

What does this mean for postgraduate medical education and training?

62. According to our literature review, there is no research looking specifically at whether current postgraduate medical education prepares doctors for working with patients and the public in the way that will increasingly be expected. But work by the Health Foundation and others show that patient involvement is crucial to improving health outcomes and to help patients take care of themselves.

63. Some studies show doctors struggle to implement the patient centred learning from medical school into their clinical practice. A lack of support and learning opportunities with supervisors, coupled with more administrative work are blamed by doctors in training for failing to involve patients in their own care. This trend suggests that if we want doctors to work in partnership with patients, we need to strengthen how they are supervised and supported in training. The Patient Liaison Group for the Royal College of Surgeons made this point in their written evidence: '*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 as well as being allowed to focus on those areas of care for which they are being specifically trained.'*

64. A number of respondents emphasised the need to use patients in educating and training doctors, with patients taking on increasingly proactive roles including teaching and giving feedback. For example, Mencap suggests '*training of doctors would benefit from being delivered by patients'* while the National Dignity Council recommend '*Patients ought not only help students take histories and observe physical signs but also inform medical students and doctors in training how it is and was for them as a patient*.'

65. But our literature review shows there is little understanding of doctors' career pathways by patients and members of the public. Patients are often not aware of the expertise and seniority of who is treating them. Respondents to the review have made it clear patients should, and want to, know who is taking care of them. In both their written and oral evidence, the National Association of Patient Participation emphasise that patients must be told in advance that they may be treated by doctors in training and that they have an option to ask for a different doctor. But they suggested patients would support doctors' training, provided they are informed about the level of supervision: '*many patients are unaware of the roles of doctors at various points in their career. It is important that clinical staff introduce themselves at all times to patients and inform them of their designation. it is important to have sufficient supervision and support/mentoring and trainees should not be left unsupervised*'. By clarifying the level of competence for doctors at different points in their career, we may be able to reassure patients that they are being treated by the right doctor for their needs.

Employer perspective

66. [Need to pull through review evidence and vignettes]

67. Organisations that employ doctors in training face several challenges when managing their responsibilities for medical training, service delivery and patient care. Potential reforms to postgraduate medical education and training will have to mitigate tensions between these responsibilities both in the short term and when planning the workforce in years to come.

68. The balance and shape of the medical workforce and the need for more flexible training are likely to be core areas for organisations that employ doctors. Employers are concerned with providing medical care that is adaptable to changing patient needs and ensuring their doctors are able to meet those needs. They must anticipate the number and kinds of doctors needed for their service and aim to have the right level of medical staff to provide safe and effective care.

69. Employers also want to provide a positive, flexible and innovative work environment for their medical staff. They have to make sure junior doctors are properly supervised and have enough training opportunities (and of the right kind) to become safe and experienced practitioners.

70. Pushing against these workforce and employment demands is the pressure to provide a good value for money in an ever tightening financial climate. Employers must also be balanced by the expectations of patients and aspirations of trainees.

71. Dame Julie Moore, Chairwoman 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 for ever to retrain somebody.'[11]

72. Employers want a system that future proofs their medical workforce. Employers argue flexibility at a workforce level requires a mix of doctors, trained both as generalists and specialists, who can provide care in different settings and in a range of ways. Studies show that more specialists involved in community care as well as the use of generalists in co-ordinating hospital care results in better patient outcomes, higher levels of patient and staff satisfaction, and reduced hospital stays and emergency re-admissions of acutely ill patients.[12]

73. But perhaps more crucial is a medical workforce able to adapt quickly to local pressures or to accommodate shifts in medical care and the way the service is delivered. The current structure of training and career development focuses on moving trainees quite quickly from a level of general knowledge and skills into specialities, some with very narrow areas of practice. If things then change, employers need doctors who can meet these new demands.

How to make the medical workforce more flexible

74. Employers are keen to develop a training structure that meets their demands.

Training and education driven by service needs

75. A training structure driven by employers and linked to local needs is one mechanism for injecting more flexibility into the medical workforce. Employers would be able to identify learning opportunities for their teams based on their service delivery needs.

76. This is the thinking behind changes in England. From April 2013, the healthcare workforce's education and training is being commissioned and managed by employers. This move is meant to give providers 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, will take responsibility for deciding what learning is necessary to make sure their staff

[11] Dame Julie Moore giving evidence to the House of Commons Health Committee, 24 January 2012.
[12] Kings report page 30 – insert references to research studies

are competent and meet the needs of the local community.[13] Discussions are happening in the other UK countries about aligning medical education and training more closely to service structures. However, there are potential risks in this approach , such as lack of transportability of competences if training is devolved entirely to local needs and the need for training to be within a regulatory framework to maintain standards.

Adjusting work patterns

77. Where doctors are in training, employers have reported they sometimes struggle to build effective teams.[14] Most specialty doctors in training rotate through different posts every 6 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 these 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 on how teams work found that where teams are functioning poorly, there is less cohesion, leadership, innovation and quality of care. [15]

78. The current structure of the medical workforce often results in no or few senior staff working on weekends or evenings. Employers then have to rely on locum doctors and trainees to meet service needs, raising patient safety concerns and providing poor levels of supervision.[16] Moving towards more shift based rotas for all grades of doctors could alleviate this gap. For example, Birmingham Children's Hospital has adopted this approach by reducing the number of junior doctors and increasing the number of consultants. They have developed a 'sliding scale of intensity' rota system to provide consultant delivered care in the pediatric intensive care unit. This resulted in a new consultant working pattern: the number of consultants on duty at any one time rose from one to two, and twilight consultant shifts (a consultant present until midnight) were introduced. The net financial cost of this change was zero: the increased cost attributable to the consultant salaries was offset by the reduction in junior doctor posts.[17] This move towards shifts would allow trainees to experience different learning opportunities at different times of the day in a supervised capacity.

More granularity of roles at the consultant level

[13] DH, Liberating the NHS: Developing the healthcare workforce, January 2012 http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_132087.pdf

[14] Medical Education England, Employer workshop for Phase 1 Shape of training project, 2011.

[15] C Borrill, The Effectiveness of Health Care Teams in the National Health Service, 2011.

[16] GMC, State of medical education and practice, 2012; AoMRC, The Benefits of consultant-delivered care, 2012.

[17] A Plunkett et al., A sliding scale of intensity: novel rota system for consultant delivered care, *BMJ Careers*, 31 Aug, 2012.

79. Employers have raised the idea of introducing a more flexible approach to trained doctors. As the number of consultants increase and more care is delivered by trained doctors, it would be more cost effective to have different levels within the consultant grade[18]. If one were to accept this model there would be no assumption that doctors would progress through the different grades, rather it would be determined by their professional development and job planning processes. In this scenario, doctors just out of training would work in more junior and supported roles. If appropriate they would then move into positions where they would manage teams or units, become trainers and take on more leadership roles. Finally, some doctors would move to a more senior and strategic role. Doctors would draw salaries appropriate to their level.

80. [link to comments from Employers vs BMA; not a subconsultant level – link to outcome of training eg judgement safe/independent practice]

81. [REcognise Consultant/trainee contract review and impact on training; focus back onto team and giving doctors right level of support/supervision and mentoring especially in early years after CCT]

Doctors in training perspective

82. The GMC National Training survey 2012 shows a generally positive picture of trainee doctors' perceptions of the quality of training in the UK.[19] But significant concerns were raised in some key areas, including the quality of induction, handover, feedback, assessment and the quality of the experience some trainees are receiving in their posts. Similarly about a quarter of trainees said their practical experience was only fair or even poor. About 19 % of trainees said they would rate the quality of clinical supervision in their current post as fair or poor.

83. This feedback suggests trainees would welcome changes to training where they have more learning opportunities in supervised and supported environments. They want a more effective assessment system that meaningfully measures their competencies and skills. A training structure that reinforces time to learn and reflect on that learning. Changes to the training structure would emphasise that teams in which trainees work should be always staffed by consultants and trained doctors.

84. [pull out feedback on issues from DiTs in CFIE and Oral evidence and workshops;- issues/improve current training eg longer placements; apprenticeship; preMMC]

85. [Career expectations- BMA progression survey; what kind of doctors do they want to be and what is needed – Goldacre research]

[18] CFWI models paper
[19] GMC National Training Survey 2012 http://www.gmc-uk.org/education/surveys.asp

86. But there is still a need to manage junior doctors' career expectations. Based on competition rates for specialty training in 2012, core surgical training posts with a ratio of 3.8 applications per post is one of the most popular career choices for trainees. Neurosurgery had a ratio of 15.9:1, in part because there were only 16 available posts in this specialty. In contrast, specialties like psychiatry (1.4:1) and paediatrics (1.9:1) continue to attract fewer trainees, although these ratios have improved over previous years. These trends suggest trainees still see their careers developing in a way that might not align with the kinds of doctors that will be needed by patients and the service in the future.

87. By shifting the purpose of postgraduate training from developing specialists trained in narrow areas towards developing doctors trained more broadly in the general areas of their specialty, it may help raise the status and acceptance of general practice and general specialty roles – areas where more doctors will be needed as the health of the UK population changes.

88. [examples of narrow specialties eg medical microbiology; medical virology; clinical oncology; Also information about numbers working in these areas]

89. [Academic doctors in training – numbers; why change would help them; link to medical advances driver]

90. More flexibility would benefit doctors who want to develop a career focused both on clinical work and academic research, leadership, medical education and management. Many doctors postpone or pause their training to pursue their academic interests while others find it difficult to link together their clinical training with the structure of an academic career. Academic doctors need a training structure 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 general knowledge and skills to allow them to undertake clinical work safely and competently but they then need opportunities to specialise within their academic area.

What might the medical workforce look like in the future?

91. [NEED to bring in written and oral evidence; literature review here; again point to purpose of section and limitation; reflects on need for doctors who are flexible and can change career pathway when needed;]

92. [Overall dr numbers from CFWI reports; other medical workforce data including specialty data of doctors working in general areas; Case studies with more granularity in selected specialties re supply numbers based on demand assumptions]

93. Doctors have had more or less had the same role in caring for patients for at least 150 years. They train for a long time to be able to diagnose disease and provide and manage effective treatment. But the systems within which doctors do

their job has changed . Medicine is no longer just about individuals, it is about teams and it is increasingly technology enabled.

94. [Define what we mean by 'generalism'/doctors with broad base of training within specialty; What kinds of doctors will be needed - quantitative numbers on doctors trained currently broadly/general within specialty and specialists]

Changes to workforce

95. [Section will look at how changes are likely to force employers to develop service in different ways; need more flexible work patterns but also need to keep service going]

Size of current medical workforce

96. The number of trainees and consultants working in the UK is set to rise over the next five to ten years as medical students and doctors in training progress through their careers[20]. Currently, the medical workforce is composed of :

a. Over 41,000 medical students (not part of workforce but in the pipeline).

b. 14,851 Foundation Programme doctors

c. 40,991 doctors in specialty training consisting of 9, 500 junior doctors training to be GPs and 31, 000 becoming other specialists

d. About 46, 500 consultants and 43, 500 GPs are working within the NHS with 71,307 doctors listed on the Specialist Register and 61,156 doctors listed on the GP Register[21].

97. If the number of medical students remains the same or increases and there are no substantial changes to the way doctors are trained and employed, the number of fully trained hospital doctors will increase by over 60% to 60,000 by 2020[22]. The question then becomes how does the service make effective use of these doctors and if consultants are doing more within the service, should that result in a different approach to trainees as part of the workforce?

[20] Information on the medical workforce is based on 2011 from the GMC S*tate of medical education and practice,* September 2012 and the British Medical Association April 2012 *Briefing note on the 2011 UK medical workforce*.

[21] Discrepancy in numbers relates to doctors who are on both registers. Also the Registers don't take account of doctors who are not working in the UK. [CONFIRM with Registration!]

[22] CFWI, *Starting the debate on workforce numbers*, 2012.

98. There is also the issue of affordability of a service that employs more consultants. The Centre for Workforce Intelligence (CFWI) estimate the salary cost of a larger consultant workforce could reach £6 billion by 2020. The salary cost currently is XXX. Although this assumption is based on current rates of remuneration and an assumption of the full time nature of posts.

99. [More women in medical workforce and impact on service delivery; demand for better work/life balance; tension of training part time and service delivery; evidence from CFIE and oral sessions; Vignette from woman/part time worker]

Changing work patterns

100. Employers have to take into account the changes to work patterns and how the medical workforce is managed at local levels. All doctors are now limited in the number of hours they work because of the Working Time Regulation (WTR). Both trainees and Local Educational Providers (LEPs) have found it challenging to comply with the WTR, particularly when managing rotas, gaps in rotas and work load intensity for all doctor grades.[23] Tensions are particularly evident when service pressures compete with time for training and education activities. Trainees now have fewer hours and opportunities for training experiences. They also have less access to senior doctors and consultants, particularly in the evenings and on weekends.[24]

101. The medical profession is also shifting towards more flexible work patterns and part-time working. This trend, driven to some extent by increasing numbers of women becoming doctors, will become more prominent as the current training cohort comes into its own. Flexible working helps keep highly trained doctors working effectively within the NHS throughout their careers.[25] But there are challenges in adapting the current and somewhat rigid training and service structures to cope with growing numbers of people seeking flexible work arrangements and career breaks.[26] For example, some specialties, particularly those with a higher proportion of female doctors in training, face some workforce difficulties. The Royal College of Paediatrics and Child Health has reported problems in filling middle grade rotas, with consultant paediatricians increasingly having to cover middle grade duties as a result.[27]

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[23] WTR research by GMC – unpublished until end of October 2012. Summary available at: http://www.gmc-uk.org/04___Working_time_regulations_research_update___report_of_the_primary_study.pdf_49994882.pdf

[24] AoMRC, Report on consultant-led care, 2012; John Temple, *Time for training*, Medical Education England, 2010; GMC National Training Survey 2012.

[25] Royal College of Physicians, Women in medicine, 2009.

[26] D. Roland, P. Dimitri, V. Walker: The extent and effect of the recruitment crisis in the UK trainee paediatric workforce. *The Internet Journal of Healthcare Administration*. 2010 Volume 7 Number 1.

[27] 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

102. A service that relies more on consultants and trained doctors working in teams that include trainees could help mitigate problems in covering shifts and gaps in rotas. A move towards a more general and shorter training programme could also result in a larger number of doctors able to deliver front line services – the areas that tend to struggle with frequent gaps in staff coverage.

Recruiting into specialities

103. While some specialties struggle to fill posts, others attract fierce competition, often in areas where there is a need for a smaller number of specialists. For example, specialties such as paediatrics, psychiatry and emergency medicine have reported lower competition rates for training places than more popular specialties such as surgery.[28] Employers rely on a robust supply of doctors recruited into specialty training to deliver large parts of the service. Difficulty in recruiting into specialty training has, in some cases, resulted in junior doctors already in post or locum doctors filling in the rota gaps, raising patient safety issues.[29]

104. The CFWI warned that, all things being equal, some specialties such as neurology if projecting forward from current numbers will not meet demand by 2020 while others such as anaesthetics and general surgery need to make moderate reductions to their training numbers. It anticipates a shortfall in England in the number of GPs and suggests GP training posts should be increased to ensure over 3,100 GPs are produced each year while specialty posts should be reduced to produce roughly 2,700 consultants each year. Pressures like these could 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.

105. [impact of geography and training/working choices – problem with rural areas with link back to demographics eg elderly in rural areas]

106. Challenges also abound in recruiting into specialities within some geographic areas. The Wales Deanery recently reported a recruitment crisis in many specialties. It has raised concerns that hospitals will not be able to provide adequate training. If this trend continues, it may result in closures to some medical services.[30] Similar issues have been raised for other rural or isolated parts of the UK.

[Case study of recruitment issue in rural area eg inverness]

107. [Changes to roles and responsibilities of other healthcare professions eg physician assistants and nurse practitioners; rise of Multprofessional team]

[28] 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_specia/competition_ information.aspx [Accessed on 9 August 2012]
[29] GMC, State of medical education and practice, 2012.
[30] BBC new (web) http://www.bbc.co.uk/news/uk-wales-19778640

Service configuration

108. [Issues raised by RCP and other College reports about hospital and GP services]

109. [integration of services and move towards community based care; what that might mean for doctors/specialties – case example of community delivered service with multiprofessional team; training in community eg paediatrics/liaison psychiatry]

110. [impact on training of commissioning; services different in each UK countries and at local levels]

111. [possible 24/7 consultant led service and impact on doctor numbers; impact on training]

112. Two reports published recently challenge the current way healthcare is delivered in the UK. Both the Royal College of Physicians and Royal College of Obstetrics and Gynaecology suggest the NHS can no longer cope with a large number of specialists spread across several hospitals. More care should take place at general practice surgeries or community hospitals and facilities. Specialised care should be delivered in specialised centres by people who have substantial experience with difficult and complex cases.[31]

113. A change in the way healthcare is delivered will inevitably change the way doctors train. More doctors will increasingly work within community based teams away from the more conventional hospital based settings. Employers will need substantially more doctors with a strong grounding in generic knowledge and skills coupled with the ability to manage not just clinical diagnosis but the interface between different services and specialists. Specialised centres will need doctors steeped in detail of particular specialties, but in far fewer numbers. In terms of future training, this might point towards a more general approach to training leading to a doctor who can provide care in community and acute admissions settings. Doctors could then go on to further specialise through credentialled programmes.

114. Employers would benefit from a medical workforce made up largely of trained doctors in order to better manage day to day rotas, ensure patients see the right doctors and provide trainees with more support and supervision. Work by the Academy of Medical Royal Colleges on the benefits of a consultant-led service points towards a structure in which trainees provide far less service delivery.[32] Evidence suggests this approach results in better patient outcomes as well as more effective training experiences. Trained doctors undertake many of the roles and responsibilities once reserved only for trainees. Patients always have access to a highly qualified doctor who can rely on years of experience. Trainees have better

[31] Royal College of Physicians, Hospitals on edge: Time for action, 2012; N Timmins, *Tomorrow's Specialist: The future of obstetrics, gynaecology and women's health care,* Royal College of Obstetrics and Gynaecology, 2012.
[32] AoMRC, *The benefits of consultant-delivered care*, 2012.

supervision and support but are not relied on to deliver substantial parts of the service, though they still need to contribute to service provision as part of their learning and experience.

115. [Possible approach may be long term more cost effective?]

116. [Example of hospital at night/hospital at day]

117. In *Time for Training*, Temple recommended that only departments and/or hospitals that can deliver high quality training and provide resources and support for this should be designated as training locations.[33] With an increasing number of consultants providing care, employers may choose to limit training to particular locations or teams where more training resources could be funnelled.

Summary of kinds and numbers of doctors needed in future

118. [Number of doctors needed in future based on demand assumptions eg multi morb and elderly assume general dr; need assumptions run through CFWI model]

What is happening in training right now?

119. [Image of PGT in UK now and brief description including legal framework and EU dimension]

What is going on in other countries?

120. [evidence from Literature review; Specialties research; meetings];

121. [implications for UK training eg length of training; transferability of qualification; patient safety]

Undergraduate medical education

122. [UME relevant to shape including student selection; widening access; variation of schools' output re MSC/GMC data; consider impact of TD and what we already know about how UME is improving clinical experience; career expectations and goals and advice as early as possible; FTP cases of FP doctors and why]

Foundation Programme

123. [Foundation Programme – what is working eg broad experiences; more opportunities; more time to select specialties; Discuss issue of Full registration and educational argument for change to FP; legal evaluation of registration and what is possible]

[33] John, Temple, Time for Training, May 2010.

124. Although the original focus of the Review was post-foundation training, a number of respondents have challenged how it will fit in any postgraduate reforms. A further review of the Foundation Programme is unlikely in the next few years. As such, we need to consider the entire continuum of postgraduate medical education and training including the transition from medical school. It is particularly relevant to our views on career development and the way doctors are supported through transitions in their training.

125. The Foundation Programme was introduced in 2005 to address, among other things, concerns that patients were being harmed by medical errors and delays in recognising the acutely ill patient by doctors. Many reports argued that support during the transition from graduation into the workplace would reduce these patient safety issues.

126. Following the Collins Review, the purpose of the Foundation Programme is to enable 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. The Foundation Programme provides generic training to bridge the transition from medical school into specialist/general practice training. According to the National Training Survey (NTS) 2012, 77% of doctors in the Foundation Programme are satisfied overall with their training, up from 73% in 2011.[34] On entry into the Foundation Programme, only about 50% of graduates felt prepared for their first Foundation Post. However, 76% of F2 doctors felt they were ready to take on GP and specialty training.[35]

127. Given our assumption that patients and the service would benefit from doctors with a broader approach to patient care, the Foundation Programme affords doctors a wide range of experiences although medicine and surgery predominate especially at F1. The top three CCT specialties experienced by F1 doctors are general surgery (82.3%), general (internal) medicine (58.9%) and geriatric medicine (23.1%). The top three CCT specialties experienced by F2 doctors were emergency medicine (43.8%), general practice (43.8%) and general (internal) medicine (22.9%).[36]

128. The Foundation Programme appears to have some influences over career destination choices. 36% of F2s enter directly into GP training, although only 5% decided to go into general psychiatry.[37] In their written response to us, NHS Scotland (a pan response from NHS Education for Scotland, employers and deaneries) explained: '*The existing two year foundation programme following graduation is overall viewed positively, and should be retained more-or-less in its current form. All trainees should have the opportunity to spend time in community/primary care and*

[34] GMC National Training Survey 2011 and 2012 - http://www.gmc-uk.org/National_training_survey_2012_key_findings_report.pdf_49280407.pdf
[35] GMC National Training Survey 2011
[36] The Foundation Programme Annual Report 2012 - http://www.foundationprogramme.nhs.uk/pages/home/keydocs
[37] The Foundation Programme F2 career destination survey 2012 - http://www.foundationprogramme.nhs.uk/pages/home/keydocs

hospital/secondary care settings, both during foundation, and subsequently.' NHS/Employer organisation in England agreed with this view: '*Foundation training has been an excellent introduction. We often have very good foundation trainees, who more than make up for their lack of experience.*'

Risks and challenges

129. Although the principle of a generic and broad based foundation in medicine seems to have consensus across the UK, there are emerging rifts in how this may be structured. Some organisations, particularly in England, would like to see the Foundation Programme reconfigured to take account of recommendations from the Tooke Inquiry. *Aspiring to Excellence* advocated that the first year move back into medical schools, although it would still focus on clinical experiences. Graduates in the UK would finish undergraduate medical education at the point of full registration. The second year would then be absorbed into core specialty training.

130. This proposal has received renewed attention due to the challenge of oversubscription. The UK Scrutiny Group is considering a number of options to ensure all UK medical graduates are enabled to complete basic medical education and apply for Full Registration. Concerns of oversubscription for Foundation Year 1 (F1) posts are the result of an unplanned growth in medical student numbers and static Foundation Programme numbers. If some UK graduates did not get F1 posts in the future, this would limit their career options because they would not be recognised as a fully qualified doctor in other countries. However, changes would not address the competition bottleneck at F2 or within going into GP and specialty training. Despite the attraction in merging medical school and F1, we have not heard any educational or service case for this change.

131. Unless changes to the Foundation Programme are UK wide, there is a risk that training will be developed and delivered differently across the four UK 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.

132. Indeed, many respondents, including feedback at the London Deanery workshop, suggest these two years are important for doctors to gain experience in working in the NHS and help them internalise their professional responsibilities as employees within the service. A possible consequence of shifting F1 into medical school would be that doctors would continue to be students (and possibly even funded through bursaries) rather than employees taking on responsibilities as working professionals. This may impact on their capacity to meet the needs of the service and employers. Others have suggested some doctors in training would benefit from a third year before making choices about their specialty.

133. As an alternative to amalgamating F1 with the medical degree, there is some interest in exploring the possibility of full registration on graduation. Even if graduates were unable to access UK training, they would possess a portable qualification which

would be accepted abroad. This is an option that would involve fundamental change and raise significant questions around patient safety and the current regime for provisional registration. The value of provisional registration should not be set aside lightly. It was introduced after the second world war precisely because of concerns around the preparedness of graduates to practise unsupervised. While systems of educational and clinical governance are now much better, the enduring benefit of provisional registration is that it places the onus on the F1 doctor to demonstrate fitness to be fully registered. This is not a theoretical issue: successive UKFPO reports show that some 200 doctors a year experience significant difficulties in F1 and a similar number in F2 (around 2.6% of each cohort) to the extent that their training needs to be lengthened, remediation put in place, or both. And a number of new doctors are dismissed by their trusts for serious disciplinary matters, or simply leave training altogether. As such, any major changes to the system must be underpinned by good evidence and impact assessments and a package of measures to address the issues outlined above.

134. [Implications of national licensing exam and use of PLAB like test; PLAB threshold]

Postgraduate medical education and training

135. [Identify main issues with current training – taken from shape evidence; NTS; BTBC etc]

136. [Vignettes/case studies of current training: training in rural locations; problems faced by undersubscribed but increasing patient need specialty eg psychiatry vs oversubscribed and decreasing patient need eg cardiothoracic surgery; case for lengthening GP training; doctor in training experienced – registrar/GP/Academic]

Career transitions

137. The current system focuses on preparing doctors up to the point of the CCT (or CCTGP), with doctors undertaking long periods of postgraduate training (lasting between three to eight years after the two year Foundation Programme). This approach is, however, wrong in principle. Medical practice evolves rapidly and doctors must undertake lifelong learning and continuing professional development to stay up to date and meet professional standards. Effectively, training and development is never really complete.

138. [Transitions research – illing; Roberts etc; FTP stats linked to risks at points in career]

Time to learn

139. [Expand on time to learn and issues with service delivery and training; training environments; issue of trainee contracts; AoMRC training charter; WTR research]

140. Forces such as the Working Time Regulations (WTR) and other drivers are limiting the amount of hours trainees can work, but the postgraduate structure continues to compress learning into the CCT period. Similarly, difficulties recruiting and retaining doctors in some specialties suggest opportunities to retrain are needed to meet patient needs and give doctors more career options.

141. Many trainees, at some time, struggle to get meaningful learning experiences because of the pressures of service delivery in combination with complex rotas. This often leads to problems with handing over their patients to other doctors, having time to learn new skills and to reflect on that learning. This possible shortcoming is being addressed to some extent by the Royal Colleges by introducing specific, post-CCT learning packages aimed at new GPs or consultants. For example, the Royal College of General Practitioners has structured a support programme for GPs during their first five years. And for similar reasons, many surgical trainees are undertaking fellowships.

Competence and capability based training

142. Over the course of this review, a number of respondents have suggested postgraduate medical education and training should be based purely on outcomes rather than completing a specific period of time. For example the British Medical Association's response to our written call for ideas and evidence suggested '*[T]he completion of training should be based on competencies rather than length*'. The Joint submission from funders and supporters of medical research expanded on this: '*The current system of time-based competency certified through the CCT generates a rigid system in which nearly all trainees move at the same pace and may not accurately reflect the skill or proficiency of the individual trainee*.'

143. In the UK, postgraduate curricula already need 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 European Directive. It is used as a proxy measure for many competencies and overall progression is based on an annual review of how they have met their training requirements. And for many craft specialties time is an important in terms of moving beyond competence and into 'mastery'. The time component means the length of training is relatively predictable, albeit many doctors take longer than the predicted length of training. This regular check in point means we are assured that doctors are competent to provide clinical care at their training level.

144. We have heard that the competence, preparedness and confidence of doctors continue to raise concerns within our current system. These issues are being translated into calls for either training without progression deadlines or lengthening training time to meet curricula requirements. Removing time as a factor in training is an attractive way of introducing much more flexibility into the system. Doctors and their supervisors would have more control over their progress depending on their ability to demonstrate relevant competencies and capabilities. Some candidates

would move more rapidly through training while others would be able to consolidate their learning and deepen their experiences. This would also take some of the bite out of the reduction in working hours brought about by the Working Time Regulations as deadlines at each stage of training become irrelevant.

145. But a competency and capabilities based approach has serious limitations. With nearly 40,000 doctors in training, it would be complicated to plan and develop training for each doctor at their own pace and could potentially cost more as doctors stay in training longer. As the NHS Employers explained in their oral evidence: '*[A] personally designed pathway through the system…It is hard to see quite how that could be achieved because training is always a balance with patient care that has got to be delivered*'. A substantial number of doctors would likely take longer to feel prepared and competent to work independently at the point of the CCT. In 2011, 85% of doctors felt ready to take up a consultant or GP post.[38] As inexact as workforce planning is now, it would be impossible to predict or speculate how many and what kinds of doctors would be ready to practise within a specialty at any given time.

146. More doctors in the future will need to care for patients with complex health needs and across different settings. A training structure that emphasises specific skills or abilities at particular points in time may not give us this kind of doctor. Respondents have told us, particularly in the workshops and seminars that the current system seems to be producing doctors who are reluctant to make decisions and are being infantilised. Competency based training does not necessarily capture how doctors make well informed and safe judgements in complex and unpredictable situations. Yet most respondents identified this broader insight as critical for doctors now and in the future. As the Academy of Medical Educators explained in the oral submission to the review: '*The professional capabilities – judgement, situational awareness, conflict management, the ability to negotiate, to influence – these high level, very complex psychosocial capabilities, take years and decades to develop…So these high level professional capabilities are a function of experience, a function of appropriate reflective experience'.* We have also heard that nothing can replace repetition and experience when mastering aspects of a specialty and these can only be gained through time. By focusing more on generic professional capabilities rather than competencies, we would develop doctors with a broader view of medical practice.

147. [Issues with current assessment system and tick box approach; role of national exams; assessments in the workplace; ARCPS]

[38] GMC National Trainee Survey 2011 - http://www.gmc-uk.org/NTS_trainee_survey_2011.pdf_45270429.pdf

Making supervision and support central to training and service delivery

148. In the NTS 2012, only 81% of doctors felt the quality of their clinical supervision was excellent or good.[39] A shift to an approach that puts supervision and support at the centre of training and service delivery would address this significant challenge in the current structure.

Longer placements

149. Confidence and preparedness issues might be mitigated by doctors training longer in one place. Longer time within a placement would help them integrate better within teams, have closer relationships with trainers, consultants and the multi professional team as well as gain support during career and training transitions. This longer time within 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. Most respondents strongly supported this idea in both the written and oral feedback. As respondents from the National Association of Clinical Tutors (NACT) told us in their oral evidence: '*[I]f you really want people to embed good skills and be able to take them forward they need long enough within that environment to develop not just competence but confidence and experience.'* Longer placements would also allow teams and trainers to build up their trust in the abilities of their doctors in training and therefore give them more opportunities to contribute to improvements in the service.

150. But some respondents warned that broad understanding and basic medical skills often come from the different and varied opportunities and experience on the Foundation Programme and in Core training. Many even reflect back to the pre-MMC years when doctors worked as Senior House Officers (SHOs) for many years and had opportunities to experience different specialties. They were more closely linked to consultants within a 'firm' structure. But this approach had serious flaws including a lack of transparency for jobs and training, less structured training and assessments, limited opportunities for flexible working and a high risk of negative role modelling and undermining.[40]

151. The solution then may be in balancing different experiences with time to bed down competencies and capabilities. This could be done without necessarily increasing the length of time in training. Doctors could, for example, in the early stages of training (such as the Foundation Programme and early core/stem training) benefit from placements lasting 6 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). One respondent from Health Education North West explained that their doctors remain within the same team or department for at

[39] GMC National Trainee Survey 2012 - http://www.gmc-uk.org/National_training_survey_2012_key_findings___final.pdf_49303306.pdf

[40] Sir Liam Donalson, CMO England. Unfinished Business: Proposals for reform of the senior house officer grade. August 2002. http://www.mmc.nhs.uk/Docs/Unfinished-Business.pdf

least six months when they move into their next training stage to make sure they have time and space to consolidate their new responsibilities and requirements while still relying on team support and relationships built up from the previous year. This idea of longer placements was also supported by the Royal College of Obstetricians and Gynaecologists in their oral evidence: '*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 in O&G and so reducing the frequency of rotations, provided you can have appropriate quality of service and quality of training, would be something we would support*.'

Apprenticeship

152. With longer placements, we may be able to re-introduce some elements of apprenticeship back into medicine, more common during the previous SHOs era. Although doctors in training would not be supernumery and would continue to deliver a large part of the service, they would not fill rota gaps in quite the way they do now. The pan- NHS Scotland written response puts it succinctly: '*The service needs to move away from the primary concern in workforce planning being sufficient doctors at junior and middle grade levels to allow for rota compliance. This could be achieved in a number of ways but all involve bringing other doctors of different grades or in some cases advance nurse practitioners into the cover arrangements to reduce dependence on doctors in training*.' We need to create a much closer link between service and training so that all service delivery provides meaningful learning and training experiences. The Academy of Medical Royal Colleges made this clear in their oral evidence: '*I think no one unlinks service and training… So I think people want to see something a bit more bespoke…[T]here is a large cohort that want to turn the clock back, not in terms of hours but in terms of that apprenticeship model…[the supervisor] would see me more than once a week and would know my weaknesses and my strengths and work on them and actually train me, as opposed to being pushed and pulled around different consultants*.'

153. More appropriate support and supervision throughout doctors' careers would help embed patient involvement within training. 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. We heard from the National Association of Patient Participation that *'In general people are quite amenable to [being seen by trainees] if they know the person is there being supervised and they know in advance…So I think you actually communicate that that is going on and give the patient the option [to be seen by a trainee]*.

154. We would have to consider carefully how an apprenticeship based approach would be implemented.

a. Supervisors and trainers need to be recognised and supported in their roles including the time and resources to provide quality training. The

Recognition and Approval of trainers is already formalising and recognising these arrangements.[41]

b. Local education providers would need to make sure negative role modelling; undermining and personality conflicts don't derail the training relationship.

c. Some training placements may not give doctors access to the full range of experiences and opportunities to meet the curricular outcomes and requirements. Those providing training would have to work together to make sure there are regional and national mechanisms to address these shortfalls.

d. Given the resource implications for employers, this may mean not all doctors and local education providers should be involved in training. The GMC's response to the Call for ideas and evidence emphasised: '*The characteristics of a good training environment need to be described and training organisations evaluated for their ability to meet those criteria. Above all, organisations which train must demonstrate their commitment to delivering high quality training.*'

Role of trainers

155. [Approval of trainers; Time to train within job planning and support]

Academic training

156. [current way training; identified needs; flexibility to have broad training/focused training and move in and out at any point]

Generic capabilities

157. [training should focus not just on technical or specialty but also on generic capabilities; GMP framework; generic capability project by GMC]

158. [system awareness; work in community and hospital and across barriers; discuss hospitalist example; consider diagnostics, ICT, more emphasis on mental health]

159. [examples of how to teach capabilities eg simulation example]

Exit point/ outcome for postgraduate training

160. [oral and written evidence]

[41] More information about the GMC's approach to the recognition and approval of trainers is at http://www.gmc-uk.org/education/10264.asp

161. [Consider length of training including tension around 4 year GP training and other specialties]

162. One of the key outputs for this review is more clarity about what level of competence and capability doctors will need at different points in their careers. Much of that work will have to be done by stakeholders like the Academy of Medical Royal Colleges, the GMC, COPMeD and employer groups outside the Review's timeframe. There has to be a review of curricula to consider questions around broader and more general training within specialties; to look at embedding generic professional capabilities, and aligning competencies to aid their transferability and to consider length of training within specialties.

163. While there may be formal points of recognising competence levels, respondents have also asked for more way and exit points in and out of training. This would be aided by transferable competencies and more cross-specialty opportunities and experiences. Indeed, some respondents to the Call for ideas and evidence have argued that doctors would benefit from training in areas relevant to patients rather than in specialties, especially in the early years. For example, people would train in caring for women, children, elderly people, people with long term illness or disabilities.

164. But before that, we need to think about the meaning of the exit point from formal postgraduate training (known at the moment as the Certificate of Completion of Training – CCT). This is one area where there are quite a lot of differing opinions from respondents, based primarily on perceptions of the roles of doctors in training and consultants. There seem to be three particular points :

a. Doctors who are emergency safe and capable of dealing with the patient in front of them. These doctors need some support but are able to safely assess patients in acute and undifferentiated 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.

b. Doctors who are able to make safe and competent judgements in broad specialist areas. They would be accountable for their professional decisions. This is what we would call 'independent practice', but doctors work in multidisciplinary teams and relying on peer and collegial groups for support and advice (and should be encouraged and even required to do so). At this point doctors would receive a certificate in specialty training. We would 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 make calls on risky and complex cases and would have enough experience, confidence and insight to manage patients more holistically across several 'specialties' and within different teams.

c. Doctors who are judgement safe but have in addition acquired more in-depth specialist and subspecialty training in a particular field of practice. But they would still have to be able to assess and treat patients with multi morbidities. This is not necessarily a progression away from working in the general areas of a specialty but might involve a narrower field of practice in greater depth.

165. [Discuss rural and remote training/practice and the ability of dr to work in safely in small healthcare teams; consider research on medical registrar]

Regulatory framework

166. [Implications for the current specialist and GP registers; EU directive/crossing borders]

Continuing professional development

167. [Role of CPD and credentialing in current system; link to more structured CPD to patient and service need; support generic capabilities throughout career; link to appraisal and revalidation; credentialing for subspecialties and driven by employer need; pull through direction of travel of credentialing re GMC credentialing group]

SAS doctors/salaried GP/locums and others out of training

168. Doctors who are not in training but are not consultants, are a wide and diverse group ranging from doctors who are only emergency safe to highly specialised doctors practising in narrow areas. This group also accounts for many doctors who decide to take a break from training, often to give them time to consolidate their skills without a progression deadline or to do academic work. With a more flexible approach to progression, longer rotations and apprenticeships, most doctors should no longer need to be out of programme or leave training.

169. Other doctors working in staff or trust level grades should be supported and supervised at the level appropriate for their competence and skills similar to doctors in training. [WHAT MORE CAN BE SAID?]

170. [more flexible arrangements to move into training]

What might training look like in the future?

171. [Pulling through oral and written and other evidence; reflect on impact of possible changes based on themes; what would be improved, what are risks or areas of uncertainty; what are the gaps in our knowledge or understanding]

Characteristics of a new structure of training

172. Feedback suggests that, regardless of how training is reformed, the system must incorporate certain characteristics and achieve certain objectives if doctors are to be able to meet the needs of patients and the service in the coming decades. These characteristics and objectives are set out below:

Caring for patients

173. Patients are likely to need more general specialty care and expertise as healthcare shifts into the community. Most doctors will have to be skilled in caring for patients with undefined or complex conditions in local and community settings and to provide both acute and non-acute care. Training should focus on giving all doctors the capabilities to care for acutely ill patients, patients with short term issues, patients with long term conditions as well as provide advice on prevention of illness.

174. Care should be delivered by multi-professional teams, who facilitate access to the right interventions by the right health or social care professional for each patient as an individual (often called the patient journey or care pathway). Within teams, doctors, particularly those with broad based knowledge and skills, should provide leadership and support throughout a patient's journey to patients/carers, colleagues and teams as a whole.

175. Doctors as part of their training should have opportunities to follow patients along a care pathway in both community and hospital settings.

176. Doctors alongside the teams in which they work, should be empowered to make decisions in collaboration with their patients and other professionals about how to provide care to individuals and the community. Doctors should be trained and supported in understanding their responsibilities to deliver safe and high quality care. Their training should reinforce their professional responsibilities to patients and the public, including the importance of medical conditions and treatments being set in the broader context of patients' lives and environments.

Education, training and development

177. Learning and development never ends and value should be given to training and development throughout doctors' careers through continuing professional development even when they are not in training or working in a training environment. Doctors should be encouraged to take on management, leadership and education roles as they progress in their careers. Doctors who are not working at the level of a trained doctor should be recognised as still in training, including doctors who are focusing on academic, research or management areas.

178. Doctors should have a longer period of time before they decide their specialty, although some doctors may want to start differentiating earlier in their training by building up their training within themes.

179. Doctors should have flexibility to move between roles and specialties at any point in their career. There should be a mechanism for recognising different points in training and development where doctors have built up skills, capabilities and experiences that show they are competent to provide care at that level.

180. Doctors should be able to transfer their competencies across specialties and roles as they move through their training. This will be helped by more emphasis during training on developing and honing general and broad based knowledge and skills.

181. Doctors during their training should have support and supervision that is right for their individual learning needs and level of training for their specialty. Far more direct supervision and support is needed when doctors are building up their knowledge, skills and competence. But the intensity of supervision may shift to more indirect support and mentoring as doctors begin to work more independently. Doctors have better learning outcomes when there is continuity in their training and they work with specific trainers and within consistent teams. This means that rotations during training may need to be longer in order to build up effective relationships in teams and with supervisors.

182. Places that train doctors must foster learning environments and have the capacity and resources to support training. Doctors need to have enough experiences or access to experiences to meet their training requirements.

183. Doctors should be given time to learn, train and reflect on their training even while providing care to patients and working within the health service.

184. Although all doctors should have an understanding in academic medicine and research, there is no expectation that all doctors should undertake academic or research work.

Implementing changes

185. Training doctors must be cost effective but should consider how to deliver the best and safest patient care, how it will integrate with the training and practice of other healthcare professionals and the value of that training across doctors' careers.

186. Reforms to the training structure should consider how to deliver changes with the least amount of disruption to the current system through a period of transition and gradual implementation.

187. Reforms to training should take account of training needs of the current medical workforce and make sure they are integrated into the new system.

188. As the roles and responsibilities of doctors change, consideration must be given to the roles and responsibilities of other health and social care professionals and the team as a whole.

Principles for changes to postgraduate medical education and training

189. From these considerations we have distilled the following principles which should inform any new approach to medical education and training.

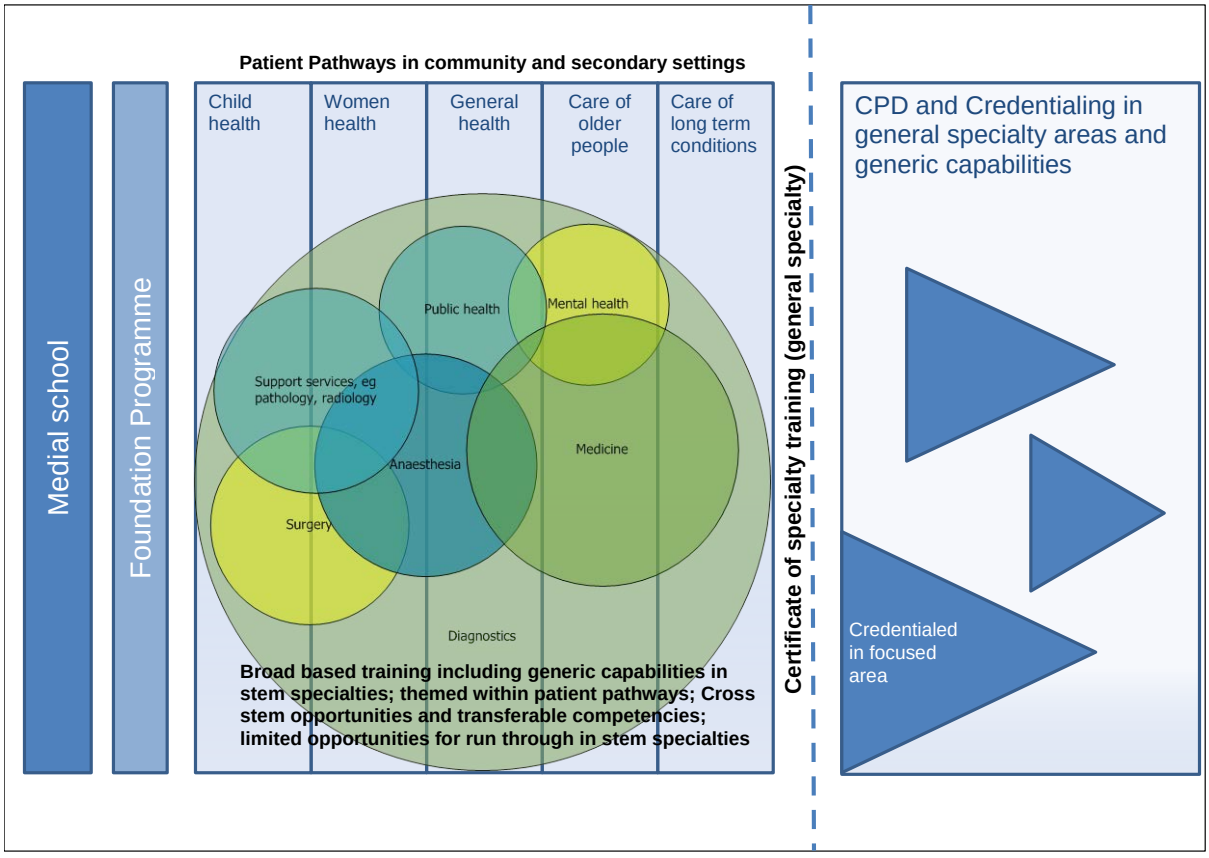
- The overarching objective of the system of medical education and training must be to equip doctors, and instil in them the professionalism needed to deliver safe and high quality care which will meet the future needs of patients and the service.
- Any new model of training must be designed to deliver this objective through the minimum structural change necessary.
- Education and training should be based upon the demonstration of capabilities, not simply time served, although time and experience remain important elements.
- Any new model of training must reflect the need for doctors to continue their learning and development throughout their working lives.
- 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 trainees.
- 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 co-existence of parallel systems.

New approach to postgraduate training

190. [Blend of models taking what was discussed in oral evidence and workshops; pull through feedback; examples of broad based training pilot, ACCS; transferable competencies; BTBC; mid staff]

191. [Description and design of model including possible examples of stems –

192. A lot of evidence points to all doctors being trained broadly in acute/chronic and community/secondary, although they would have a particular focus. It might be that these elements are assumed within the specialty categories. We could have the list of stem specialties eg medicine, surgery…..and within each stem, doctors may theme their learning within patient categories eg child, women, elderly, long term conditions. Stems might be medicine (including GP); surgery; mental health.



193. [Discuss need to review curricula to consider how to make them more streamlined/broad based/generic capabilities; consider how impact on length of training in different specialties; transferable competencies]

Impact of possible changes on specific groups

194. [consider impact of changes especially shift to general broad based training for groups with protected characteristics and others eg Age, gender, disability; GMC health and disability working group recommendations; widening access policies etc]

Value and affordability

195. [consider impact of recommendations especially move towards more doctors taking broad stem training before further specialisation; short term vs long term value eg easier and less costly to retrain; NEED TO KNOW EXACTLY WHAT WE ARE EVALUATING]

Recommendations

196. SEE SEPARATE PAPER

Implementation Plan

197. Immediately –

- work with AoMRC, HEE, NES, NIMTDA, NHS Wales, CoPMED etc to further define what is general/broad based training for specialties/curricula and to consider how to make sure training is driven by patient needs/pathways
- GMC to review Registers and meaning/definition of CCT to CGT
- GMC to consider legal/regulatory implications of change to full registration; Implications of national licensing exam and the assessment system as a whole; work with HEE, MSC and others on this
- discuss and work with HEE, NIMTDA, NES, NHS Wales to ensure consistent national standards and function of Foundation Programme
- GMC to consider training environments and whether training should take place anywhere
- GMC and MSC to consider medical school variation
- MSC to consider how to develop career advice and outreach to secondary schools re medical career

198. 2-5 years

- HEE, AoMRC and others to have shifted curricula towards broad based training; training begins to be themed on patient needs
- GMC and others to have implemented generic capabilities within curricula
- GMC to be legally to award CGT with recognition that doctors are judgement safe and able to practice safely without support from large clinical teams
- MSC to demonstrate effective processes in place to assure GMC that students no longer need period of provisional registration
- Doctors will have longer placements and different supervision arrangements
- Local and regional arrangements are in place to support specialty training and credentialing eg agreements on funding; release from work etc
- New training structure based on broad based training

199. 5-10 years and beyond [??]

- Key interests able to demonstrate training is meeting patient and service needs – QM and QA arrangements
- Credentialing of subspecialties is up and running

Annexes

- Terms of Reference
- List of EAG members
- Literature review, scenarios, synthesis of evidence
- Engagement and coms plans