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## Training for Diabetes Integrated Care: A Diabetes Specialist Physician Perspective from the English NHS

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The provision of healthcare is challenging for everyone, the politicians, the providers, the workforce as well as the patients on the receiving end. The provision of education for the healthcare workforce is equally challenging for the politicians, the universities, the training and regulatory bodies and the trainees on the receiving end. Clearly the medical workforce of tomorrow should be trained to meet the challenges of delivering a sustainable high quality healthcare system of the future. Currently in the UK there is a miss-match between what the healthcare policies require and what the workforce is actually being trained for. The specialist training for the longterm conditions, for which diabetes is one, is a good example of this miss-match. The last 5 years in the UK and England, in particular, has seen seismic changes in the healthcare landscape including how the education of its workforce is funded. Health Education England (HEE) has, since 2015, been an autonomous national body responsible for the education and training of the NHS healthcare workforce, and is overall responsible for commissioning under and postgraduate medical education. Supporting education and training for integrated care is a priority for

programmes, both clinical and non-clinical, to 13 Local Education and Training Boards (LETBs) within 13 separate areas in England [1]. In the United Kingdom the Secretary of State

HEE. HEE delegates the training and education

In the United Kingdom the Secretary of State for Health, a cabinet minister in the UK elected government has financial control and oversight of NHS delivery and performance; however, since 1998, this has been largely restricted to England. Today the majority of non-English related NHS policy is devolved from the UK parliament to its member parliaments, or assemblies, in Scotland, Wales and Northern Ireland, leaving the Department of Health (DH) responsible for health and adult social care policy mostly in England. The principals of the NHS that pledges a comprehensive health service, available to all with access based on clinical need, not an individual's ability to pay, remains a fundamental tenet across all four UK health systems [2].

In late 2014 NHS England published their 5-year forward plan for the NHS [3]. Central to this plan was commissioning new models of integrated care that would promote different providers including GPs, hospital consultants and social care to work more closely together to allow more non-elective healthcare to move out of secondary care back into the community and reduce unnecessary hospital admissions. A drive shared across all political parties. However, current medical training is not aligned to this. For example, the current Certificate in Endocrinology a multiple choice Diabetes. awarded on

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examination of best of 5 of 200 questions and a prerequisite for completion of higher specialist training in diabetes, includes only 10 questions relevant to integrated care [4]. While the training curriculum does cover delivery of diabetes care (Table 14.1), this knowledge can all be acquired solely through reading not actual exposure to integrated care, and currently represents a very small fraction of the total curriculum [5].

Overall undergraduate and speciality postgraduate medical training today has little exposure to the different community healthcare teams working across a local population. This lack of community exposure and hospital centric focus has resulted, not surprisingly, in a negative perception among trainees and consultants on community work, with hospital based consultant posts being considered more prestigious to community based posts. Going forward, undergraduate and postgraduate medical training will need to change as will the perception around community work if integrated care as envisaged by the 5-year forward plan, is to flourish. The concept that postgraduate medical training and workforce planning need to be intimately interwoven with health service policy and delivery is not new and was emphasised by Sir Professor John Took in 2008 in his report on Modernising Medical Careers [6].

In the UK from the selection of medical students through to higher speciality training and the revalidation process of doctors to practise, there is no one unifying professional body responsible. There are eight main bodies involved in the regulation, commissioning and delivery of

**Table 14.1** Aspects of endocrinology and diabetes curriculum of Joint Royal Colleges of Physicians diabetes and endocrinology Training Board (JRCPTB) relating to the management of delivery of diabetes care

- 1. The factors which influence commissioning diabetes care within the NHS
- 2. Which aspects of diabetes care can be appropriately delivered in different clinical settings
- 3. The role of information technology in integrating care across different providers
- 4. The role of diabetes networks and advisory groups in the organisation of care

medical education and training, each representing multiple members (Table 14.2). All represent the interests of their respective membership and some with conflicting interests around supporting integrated care.

The General Medical Council (GMC) is an independent regulatory organisation responsible for setting standards for the delivery of undergraduate and postgraduate training including the final Certificates of Completion of Training (CCT), the universal requirement for all GPs and consultants, in any specialty, be it diabetes, respiratory or other specialty, to obtain to work within the UK [7].

To date the GMC has not been involved in the content of either the undergraduate or postgraduate training programmes. The content of the undergraduate curriculum is the responsibility of the 34 different UK undergraduate medical schools, all members of the Medical Schools Council. Although all medical schools do offer some community-based teaching in their curricula, the time spent and emphasis on crossorganisation and cross-discipline community placements and population health varies among the medical schools [8]. As a generalisation, undergraduate teaching is given predominantly by university lecturers and hospital consultants, with little experience in chronic disease management in the community. A significant percentage of undergraduate clinical placements are timetabled in the hospital environment. There also remains a real financial dis-

**Table 14.2** Organisations responsible for the regulation, commissioning and delivery of medical education and post graduate training in the UK

- 1. The General Medical Council (GMC)
- 2. The Medical Schools Council (MSC)
- 3. Education England (HEE)
- 4. NHS Education Scotland (NES) 1 the Northern Ireland Medical and Dental Training
- 5. Northern Ireland Medical and Dental Training Agency (NIMDTA)
- 6. The Conference of Postgraduate Medical Deans of the UK (COPMeD)
- 7. Wales Deanery
- 8. The Academy of Medical Royal Colleges (AoMRC)

incentive for universities and their university hospitals to actively encourage clinical placements in the community as this would result in lost income. University hospitals are Local Education Providers (LEPs) and receive tariffs for education and training for each undergraduate placement from the Local Education and Training Boards (LETBs), which in turn receive their money through HEE. These tariffs would be lost if more clinical placements took place in the community. Currently a tariff for an annual clinical placement is in excess of £33,000 [9].

For the profile of undergraduate teaching on chronic disease management in the community to increase requires not only more out of hospital based clinical placements, but for the assessment of population health to be part of the final qualifying exams. The Medical Schools Council Assessment Alliance (MSCAA) a partnership of its members has already agreed to include a proportion of finals examination questions from a shared question bank. Potentially the MSCAA could play a role in supporting integrated care by mandating its inclusion into all curricula and final assessment exams [10].

There is a significant focus from HEE and the individual LETBs to support medical workforce planning and educational commissioning that fosters doctors to meet the changing needs of and ageing population with complex health needs and high expectations. There is a real appreciation by the LETBs that there will need to be fundamental changes in postgraduate training to equip medical physicians for integrated care and recognition that current training is not doing this.

The first 2 years of postgraduate medical education and training after qualifying, are undertaken in a foundation programme that provide a generic training to bridge the transition from medical school into specialist and general practice training. Both the GMC and the LETBs assess these educational programmes for the standards of training they provide. Placement opportunities are in broad specialty areas with opportunities to work in both primary and secondary care settings. Integrated care was widely referred to in the Health Education England Broadening the Foundation Programme report of 2014 [11]. This report recommended a greater amount of training during these first 2 years to be undertaken in community-based settings, anticipating the need for the next generation of foundation doctors to be better equipped to provide integrated care. A major recommendation from this report was that at least 80% of foundation doctors should undertake a community placement or an integrated placement starting in August 2015. A view echoed in the 2014 Shape of Training report [12].

The responsibility of postgraduate speciality training after the foundation years is dissolved to the different medical royal colleges, faculties and specialty associations to deliver the curricula and to assess trainees' competencies. For example, diabetes speciality training is the responsibility of the Joint Royal Colleges of Physicians Endocrine and Diabetes Training Board (JRCPTB) [13].

The GMC involvement and influence on curriculum content as well as training standards may increase following two major reports in the last 3 years. Firstly, the publication on the Shape of Training Review by Professor Greenaway's in 2013 [12], an independent review commissioned by the four UK governments sponsored in part by the GMC, reported what changes were required in medical postgraduate training to meet the future healthcare needs across the UK. The report came up with 19 recommendations. Although these continue to be hotly debated, changes to medical training are likely to follow. This will equip tomorrow's medical specialist to be better suited to work in integrated care settings. This will include closer training with GPs and other healthcare professionals to deliver out of hospital speciality care at a population level in the community. Another one of the 19 recommendations of this report was for more subspecialty training to be undertaken following qualification as a doctor. The GMC is in favour of credentialing; however, who exactly would pay for and accredit this extension to training remains unclear. Potentially training in integrated care for the long-term conditions both for general practitioners and hospital specialists could become a recognised post CCT credential [12].

The second factor that might lead to the GMC having a greater influence on the core medical curriculum is it support for a national licensing examination to be taken by all graduates and doctors wishing to work in the UK, with 2021 being the provisional date for its implementation. Such an exam could support integrated care by including greater focus on the nature of multidisciplinary team-work, the impact of differing UK health systems and the interface between acute and primary healthcare and social care [14].

Currently, following foundation training, those trainees wishing to pursue a career in one of the 27 medical specialties enter a 2 year core medical programme in which they rotate through generic medical disciplines before a competitive selection process during year 3 of their post graduate training (ST3) into one of the specialist training programmes. These specialty training programmes are usually an additional 4–5 years of training. Those wishing to pursue a career as a general practitioner, enter 3 years of GP Specialty Training (GPST) that normally includes 18 months in an approved training practice with a further 18 months in approved hospital posts.

The Royal College of General Practitioners (RCGP) has been a long-term champion of integrated care [15]. The Shape of Training report concentrates on medical as opposed to general practice training. It proposes expanding the number of trainees working purely in general medicine to 3 rather than 2 years before entering specialist training, and to continue with a commitment to general medicine throughout their specialty training. Current funding for these training years is paid half by the LETBs with the other half from the hospital trusts for clinical service. While there is a general acceptance that there needs to be a balance between training and clinical service along with greater integrated work, there is reluctance among the different speciality Royal College training boards and speciality medical societies to shorten or dilute speciality training.

For LETBs to commission a specialist training post that supports integrated care, training placements will need be outside of the acute setting and be able to provide suitable training experiences. Placements that span the acute sector, community and private/voluntary sector organisations will require training programme directors and educational supervisors, at a local level, who meet the GMC standards for training. This may initially be difficult to establish in organisations that are unfamiliar with training. Certain specialities, such as respiratory medicine, have, through their speciality society the British Thoracic Society (BTS), developed a curriculum for integrated respiratory physician training [16, 17]. Other speciality societies, including those involved with diabetes training, have yet to develop a curriculum for integrated care. The BTS Working Group on Integrated Respiratory Care recognises it is essential in the future for all specialist trainees to have some experience of primary care at least once during their training, probably twice a year and late in the course of their training. The BTS acknowledges, in the future, the roles of consultant involvement in respiratory care is likely to increase to include supervision of community sleep services, reviews of those dying from airway disease and provision of medical input into and care for those with idiopathic pulmonary fibrosis.

While exposure to community work during training is available in other medical specialties, including diabetes, this exposure is extremely patchy and other specialty curricula could learn from the proactive endorsement the respiratory specialty society, BTS, has given to specialty training in integrated care. Diabetes UK, the UK's leading diabetes charity, has widely supported integrated care as the way forward in their 2014 published report on the subject; however, this report failed to address the needs for professional medical training to deliver such care, and the on going training consultants in diabetes would need to support out of hospital services [18]. While this report had the endorsement of the Association of British Clinical Diabetologists (ABCD), the national organisation of Consultant Physicians in Britain who specialise in Diabetes (the increasingly influential body) has remained lukewarm concerning integrated care concentrating more on the role of consultant diabetologists as specialty hospital based [19]. The ABCD has

representation on the RCP training and Specialist Certificate Exam Board Specialist training Committee boards and is in a very strong position to influence change in diabetes postgraduate training if it so wished. While the ABCD do acknowledge a role for consultants to provide specialist leadership for the local health economy in designing a high quality and cost-effective integrated model of diabetes care, the training required to do this has not yet been addressed. This contrasts with the emphasis on diabetes educational training for all healthcare professionals in primary care and the need for clinical up skilling the workforce that has come from general practice and the Diabetes UK Primary Care Network [20] and Primary Care Diabetes Society [21]. For true integrated care in diabetes and the other long term condition specialties to work, the education and training needs for both general practitioners and hospital specialists need to be more closely aligned.

The Royal Colleges, both the RCP and the Royal College of General Practitioners, have a pivotal role in supporting integrated care, for all specialities. Not only through the RCP speciality training boards but also through on going educational programmes and support for those consultants involved in community care. The RCP through its Advisory Appointments Committees (AAC) is involved in scrutinising consultant job plans and the appointment process of most consultant posts in the England. They are also working with medical staffing departments to make them compliant with British Medical Association guidelines. The RCP continues to have a representative on most medical consultant interviews. The RCP should take a lead from the respiratory society, the BTS, which has published a generic job plan for community consultant.

For new diabetes and other speciality consultant posts that have a community component, and an increasing number do, the RCP is well placed to ensure that there is a balance between community and hospital work, that a newly appointed consultant is supported by the hospital specialist team to guarantee that they have the skills necessary, there is access to continual professional development and appropriate time set aside in the

**Table 14.3** Supporting professional activities

- 1. Continuing professional development
- 2. Local clinical governance activities
- 3. Multidisciplinary training
- 4. Formal teaching
- Management
- 6. Appraisal
- 7. Job planning
- 8. Audit
- 9. Research

job plan for supporting the professional activities (SPAs) necessary to underpin direct clinical care work. The SPAs for a community consultant post will differ from those in a traditional hospital based consultant job plan but are equally as important (Table 14.3).

At the very core of integrated care is working across primary and secondary care. Advertised consultant appointments that are purely in the community are not the way forward as this just replaces one form of working in *silos* for another. The RCP Advisory Appointments Committees should not sanction such posts and should strongly encourage the host institution holding the contract to be an NHS trust, preferably a hospital NHS trust. A major reason for this is that if the contract for the community specialist service is not re-commissioned or is commissioned by a non-NHS private provider, the consultant would still hold an NHS contract with the hospital. This is important as this has implications for pensions and other employment benefits. Again the RCP is in a strong position to actively encourage this when approving consultant posts.

The royal colleges are also well placed to raise the clinical profile and stature around integrated care by hosting faculty with expertise in integrated care within their colleges and supporting research and educational conferences on integrated care. These programmes could include programmes in leadership skills required for consultants in these roles. At the end of the day it will be action not purely words that will dictate the success and implementation of high quality integrated care clinical services. Action around education is key to this success.

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