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Radiation Therapy in the United Kingdom and the Wider Role of the Clinical Oncologist

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These are interesting times for radiation therapy in the United Kingdom (UK), as the specialty is enjoying attention from the highest level of government, a greater appreciation of its role in cancer care and, consequently, increased public acceptance and even pressure for its use. With this has come a very welcome injection of funding, but there are still major challenges. Prominent among these is how best to assimilate this enthusiasm for our specialty in a sustainable, equitable fashion while nurturing equally pressing nonradiation issues that UK clinical oncology encompasses (more on this in a moment). First, a little background on the National Health Service (NHS) and the organization of cancer services over the past decade.

Birth of the NHS

The NHS was born out of the principle that good healthcare should be available to all, regardless of wealth, and should provide a comprehensive range of services that are free at the point of delivery. The launch of the NHS came in 1948, in the immediate postwar period, and has grown over the ensuing 65 years to become the largest publicly funded health service in the world. You might think that the term "National," as in National Health Service, would be synonymous with United Kingdom, but you would be wrong. Health and social care are devolved issues in the UK: there are separate public healthcare bodies for Scotland, Wales, Northern Ireland, and England, and each is commonly referred to as a "National Health Service." Of course, there are similarities in the way healthcare is delivered in each of the components of the United Kingdom, but there are also fundamental differences. This is an issue for bodies such as the Medical Royal Colleges, which are truly UK-wide and which need to ensure equivalent education and standards throughout each of the devolved countries. This separation of power and financing is often not appreciated even by the health-seeking community of the UK. A little more clarity on this has been achieved with the introduction of the term "NHS England," which came into use earlier in 2013 and which is, by far, the largest of the 4 health services. From here on, in referring to the NHS it will be in terms of NHS England.

Organization of cancer services in the 21st century

In the late 1990s, cancer came under the radar of politicians, and a "Cancer Plan" was published in September 2000. In response to this, and to ensure that the recommendations of the plan were implemented, the Cancer Action Team was founded. This body underwent a number of changes over the years and was later known as the National Cancer Action Team (NCAT). The function of the team was to raise awareness of the cancer agenda, coordinate services, and to implement policy as it emerged. A great deal was done by NCAT, and the standards of care for patients in England were undoubtedly improved by the focus and drive that this organization provided. Nothing stays the same forever, however, and with reform of the NHS, NCAT finally shut its doors in April 2013.

NHS reform (2014): Implications for cancer services

The NHS (England) reforms came into being in April 2013 after a painful gestation period, with the details of implementation still in evolution. These reforms have huge implications, mainly in terms of how services are commissioned, a term that imbibes the elements of contracting and financing. The allocation of radiation therapy and chemotherapy, each, to a national system for specialized services, rather than being left to local generalized commissioning, opens up the opportunity to establish consistent nationwide specifications for quality of radiation therapy delivery and cost (tariff). That's good, but in the new system cancer is no longer considered as a contained entity, with well-funded supporting bodies, and instead is woven into the fabric of 5 new domains of healthcare (1) in an attempt to find commonality between disease types and integrate services. The domains have not exactly been graced with catchy titles, but at least the cumbersome strap-lines offer clarity on intent and are shown in the schema (Fig. 1). Obviously all 5 domains are relevant to delivering radiation therapy and to cancer care in general.

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The NCAT was responsible for implementing the cancer healthcare policy, increasing access to cancer services, and setting the aspirations for high-quality services. Much of what it achieved was done through the coordination of the involved professional bodies, and other relevant organizations, in the form of the National Radiotherapy and National Chemotherapy Implementation Groups. These groups have suffered the same fate as NCAT in the health service reforms, and their demise hugely threatens our ability to coordinate services, implement developments, and sustain innovations.

The National Radiotherapy and National Chemotherapy Implementation Groups brought together the relevant professional bodies, service managers, commissioners, patient representatives, and those responsible for development of national datasets and were a powerful positive force in their 5-year lifespan. However, at their rather sudden demise their work was not finished, and there were both long-term, ongoing issues such as workforce planning, and more specific projects, which included guidance on ways of working in the setting of extended days and weekend services. The professional bodies involved have expressed enormous concern around the loss of these umbrella structures and feel that their removal has compromised the ability to deliver high-quality, advanced therapies and offer UK patients a world-class service. In an attempt not to lose the ground gained under the direction of the NCAT, the professional bodies consider it important to continue this coordination of work and have established both a Radiotherapy Board and a Chemotherapy Board. The need to foster multiprofessional coordination has never been greater than at a time of encouragement to expand the service, innovate, and meet new targets. These new boards are coming together well, but there is no NHS funding for them (the professional bodies are footing the bill), and they have no authority to implement the standards and quality measures that they recommend. Hopefully dialogue with the commissioning bodies will translate the aspirations of the professional bodies into standards of care in cancer departments across the country. It is early to see how this is going to work out, and at the moment the system is fragile and unproven, but there is undoubtedly opportunity as long as the goodwill does not run out.

The specialty of clinical oncology: More than just radiation oncology

You may have noticed a continuous stream of chemotherapy-speak in the above text—a reflection of the almost unique UK system in which clinical oncologists not only deliver radiation therapy, in all its guises, but also the entire spectrum of systemic therapies. The specialties of medical oncology and hemato-oncology are also responsible for chemotherapy services, but clinical oncology delivers more chemotherapy than either of these 2 other groups. It is interesting to reflect on how the specialty of clinical oncology in the UK evolved in the way that it did, particularly because this was in contrast with the development of cancer specialties virtually everywhere else in the world. There are no obvious answers to this question, and it was most likely the combination of a number of factors that were at play around the 1970s and into the 1980s. At this time, there was an influx into radiation therapy training programs of young physicians who had a strong background in internal medicine and who had obtained their internal medicine qualification (Membership of the Royal College of Physicians). At the same time, medical oncology experienced a more faltering start in the UK than in many other countries and did not offer as substantial a training program or career structure as clinical oncology. A further attraction of these radiation therapy training programs was their inclusion of laboratory and clinical research opportunities, leading to higher degrees, and this combination of diverse clinical activity and research provided an attractive career path. At the same time, tumor-specific units were established in leading UK cancer institutions and provided a model for the delivery of chemotherapy alongside radiation therapy for tumors such as testicular cancer and Hodgkin lymphoma. These units delivered clinical results comparable to the best international figures, provided opportunities to study the totality of tumor biology and therapy systems, and challenged the notion of a drug-radiation disciplinary split. There was the added incentive of early optimism for the success of chemotherapy, with the possibility that radiation therapy might become obsolete, and this encouraged the maintenance of a flexible workforce.

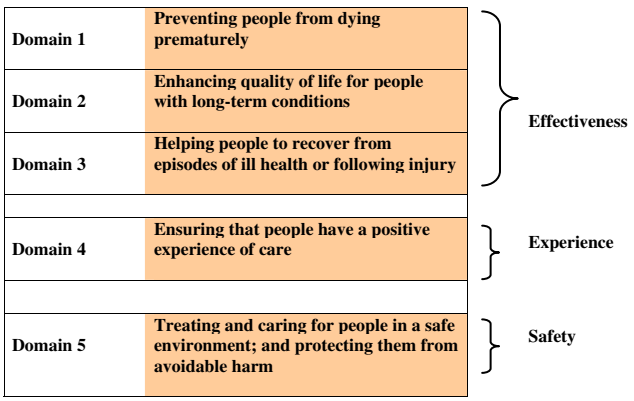

Fig. 1. Five domains of National Health Service healthcare.

Whatever the influences for its earlier development, clinical oncology has an obvious challenge with such a diverse portfolio of therapeutic responsibilities and the need to train and maintain the necessary skilled workforce. Not only is the scope of practice broad, but there is also pressure from the workload implications associated with increasingly complex radiation techniques and the greater choice of systemic agents and combination schedules. Has this broad therapeutic basis had a detrimental effect on the development of modern technical radiation therapy? There are certainly those who think it has and would be strongly in favor of the specialty concentrating on the delivery of high-quality radiation therapy supported by a strong academic foundation. As the only specialty able to deliver radiation therapy, should we make this our raison d'être and leave systemic therapy, and other aspects of oncology care, to other specialties? The way care is delivered in clinical oncology is one that helps to address the constant concern that patients have over continuity of care and ensures better access to the range of available therapy options. The fragmentation of nonsurgical oncology into what could almost be described as subspecialties cultivates microcosms of care that patients and caregivers feel very negative toward. Additionally, and this is of core interest to those responsible for resourcing and delivering oncology services, clinical oncology provides very good value for money, avoiding duplication of effort and expense and shortening the patient pathway. Undoubtedly there is conflict here between a highly trained, technical single-modality specialty and one that encompasses multiple approaches to treatment and provides a greater element of continuity. For the latter, how can clinical oncologists be trained to be skilled in all aspects of modern radiation therapy and chemotherapy, and how can those skills be maintained? The Royal

College of Radiologists, as the body responsible for training clinical oncologists and for setting the standards of the specialty, is very aware of this tension and has set up a strategy group to explore how the specialty may look in 10 years' time. Lessons can be learned from other parts of the world where radiation therapy has developed into a highly technical specialty and where, without overall care of the patient, various components of radiation therapy can be assumed by other professionals and specialties. Medical specialties come and go, evolve, and diversify, and this is right because medical knowledge and applications do not stand still. Defining the spectrum of work and lobbying for the appropriate workforce, in terms of numbers and specialist skills, must be our best way to maintain standards of care for patients.

There are pros and cons to each of the alternatives: maintaining the spectrum of clinical oncology activity as it is, redefining the specialty in terms of radiation therapy alone, or creating a "halfway house" that lies somewhere between the 2. From the initial discussions of the Royal College of Radiologists Strategy Group, it seems there is an appetite to continue with a broader therapeutic responsibility rather than focusing solely on radiation, and to continue to have responsibility for the overall management of patients. In the UK, this approach has the potential to find clinical oncology entangled within the acute medicine crisis, one of the core issues of the NHS today. The pressure involved in managing and staffing acute medicine services means that all specialties involved in medical care are being asked to contribute to sustaining acute medicine in our hospitals. In addition, the establishment of an acute oncology service, designed to manage acute medical situations arising from the complications of cancer and its treatments and to streamline the diagnostic pathways for those admitted with suspected cancer, has brought us closer to this acute medicine arena. How can this type of commitment sit with the training requirements for advanced radiation therapy?

So there we are. Clinical oncology in the UK finds itself in all shapes and sizes, and models of care tend to emerge from local needs and the available skill-mix from other professionals and other specialties. Can we develop as a specialty based on broad training in the early years but that allows subsequent specialization, depending on the tumor type and modality requirement? The initial broad training equips clinical oncology with a flexible workforce and maintains the concept of generalism, which has become very topical in our healthcare system.

Evidence-based practice in UK oncology

Through the National Institute for Health and Care Excellence (http://www.nice.org.uk/), evidence-based care has been integral to UK medicine for many years, and guidance on specific cancer types has been a major part of this program. Although at times the medical community is at variance with the National Institute for Health and Care Excellence, in general, guidance is well received and incorporated into practice. This has helped to contain inequalities in care depending, for example, on geographic location, but in reality, how precisely are these guidelines interpreted and delivered? National datasets for radiation therapy and chemotherapy, which include details of every patient treated in England, are now mandatory and are generating enormously powerful information on an almost real-time basis. For example, we know on a monthly basis what proportion of radiation therapy is delivered by intensity modulated radiation therapy nationally, and this information is also available by cancer center, for specific tumor types, and can be linked to other national datasets recording a whole range of patient episodes. The range of chemotherapy schedules delivered for a specific cancer type can be reviewed and are available to hospital trusts to benchmark practice and to commissioners of healthcare to scrutinize quality. These national datasets are unrivaled in global healthcare but need to be efficiently managed, subject to good governance, and available for intelligent enquiry.

The future

All this adds up to a climate of enthusiasm and opportunity for radiation therapy in the UK. The increased interest in the specialty generates energy and achievement, and the concepts around commissioning, with service specifications ensuring quality and determining the funding flows, introduce new possibilities in terms of the access that patients have in all parts of the country to best standards of care. It seems naïve to think that expansion of services, with increasingly complex technology, will not require a matched expansion of the clinical oncology workforce, but this is going on at a time when the NHS is having to make major savings through budgetary constraint. That constraint has removed the structures that secured the organization of services, and it remains to be seen whether the commissioning bodies and the multiprofessional bodies can flourish in such an environment.

Reference

1. National Health Service. The NHS Outcomes Framework 2013/14. Available at: https://www.gov.uk/government/publications/nhs-outcomes-framework-2013-to-2014.