www.rcr.ac.uk

Clinical Oncology
The Royal College of Radiologists

Clinical oncology
UK workforce census report 2020 executive summary

July 2021

1. Executive summary

Cancer continues to be one of the leading causes of mortality in the UK. Around 1,000 new cancer cases are diagnosed each day in the UK and one-in-two people born after 1960 will likely develop cancer in their lifetime.[1,2] Although data indicate that UK cancer survival rates are slowly improving, the UK still lags behind other comparable countries. The NHS *Long Term Plan* has committed to improving cancer survival by increasing early diagnosis from half to three-quarters and enabling 55,000 more people to survive cancer for five years or more by 2028.[3]

The UK cancer workforce plays a vital role in fulfilling these ambitions. Yet, without meaningful and sustained investment to grow the oncology workforce, these ambitions will remain simply that. On top of this, the fallout from COVID-19 has made these targets even harder to achieve, with clinicians seeing significant delays in cancer referrals, diagnosis and treatment.

The findings from our latest annual workforce census of clinical oncologists in the UK highlight the widening gap between the future demand for cancer services and the specialist oncologist workforce who provide the service, shortages which threaten to put the *Long Term Plan* and cancer recovery in jeopardy.[3] Urgent and decisive action is needed now to ensure the appropriate clinical oncology (CO) workforce is in place so that improvements to cancer survival can be realised.

Clinical oncology consultant UK workforce capacity – in brief

CO consultants play a central role in cancer teams with approximately half of all cancer patients having some form of radiotherapy and two-fifths (40%) receiving chemotherapy as part of their treatment plans.

- The CO consultant workforce has a shortfall of 17% (189 whole-time equivalents [WTE]) which is set to rise to 28% (401 WTE) by 2025.
- Despite overall growth in the CO consultant workforce there were parts of the UK where a quarter of cancer centres reported no gain or a decline in 2020.
- Over half (52%) of cancer service leaders reported that workforce shortages have negatively impacted the quality of patient care.
- In 2020, 55% of CO consultant vacancies remained unfilled after a year compared with 29% in 2015.
- In the 55+ age group, less than full-time (LTFT) working has increased from three in five CO consultants in 2015 to four in five in 2020.
- The UK CO consultant workforce has grown by 3% per year (on average over the last five years). This falls below the 4% average annual workforce growth across all specialties in England.[4]
- Workforce growth is forecast to slow down from 3% per year seen over the past five years to 2% per year over the next five years.
- The number of doctors starting specialty training would need to double for the next five years to close the forecast workforce gap.

Background

Clinical oncologists lead and participate in teams with nurses, radiographers, physicists, pharmacists and other allied health professionals. These multidisciplinary teams assess and treat cancer using various therapies and interventions, including systemic anticancer therapies (chemotherapy, immunotherapy etc) and radiotherapy; only clinical oncologists are qualified to deliver both forms of treatment. Clinical oncologists also train and mentor specialty trainees and other professionals, lead service improvements and participate in research.

2020 underlined the undisputed value and resilience of the healthcare workforce in responding to the major healthcare challenge brought about by COVID-19; cancer services responded with adaptability and innovation. However, backlog fears add to existing pressure on cancer services. Clinical oncologists and their teams pulled together to ensure that radiotherapy treatment for cancer patients continued to be available for all patients during the pandemic.[5]

New ways of working, altered radiotherapy treatment schedules, better use of technology, improved remote access to hospital systems and the ability to plan radiotherapy remotely were all seen as beneficial changes.

Nevertheless, the pandemic has presented many challenges for cancer services that will continue to reverberate for some time. As cancer referrals return to pre-pandemic levels, there is concern regarding the backlog of cancer patients who may require more complex treatment on top of a growing demand for cancer services. Studies show that approximately 40,000 fewer patients in the UK started treatment for cancer than normal last year.[6]

Over recent years cancer prevalence has increased by 3% per year in the UK, with the need for increased cancer services provided by clinical oncologists rising alongside.[7] Approximately half of all cancer patients have some form of radiotherapy included in their treatment and two-fifths (40%) receive chemotherapy (alone or combined with other treatments).[8] Other factors contributing to increased service demand include:

- A growing and aging population with more complex care needs
- The increase in screening, which has driven up cancer diagnoses at an earlier stage
- Patients' needs and expectations in being fully informed and involved in decision-making about an increasing number of treatment options
- Technological advancements increasing the number and complexity of treatment options available
- The need for clinicians to keep abreast of the latest research, clinical guidelines and technological developments as well as time to lead service developments and teach/supervise trainees and others in the team.

The oncology workforce has not been able to keep up with the increasing demand and with workforce growth predicted to slow down in the next five years the future for cancer services looks ever more fragile without significant investment.

Key findings

1. Cancer workforce 'winners and losers' across the UK

Tackling health inequalities and ensuring access to services remains a top priority for government, NHS leaders and health professionals. Although the CO consultant workforce grew by 3% per year (on average over the last five years), the picture across the UK varies significantly. For instance, North Wales saw no growth in the CO consultant workforce over the past five years. Also, growth was minimal (average 1% per year) in the East of England, the North West of England and South East Scotland. Workforce growth was even more variable between UK cancer centres. While a quarter of cancer centres reported average annual workforce growth of 6% or more per year, another quarter reported no gain or a decline in their CO consultant workforce.

There is also significant variability across the UK in the distribution of CO consultants relative to population size. Wales and England have five consultant oncologists per 100,000 'older' population (aged 50 or over). By contrast, Northern Ireland has approximately seven. The distribution of consultant (clinical and medical) oncologists across cancer centres ranges from 12 to 43 WTEs per million population.

Regional variation in workforce has a direct impact on the care that patients receive. In areas that have acute staff shortages access to services is likely to be in higher demand. A global study found that a delay of treatment for cancer of four weeks is associated with a 6–13% increase in the risk of death, so any delays are likely to have a major impact on patients' chances of survival.[9] To improve cancer outcomes for all, the CO workforce must be levelled up across the UK to address regional variations.

2. Trend to work more flexibly and less than full-time rises amid ongoing recruitment challenges

LTFT working across the UK has steadily become more common over the past five years, with the most significant shift towards LTFT working seen in those approaching retirement age (the 55+ age group).

LTFT and flexible working options play an increasingly important part in workforce retention. Not only do they support improved staff wellbeing but they also enable older CO consultants to keep working for longer compared with their full-time colleagues who retire, on average, three years earlier. As well as ensuring flexible models are optimised to support retention of the current workforce, future workforce planning should account for this growing preference when projecting specialty training place requirements.

Despite census data in 2020 showing an increase in the number of consultants recruited to the UK workforce, the data also showed that UK cancer centres could not recruit all the CO consultants needed to fill existing vacancies. Over half of all CO consultant vacancies remained unfilled for more than a year. Ongoing problems of insufficient numbers of trainees, a lack of suitable UK candidates and significant barriers to global recruitment were all contributory factors.

3. The most common cancers are facing the greatest workforce shortages while 24/7 acute oncology service (AOS)provision is not growing fast enough

Breast, lung, prostate and bowel together account for over half of all cancers diagnosed in the UK.[1] High levels of vacancies for specialists in these tumour sites are particularly

alarming, with specialists in breast and lung revealing minimal growth in the past five years, which is insufficient to meet the growing demand for these specialists.

Acute oncology teams provide multidisciplinary clinical expertise to support the care of acutely unwell cancer patients, avoiding hospital admissions where possible. In England, one in five cancers are diagnosed following an emergency presentation, the number of older people living with cancer has grown by 23% over a five-year period and 9.2 million bed days are utilised for advanced cancer and end-of-life care.[10] It is recommended that all hospitals with an emergency department have an AOS in place.[11]

However, while two-thirds of cancer centres provide a dedicated unit for assessment and admission of acutely ill cancer patients during standard working hours, only a quarter can provide a 24/7 service despite this number reflecting a modest increase.

RCR recommendations

In response to the findings in this report we recommend that:

- The 2021 increase clinical oncology training numbers in England and Wales should be repeated in subsequent years and should be replicated across the individual UK nations
- NHS leaders should improve staff retention through consulting on, implementing and evaluating appropriate retention strategies. They should also ensure that flexibility in working patterns and opportunities to work LTFT are available to all NHS staff
- Local and national health leaders must account for increased demand for LTFT working in all workforce planning and projections
- NHS trusts and health boards should ensure increased capacity in job plans for service improvement and research for the benefit of patients
- Governments should create incentives to prioritise additional training places in areas worst affected by workforce growth
- Governments must provide funding for better admin and information technology (IT) support to improve the efficiency and productivity of cancer services
- Local and national health leaders should continue to facilitate skillmix, with sustained investment in training to support this
- Governments across the UK must invest in ways to share best practice and implement new treatments and techniques in every cancer centre, including operational delivery networks (ODNs)
- NHS employing organisations should monitor the risks associated with doctors working excessive hours and take prompt mitigating action where risks are identified.

References

1. www.cancerresearchuk.org/health-professional/cancer-statistics-for-the-uk (last accessed 25/6/21)
2. https://news.cancerresearchuk.org/2015/02/04/1-in-2-people-in-the-uk-will-get-cancer/ (last accessed 25/6/21)
3. www.longtermplan.nhs.uk/ (last accessed 25/6/21)
4. https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/september-2020 (last accessed 25/6/21)
5. Spencer K, Jones CM, Girdler R *et al*. The impact of the COVID-19 pandemic on radiotherapy services in England, UK: a population-based study. *Lancet Oncol* 2021; **22**(4): 309–320.
6. The Lancet Oncology. COVID-19 and cancer: 1 year on. *Lancet Oncol* 2021; **22**(4): 411.
7. NHS England. *Modernising radiotherapy services in England – developing proposals for future service models*. London: NHS England, 2016.
8. www.gov.uk/government/statistics/chemotherapy-radiotherapy-and-surgical-tumour-resections-in-england/chemotherapy-radiotherapy-and-surgical-tumour-resections-in-england (last accessed 25/6/21)
9. Hanna TP, King WD, Thibodeau S *et al*. Mortality due to cancer treatment delay: systematic review and meta-analysis. *BMJ* 2020; **371:** m4087.
10. NHS England Chemotherapy Clinical Reference Group. *Clinical advice to cancer alliances for the commissioning of acute oncology services.* London: NHS England, 2017.
11. National Chemotherapy Advisory Group. *Chemotherapy services in England: ensuring quality and safety.* London: National Cancer Action Team, 2009.

The Royal College of Radiologists
63 Lincoln's Inn Fields
London WC2A 3JW

+44 (0)20 7405 1282
enquiries@rcr.ac.uk
www.rcr.ac.uk
@RCRadiologists

The Royal College of Radiologists. *Clinical oncology UK workforce census 2020 executive summary*. London: The Royal College of Radiologists, 2021.