

# Clinical oncology Wales workforce census 2020 summary report

July 2021

---

## Contents

---

Foreword	3
----------	---

---

Objectives	4
------------	---

---

1. Context – COVID-19 pandemic	4
--------------------------------	---

---

2. The oncology workforce in Wales in 2020	4
--	---

---

3. Less than full-time (LTFT) working	7
---------------------------------------	---

---

4. Vacancies and recruitment	8
------------------------------	---

---

5. Estimated shortfall of clinical oncology consultants in Wales in 2020	10
--	----

---

6. Workforce forecast illustrated – next five years	11
---	----

---

7. Gap between supply and demand – five year forecast	12
---	----

---

8. Recommendations	13
--------------------	----

---

References	14
------------	----

---

---

## Foreword

In challenging circumstances, clinical oncology (CO) consultants in Wales have worked tremendously hard to keep radiotherapy and systemic anticancer treatment services running during the pandemic. However, this latest workforce census exposes large workforce shortages, which pose a serious threat to the ability of cancer centres in Wales to provide the level of care that patients need.

While there was an increase of three CO consultants in Wales in 2020, further sustained investment in training places is required to address workforce shortages, estimated to be 12 CO consultants (whole-time equivalent – WTE) in 2020, equal to a 20% shortfall.

A high proportion of CO consultants (29%) in Wales are approaching retirement age, so succession planning is vital. The census reveals retirements in Wales are forecast to outnumber training completions in the next five years, resulting in a forecast 45% shortfall of CO consultants by 2025. Urgent mitigating action is required, as such a shortfall would have a devastating impact on patient care.

The data demonstrate the wide variability across Wales in the distribution of CO consultants. While the size of the consultant oncology workforce in South East Wales (Cardiff) is on par with the UK average (in terms of CO consultants relative to population size), the other two cancer centres in Wales fall significantly below this.

The increase in less than full-time (LTFT) working needs to be factored into future workforce planning in Wales. With half of the CO consultants at Velindre Hospital and the Singleton Hospital working LTFT in 2020, it is clear that the availability of and support for flexible working is crucial to improving staff retention.

The RCR will continue to work with others to look at ways to draw the most out of our current resources, including how the use of skillmix can ensure that multi-professional teams are more efficient and enable the current oncologist workforce to deliver, lead and develop services.

The commitment by the Welsh Government to four additional clinical oncology training places for the next five years is welcome. However, it is only with increased and sustained long-term funding for training places that we will be able to address workforce shortages and bring down waiting lists that have arisen during the pandemic.

*Dr Tom Roques*

Medical Director, Professional Practice, Clinical Oncology

*Dr Seema Arif*

Secretary of Welsh Standing Committee, Clinical Oncology

---

## Objectives

This report provides details of the oncology workforce situation in Wales in 2020. It focuses on the estimated shortfall of clinical oncology (CO) consultants and workforce forecasts over the next five years. This report supplements the *Clinical oncology UK workforce census 2020 report*;<sup>1</sup> please refer to the UK report for UK-wide oncology trends and information such as census questions methodology and timings.

### 1. Context – COVID-19 pandemic

The COVID-19 pandemic has presented many challenges for cancer services. Across the UK, fewer people sought appointments with their general practitioners (GP) during the pandemic, including those with possible cancer symptoms.<sup>2</sup> In addition, people with cancer have waited longer for diagnoses and some treatments needed to be delivered in different ways; other treatment was paused on the grounds of clinical safety; and there has been significant disruption to follow-up care.<sup>3</sup> As cancer referrals return to pre-pandemic levels, estimates indicate that there are around 2,900 undiagnosed 'missing' people with cancer in Wales in 2020, with numbers likely to rise in 2021.<sup>4</sup> Urgent investment in the cancer workforce is needed to tackle waiting times and to share best practice and implement new treatments and techniques in every cancer centre.

### 2. The oncology workforce in Wales in 2020

CO consultants 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 radiotherapy, systemic anticancer therapy (SACT) and immunotherapy.

Table 1 shows that the three cancer centres in Wales employed 75 consultant-grade oncologists in 2020. This number includes NHS, academic and mixed NHS/academic posts.

**Table 1. Clinical and medical oncology workforce (headcount) – Wales, 2020**

	Clinical oncology	Medical oncology*	Oncology total
Consultant grade	55	20	75
Higher specialty trainee	22	Not known	Not known
SAS grade**	3	Not known	Not known

\*Medical oncologists are physicians who specialise in the administration of systemic therapies but not radiotherapy.

\*\*SAS grade comprises associate specialists, specialty doctors and trust-grade staff.

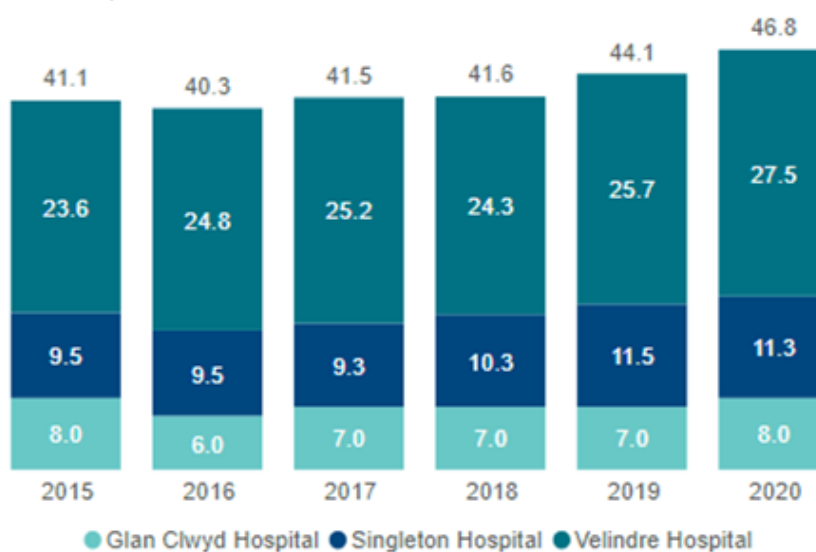
The 3:1 ratio of CO consultants to medical oncology (MO) consultants in Wales is higher than the UK average; across the UK, approximately two CO consultants are employed for every MO consultant.

Higher specialty trainees in Wales comprise 29% of the clinical oncology workforce; this compares to 32% across the UK as a whole. This indicates that Wales has a smaller supply of future CO consultants relative to other UK nations.

### Clinical oncology consultant workforce: five-year trend

The total of 55 CO consultants in Wales equates to 47 whole-time equivalents (WTEs).<sup>\*</sup> The workforce growth of six CO consultants (WTE) in Wales over the past five years is illustrated in Figure 1. The CO consultant workforce grew by 6% (3 WTE consultants) during the past year, exceeding the 3% average annual growth seen over the past five years. This is equivalent to the 3% per year growth seen in England over the past five years, though lower than the average growth of 5% and 6% per year seen in Northern Ireland and Scotland, respectively.

**Figure 1. Clinical oncology consultants (whole-time equivalent) – Wales, five-year trend (2015–2020)**

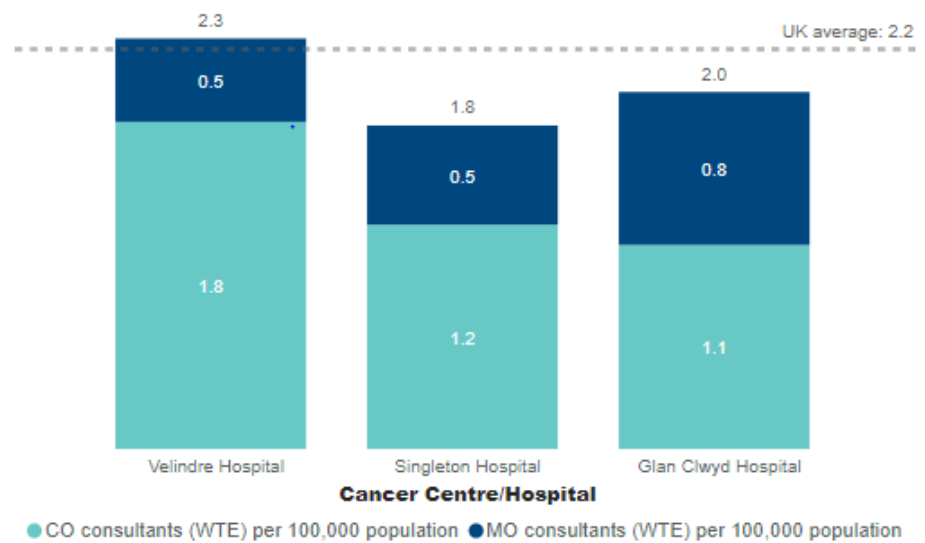


Workforce growth has varied significantly across the three cancer centres in Wales. While the workforce at Velindre Hospital (Cardiff) has grown by four CO consultants (WTEs) over the past five years, Glan Clwyd Hospital (Rhyl, North Wales) has seen no growth.

<sup>\*</sup>A WTE is a whole-time (or full-time) doctor contracted for ten programmed activities (PAs) per week, equivalent to a 37.5-hour week.

There is also significant variability across Wales in the distribution of consultant (clinical and medical) oncologists relative to population size. Figure 2 shows that Velindre Hospital has 2.3 consultants per 100,000 head of population, on a par with the UK average. By contrast, Singleton Hospital has 1.8.

**Figure 2. Clinical oncology consultants (whole-time equivalent) per 100,000 population – Wales cancer centres, 2020<sup>5</sup>**

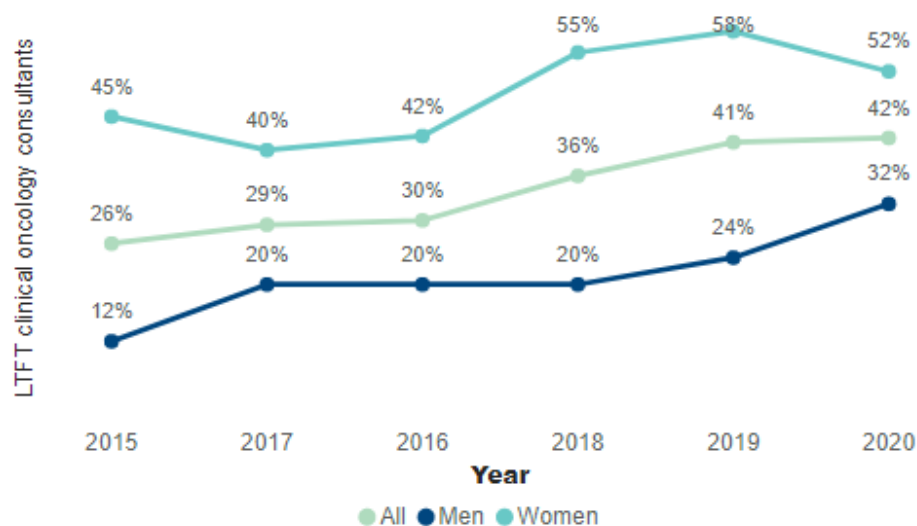


### 3. Less than full-time (LTFT) working

LTFT is defined as working fewer than ten contracted PAs per week, equivalent to a 37.5-hour working week in Wales. LTFT and flexible working can play an essential part in workforce wellbeing and retention; UK census data show that full-time CO consultants retire on average three years earlier than their LTFT counterparts.

LTFT working is more prevalent among women than men. Figure 3 shows that just over half (52%) of female CO consultants worked LTFT in 2020. However, LTFT working has increased significantly over the past five years among male CO consultants; approximately one-in-three (32%) worked LTFT in 2020.

**Figure 3. Frequency of less than full-time working, clinical oncology consultants – Wales, five-year trend (2015–2020)**



In 2020, the workforce capacity reduction due to LTFT working in Wales equated to eight CO consultants (WTE) or 15% of the workforce. That is to say, an additional eight CO consultants (WTE) are required to support current levels of LTFT working.

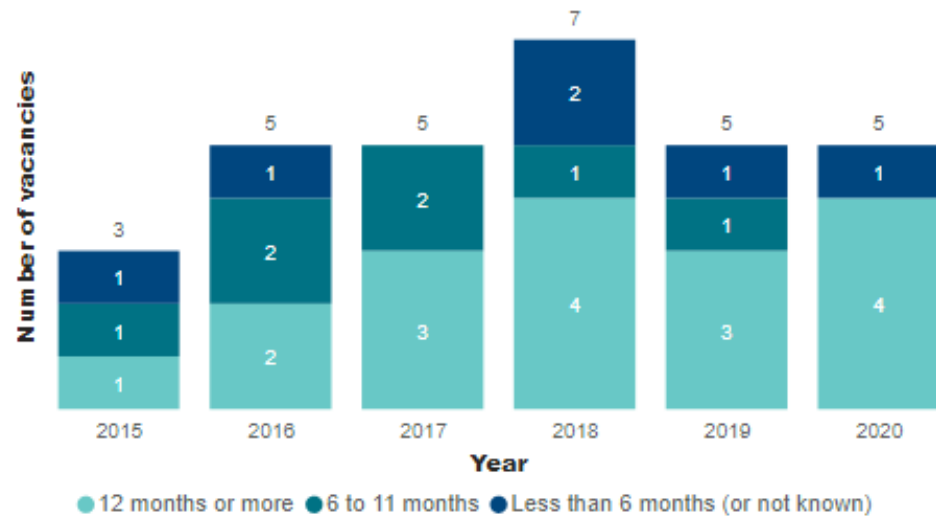
None of the CO consultants in Glan Clwyd Hospital worked LTFT in 2020; in contrast, half of those at Velindre Hospital and the Singleton Hospital did so.

The NHS should ensure the availability of, and support for, flexible career options to maximise staff wellbeing and staff retention. In addition, workforce planning should factor in the increasing demand for LTFT working. Such measures will help to ensure the long-term viability of the workforce.

#### 4. Vacancies and recruitment

Five funded CO consultant vacancies were reported in Wales in October 2020, equating to a vacancy rate of 8%. This is on a par with the UK vacancy rate of 8%. Four of the vacancies in Wales remained unfilled for over a year despite recruitment attempts, indicating significant recruitment challenges. Figure 4 shows vacancy trends in Wales over the past five years.

**Figure 4. Number and length of clinical oncology consultant vacancies – Wales, five-year trend (2015–2020)**

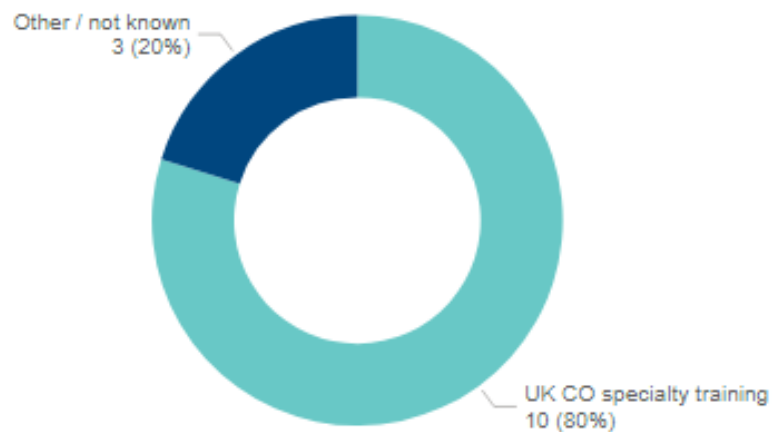


Census data show that four CO consultants (WTE) were recruited to the workforce in Wales over the past year (to October 2020), indicating that there was some success with recruitment activities. Nonetheless, the significant challenges to filling roles remain.



Figure 5 shows the source of newly appointed CO consultants in Wales over the past five years. Four in five (80%, n=10) came from UK clinical oncology specialty training. Overseas specialty training in oncology tends to be split into radiation oncology and systemic therapy, unlike UK clinical oncology specialty training which covers both aspects of non-surgical oncology. This difference makes it particularly challenging to fill UK CO consultant posts with candidates trained overseas.

**Figure 5. Source of newly appointed clinical oncology consultants – Wales, past five years (2016–2020)**



*Global recruitment refers to doctors who undertook their primary medical qualification outside the UK and have not undertaken UK specialty training. The other/not known group includes older CO consultants returning to practice after taking time out and those whose General Medical Council number is not known.*

## 5. Estimated shortfall of clinical oncology consultants in Wales in 2020

The need for cancer services and the demand for CO and MO consultants have risen over recent years as a result of:

- Increased numbers of people with cancer
- A growing and aging population with more complex care needs
- Increased screening to support early diagnosis of cancer
- Patients' needs and expectations
- Technological advances increasing the number and complexity of treatment options available.

In addition to delivering more complex care needs to increasing numbers of patients, an adequate workforce is essential to ensure that CO consultants have time to keep abreast of the latest research, clinical guidelines and technological developments. They also need time to lead and support service developments such as process and quality improvements and embedding new technologies into practice, all of which improve the quality of care for people with cancer.

Census data indicate that the CO consultant workforce in Wales is currently understaffed by a minimum of 12 WTE consultants, equal to a 20% shortfall. This estimate is based on the:

- Five vacancies (WTE) reported in 2020
- Seven additional consultants (WTE) required to cover the excess workload in 2020. Excess workload is defined here as that which exceeds ten PAs per week (equal to 37.5 hours).

This compares to an estimated 17% CO consultant shortfall across the UK as a whole, indicating more severe workforce shortages in Wales.

Cancer incidence rises with age. Nine-in-ten cancers occur in the 'older' population aged 50+.<sup>6</sup> Workforce shortages relative to the 'older' population in Wales are greater than in other UK countries. In Wales, there are 5.0 CO consultants (WTE) per 100,000 'older' population (aged 50+), compared with 5.6 WTE consultant oncologists per million 'older' population across the UK as a whole.

## 6. Workforce forecast illustrated – next five years

The primary inflows and outflows impacting the CO consultant workforce are new entrants from UK specialty training and global recruitment, set against attrition from retirements and other leavers. Workforce capacity is also affected, though often to a lesser extent, by LTFT working and staff absence.

### Forecast supply of CO consultants – next five years (2020–2025)

Comprehensive data on CO consultant joiners, leavers and working patterns have been captured through RCR censuses and training data over the past ten years. Figure 6 illustrates the forecast CO consultant workforce (WTE) in Wales in five years' time (2025) based on trends observed over the past five years. An estimated 37 CO consultants (WTE) will be in post in 2025, ten fewer than in 2020. This is driven by expected retirements outnumbering training completions and, to a lesser extent, the trend towards LTFT working.

**Figure 6. Forecast supply of clinical oncology consultants (whole-time equivalent) – Wales, next five years (2020–2025)**



*Increased training numbers in 2019 and 2020 are not reflected in the above forecast as trainees take an average of seven years to complete their training.*

Workforce growth is forecast to slow down from the 3% per year growth seen over the past five years to negative growth over the next five years. By region, the CO consultant workforce (WTE) is forecast to contract as follows:

- **North and West Wales:** forecast decrease from eight to five
- **South Wales:** forecast decrease from 39 to 32

Assumptions behind these forecasts:

- **UK specialist training:** Based on the UK average training time of seven years and one month and the UK average attrition rate (over the past five years) of 13%. Assumes 91% of doctors who have completed their training will take up CO consultant posts by 2025.
- **Global recruitment:** Assumes no global recruitment over the next five years.
- **Retirement:** Wales has a relatively high proportion of older consultants. Based on the UK CO consultant median retirement age of 60 years, 29% of CO consultants in Wales (n=13) are forecast to retire by 2025. This is higher than the UK average forecast of 19%.
- **Other leavers:** Assumes the UK annual attrition rate of 1% for other leavers (that is, all leavers excluding retirements) observed over the past five years remains unchanged.

---

## 7. Gap between supply and demand – five-year forecast

Census data show that the gap between supply and demand for CO consultants in Wales is forecast to widen over the next five years.

### Forecast demand

Scenario A outlines the minimum expected workforce demand in 2025, Scenario B outlines the workforce levels needed to accelerate improvements in patient care by 2025.

**Scenario A:** deliver a minimum standard of patient care. Estimated 3% rise in demand per year, based upon the increase in cancer prevalence.<sup>7</sup>

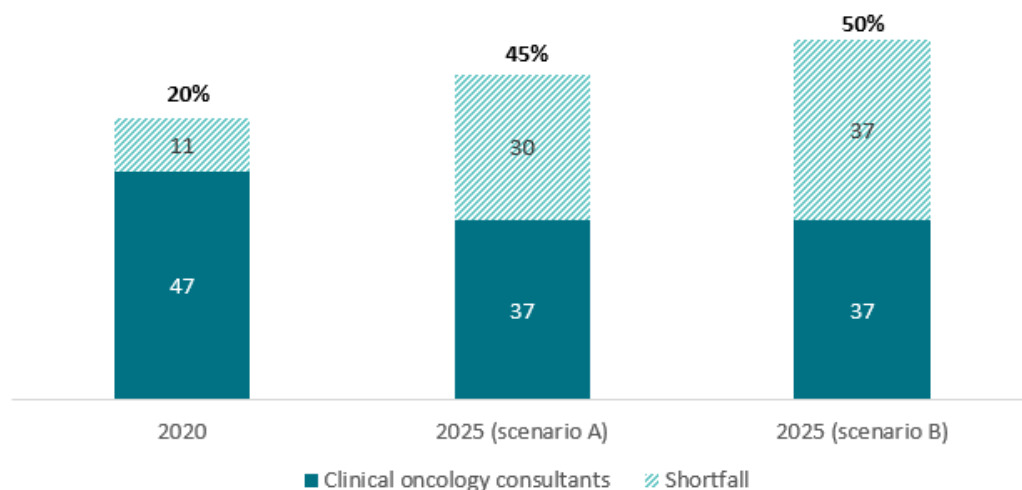
- 2025 forecast demand: 68 WTE CO consultants.
- 2025 forecast shortfall: 30 WTE CO consultants (equivalent to a 45% workforce shortage).

**Scenario B:** Accelerated improvement in patient care. Estimated 5% increase in demand per year to support oncology research, quality improvement and service transformation.

- 2025 forecast demand: 74 CO consultants.
  - 2025 forecast shortfall: 37 WTE CO consultant (equivalent to a 50% workforce shortage).
-

These two scenarios are shown in Figure 7, which provides a simplified illustration of the widening gap between the estimated supply of CO consultants and the demand for cancer services.

**Figure 7. Clinical oncology consultants (whole-time equivalent), estimated supply and demand – Wales, next five years (2020–2025)**



## 8. Recommendations

In response to the findings in this report, the RCR recommends the following.

- A five-year international recruitment plan should be devised and implemented to maximise opportunities for CO consultants to work in Welsh cancer centres.
- Clinical oncology training numbers in Wales should increase incrementally each year to meet demand. Training places should be prioritised in the areas worst affected by workforce shortages due to the tendency for trainees to work in the region where they trained.
- 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.
- Cancer centres should consider SAS-grade expansion as part of plans to grow the oncology workforce.
- Local and national health leaders must account for increased demand for LTFT working in all workforce planning and projections.
- NHS health boards should ensure increased capacity in job plans for service improvement and research for the benefit of patients.
- The Welsh Government should provide funding for better admin and information technology (IT) support to improve the efficiency and productivity of cancer services.
- An urgent review of the multi-professional oncology workforce across Wales should be carried out and the recommendations implemented to ensure skillmix is maximised in every centre.
- The Welsh Government must invest in ways to share best practice and implement new treatments and techniques in every cancer centre.
- NHS employing organisations should monitor the risks associated with doctors working excessive hours and take prompt mitigating action where risks are identified.

## References

1. The Royal College of Radiologists. *UK clinical oncology workforce census 2020 report*. London: The Royal College of Radiologists, 2021.
2. <https://digital.nhs.uk/data-and-information/publications/statistical/appointments-in-general-practice> (last accessed 14/7/21)
3. NHS Cancer Programme. *Cancer services recovery plan*. London: NHS England, 2020.
4. Macmillan Cancer Support. *The forgotten 'C'?* London: Macmillan Cancer Support, 2020.
5. <https://stats.wales.gov.wales/Catalogue/Population-and-Migration/Population/Estimates/Local-Health-Boards/populationestimates-by-lhb-age> (last accessed 15/7/21)
6. [www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/age](http://www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/age) (last accessed 14/7/21)
7. Maddams J, Utley M, Moller H. Projections of cancer prevalence in the United Kingdom, 2010–2040. *Br J Cancer* 2012; **107**: 1195–1202.



The Royal College of Radiologists. *Clinical oncology Wales workforce 2020 summary report* London: The Royal College of Radiologists, 2021.

Ref No. BFCO(21)6

© The Royal College of Radiologists, July 2021.

The RCR is a Charity registered with the Charity Commission No. 211540

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

+44 (0)20 7405 1282

[enquiries@rcr.ac.uk](mailto:enquiries@rcr.ac.uk)

[www.rcr.ac.uk](http://www.rcr.ac.uk)

[@RCRradiologists](https://twitter.com/RCRradiologists)

For permission to reproduce any of the content contained herein, please email: [permissions@rcr.ac.uk](mailto:permissions@rcr.ac.uk)

This material has been produced by The Royal College of Radiologists (RCR) for use internally within the specialties of clinical oncology and clinical radiology in the United Kingdom. It is provided for use by appropriately qualified professionals, and the making of any decision regarding the applicability and suitability of the material in any particular circumstance is subject to the user's professional judgement.

While every reasonable care has been taken to ensure the accuracy of the material, RCR cannot accept any responsibility for any action taken, or not taken, on the basis of it. As publisher, RCR shall not be liable to any person for any loss or damage, which may arise from the use of any of the material. The RCR does not exclude or limit liability for death or personal injury to the extent only that the same arises as a result of the negligence of RCR, its employees, Officers, members and Fellows, or any other person contributing to the formulation of the material.