

# Diagnosics and Cancer Care in Northern Ireland: A Workforce and Policy Review

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## Context: Healthcare in Northern Ireland

Healthcare in Northern Ireland has been devolved to the Northern Ireland Executive, the devolved government of the region, since 1998. The Department of Health (DoH) is one of nine departments of the NI Executive; it is responsible for delivering both health and social care, as well as for public health.<sup>i</sup>

The Northern Irish healthcare system is called Health and Social Care (HSC). Like the NHS, HSC is funded by general taxation and free at the point of use; but unlike the NHS, HSC provides both healthcare and social care. The Health and Social Care Board of DoH commissions services centrally. HSC then delivers those services on the ground. HSC is divided into five Trusts: Belfast Trust, Northern Trust, South Eastern Trust, Southern Trust, and Western Trust. Each Trust manages its own staff and budget. Belfast Trust, the largest, contains most of Northern Ireland’s major teaching and training hospitals. There is also the NI Ambulance Trust, which provides ambulance services across the whole of the region.<sup>ii</sup>

Northern Ireland is served by two cancer centres, both of which deliver radiotherapy. The Northern Ireland Cancer Centre (NICC) is based in Belfast Trust and the North West Cancer Centre (NWCC), which serves a much smaller population, is based in Western Trust. SACT is delivered in both centres, as well as in three cancer unit hospitals via visiting oncologists: Antrim Area Hospital, Craigavon Area Hospital and Ulster Hospital. The

Northern Ireland Cancer Network (NICaN) is a network bringing together commissioners, providers and users of cancer services across Northern Ireland, which aims to improve services through collaboration.<sup>iii</sup>

In Northern Ireland, cancer diagnoses have risen by 54% in the 25 years to 2022, and are projected to double by 2040. Cancer survival also lags behind the other UK nations, which in turn lag behind many European comparator nations.<sup>iv</sup>

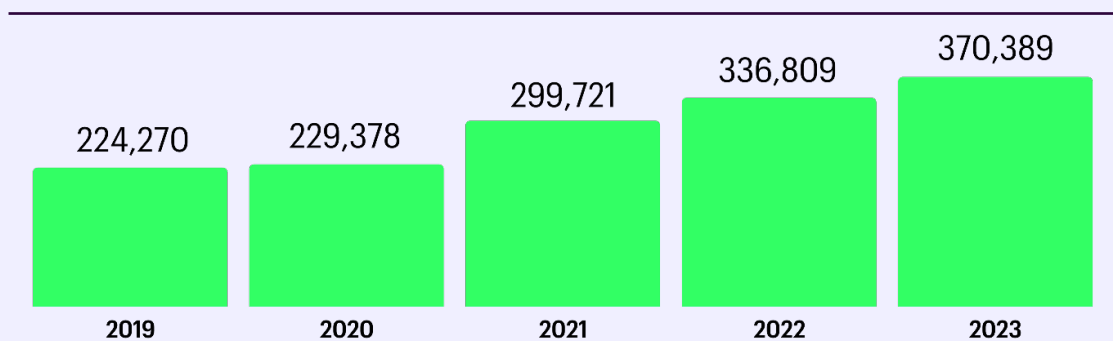
Since the establishment of devolved government in 1998, the NI Executive has been suspended several times,<sup>v</sup> most recently between February 2022 and January 2024.<sup>vi</sup> During periods of suspension, policy making is halted and spending is curtailed; civil servants are empowered to act in a limited fashion to keep public services operational, but cannot usually take significant action.<sup>vii</sup> This periodic stasis has contributed to the challenges facing HSC.

## HSC – Performance against targets

The DoH has set HSC a series of performance targets for diagnostics and cancer care.<sup>viii,ix</sup> Monthly and quarterly data releases track HSC’s progress against these targets. The three diagnostic waiting times targets have never once been met since their introduction.<sup>x</sup> The two cancer targets have not been met since 2013 and 2009.<sup>xi</sup> In general, performance has been declining year-on-year. The Covid-19 pandemic appears to have sharply exacerbated the struggles services were already facing; they have yet to recover.

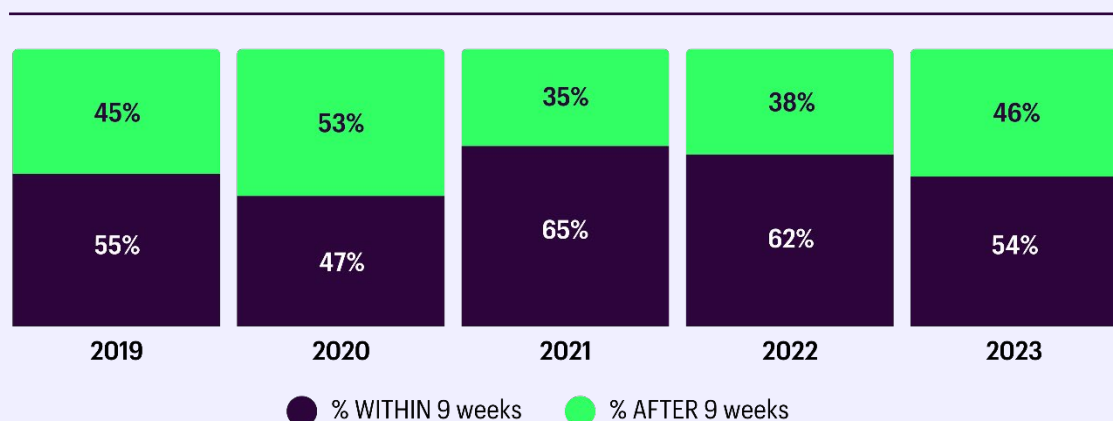
One reason for this decline is the fact that the number of urgent scans has been rising year on year. Between 2022 and 2023, there was a 10% increase in the number of urgent scans carried out in Northern Ireland.

FIGURE 1: NUMBER OF URGENT SCANS CARRIED OUT IN NORTHERN IRELAND EACH YEAR



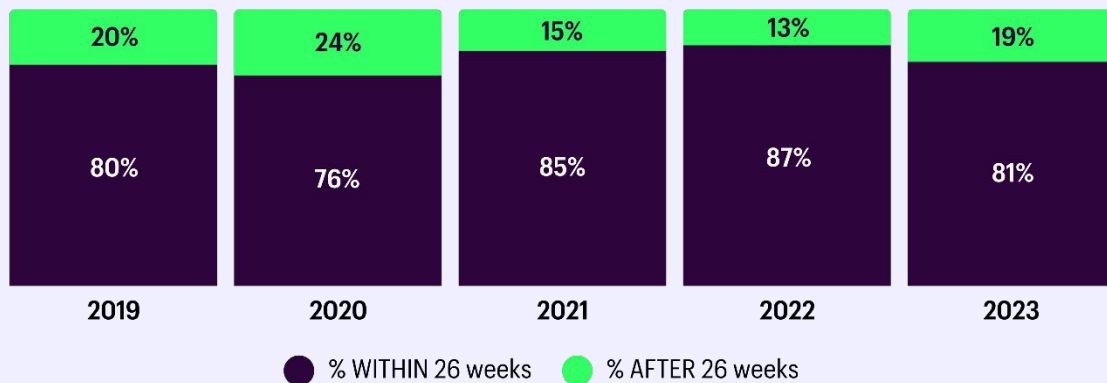
**Target: 75% of patients should wait no longer than 9 weeks for a diagnostic test.**

FIGURE 2: PERCENTAGE OF PATIENTS RECEIVING A DIAGNOSTIC TEST WITHIN 9 WEEKS, BY YEAR



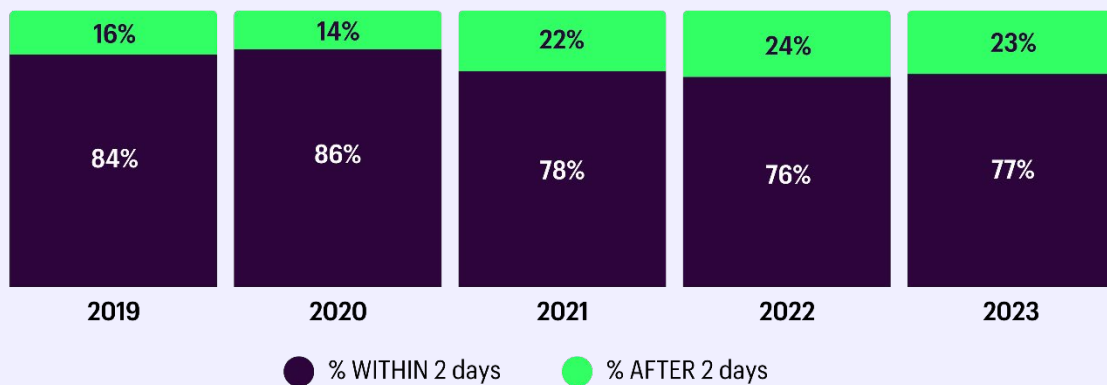
**Target: No patient should wait longer than 26 weeks for a diagnostic test.**

FIGURE 3: PERCENTAGE OF PATIENTS RECEIVING A DIAGNOSTIC IMAGING TEST WITHIN 26 WEEKS, BY YEAR



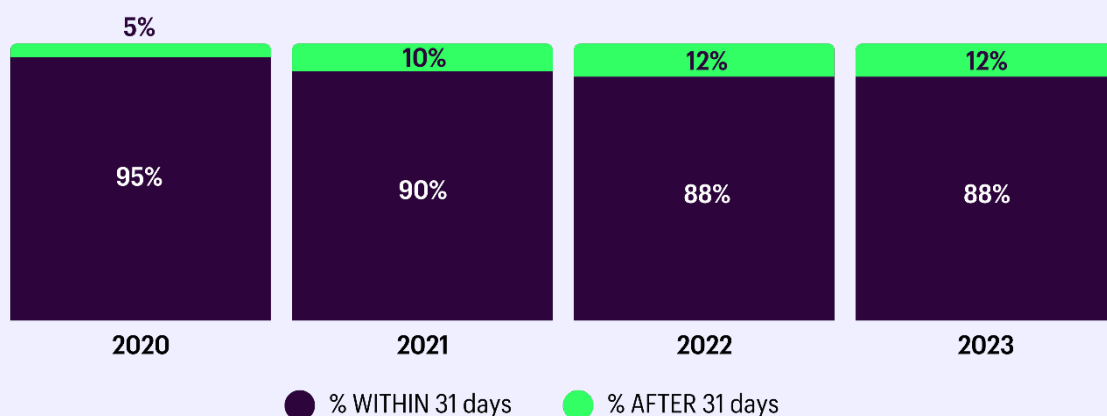
**Target: All urgent diagnostic tests should be reported within two days of the test being undertaken.**

FIGURE 4: PERCENTAGE OF PATIENTS RECEIVING AN URGENT SCAN WITHIN TWO DAYS, BY YEAR



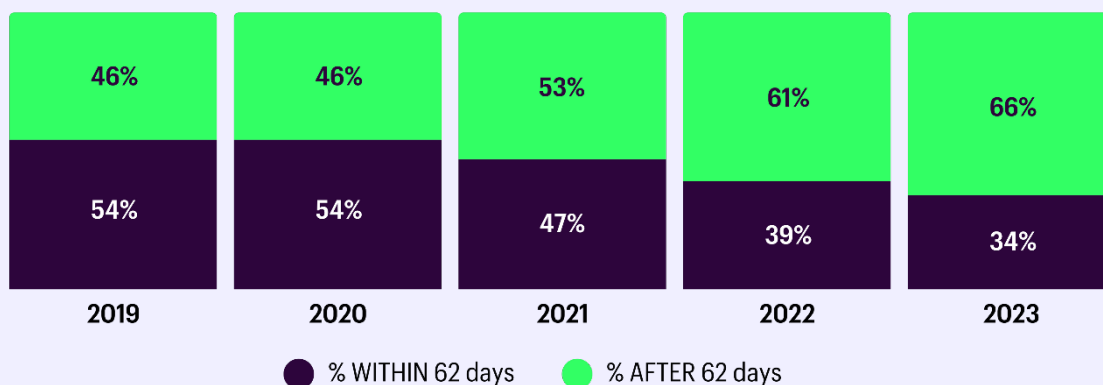
**Target: At least 98% of patients diagnosed with cancer should receive their first definitive treatment within 31 days of a decision to treat.**

FIGURE 5: PERCENTAGE OF PATIENTS STARTING CANCER TREATMENT WITHIN 31 DAYS, BY YEAR



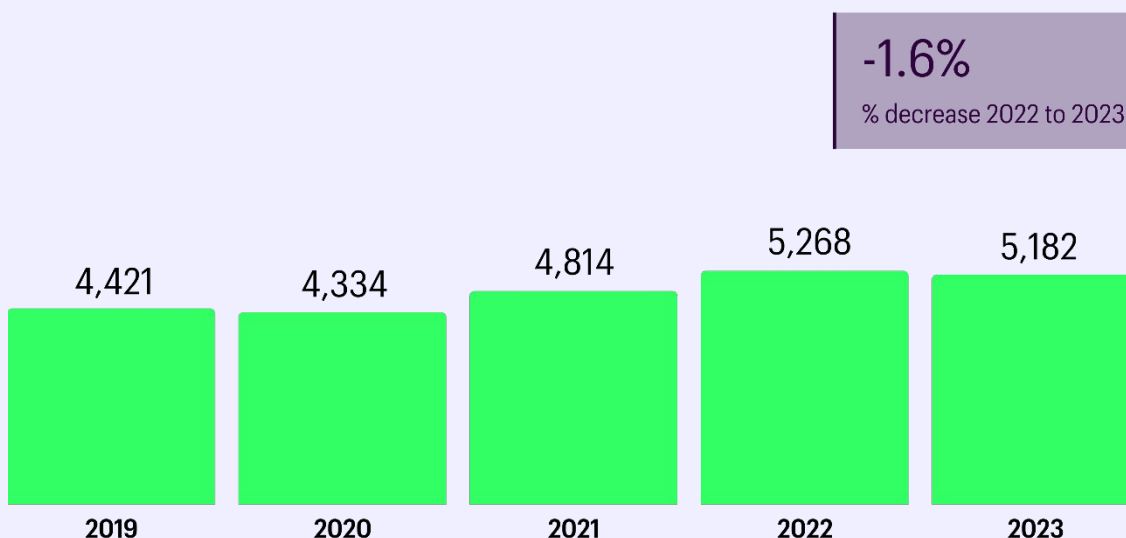
**Target: At least 95% of patients urgently referred by a GP with a suspected cancer should begin their first definitive treatment within 62 days.**

FIGURE 6: PERCENTAGE OF PATIENTS WAITING FOR OVER 62 DAYS TO BEGIN THEIR FIRST CANCER TREATMENT, BY YEAR



Data also shows that large numbers of patients are starting cancer treatment each year. From 2020 to 2023, there has been a 19.6% increase in the number of patients beginning cancer treatment. Though the number of patients beginning treatment decreased by 1.6% in 2023 compared to 2022, it remains very high. Drivers of this rise are likely to include an ageing population, with rising rates of multimorbidity, and increasing prevalence of drivers of ill health, such as obesity and inactivity.<sup>xii</sup>

FIGURE 7: NUMBER OF PATIENTS STARTING CANCER TREATMENT IN NORTHERN IRELAND, BY YEAR



Research has shown that patients in Northern Ireland wait longer than patients in other European countries. On average, they wait 53 days to receive radiotherapy, versus 44 days in Norway; though this compares favourably to the rest of the UK, with patients in England, Scotland and Wales waiting 63, 79 and 81 days, respectively. For chemotherapy, Northern Ireland lags behind, with patients waiting on average for 57 days versus 39 in Norway, 48 in England, 58 in Wales and 65 in Scotland.<sup>xiii</sup>

## **Target: All urgent breast cancer referrals should be seen within 14 days.**

In 2023, just 61% of patients urgently referred for breast cancer were seen within 14 days. This is an improvement on the 2021 low point of just 54%, but nonetheless represents a significant decline from pre-pandemic performance levels. In 2019, 89% of patients were seen within 14 days. Data from the early months of 2024 suggests a further decline in performance. This target was last met in September 2012.

### **Overview:**

The poor performance against each of HSC's diagnostic and cancer waiting times targets is worrying. It is likely the result of a complex array of factors, including a lack of sufficient funding for the health system (as the two most recent Health Ministers have acknowledged explicitly<sup>xiv</sup>), poor working conditions leading to high staff attrition rates, increasing demand for imaging and cancer care due to an ageing population, and periods of policy stasis owing to a lack of devolved government. Data for 2024 to date suggests further declines in performance. This is despite higher per-capita spending on healthcare in Northern Ireland than the other UK nations.<sup>xv</sup> Whilst this higher spend may be justified by greater demand for healthcare, it is concerning that funding levels are yet to shift the dial in terms of patient waits.

## **Northern Ireland workforce statistics: clinical oncology**

The latest RCR clinical oncology workforce census (2023)<sup>xvi</sup> revealed that there is:

- A 9% shortfall in the consultant clinical oncology workforce, which is expected to rise to 12% by 2028. This is the smallest shortfall of any UK nation.
- A smaller workforce in 2023 than in the previous year. The workforce shrank by 1% versus 2022 – the only UK nation where this was the case.
- An attrition rate of consultant COs of 4% over the past five years.
- A low number of trainees as a proportion of the CO workforce, at 24%. This is the lowest of any UK nation, and smaller than the UK average of 32%.
- A high number of locum doctors, at of the consultant CO workforce at 21% - the highest of any UK nation.
- An increase in the number of staff on less than full time contracts, at 39% in 2023 versus 27% in 2022.
- High reliance on insourcing, goodwill (unpaid overtime) and skills mix to manage workforce shortfalls.

## **Northern Ireland workforce statistics: clinical radiology**

The latest RCR clinical radiology workforce census (2023)<sup>xvii</sup> revealed that there is:

- A 27% shortfall in the consultant clinical radiology workforce. Though this is lower than the UK average, the forecast shortfall by 2028 is 44% - the highest of any UK nation.
- A high reliance on locum staff with locums comprising 16% of the CR workforce.
- A small number of trainees, who comprised just 23% of the CR workforce – below the UK average.
- A relatively high vacancy rate of 14% (versus 10% for the UK). 60% were unfilled for 12+ months.

- A smaller growth rate of the CR workforce (4%) than the UK average and than any other UK nation.
- A declining CR trainee workforce, which shrank in 2023 by 1% - the only UK nation where this was the case.
- A high retirement rate, with 25% of CR consultants forecast to retire within five years.
- A high expenditure on measures to manage excess workloads, with £9,112,583 spent in total on outsourcing, insourcing and ad hoc locums. This equalled £4.77 per head of population and £20,913 per CR consultant – the highest in the UK.
- A high number of radiologists per 100,000 older population, at 7.9. This is the highest of any UK nation, and higher than the UK average of 6.8.
- 80% of clinical directors who were concerned that they did not have enough radiologists to deliver safe and effective patient care.
- Just 40% of Trusts reported having adequate interventional radiology provision, though Northern Ireland has more IR consultants per million population than the other UK nations.

## HSC – training and education

The Health and Social Care Workforce Strategy 2026<sup>xviii</sup> looks to address the chronic workforce shortfalls facing many specialties in Northern Ireland. It has three objectives: to ensure HSC has the right number of staff in place to deliver the care it must by 2026, to make HSC a fulfilling and rewarding place to work by 2021, and to ensure the DoH and HSC can monitor workforce trends and proactively take actions to address issues by 2019.

The Strategy consists of ten themes, each of which fits into one or more of the three objectives. These ten themes include: attracting, recruiting and retaining staff; sufficient availability of high-quality training and development; effective workforce planning; recognising the contribution of the workforce; work-life balance; and others. These are to be delivered via a series of actions set out in three consecutive action plans.

The second action plan covering 2022-25 remains current.<sup>xix</sup> It builds on the first and introduces new actions relating to recovery from the Covid-19 pandemic. Its actions include, among others:

- Measures to advertise HSC careers more widely
- Exploration of apprenticeship schemes within the HSC
- An ongoing, rolling programme of workforce reviews and commitment to implementing their recommendations
- A project to scope international recruitment, including from Great Britain and the Republic of Ireland
- Establish processes to encourage retired staff to return to HSC
- Non-salary incentives to recruit and retain staff in less-popular specialties and locations
- A review of medical training places
- Mechanisms to reduce the use of 'off contract' agency staff.

The statutory health education body in Northern Ireland is the Northern Ireland Medical and Dental Training Agency (NIMDTA). NIMDTA organises and performs recruitment of doctors and dentists into foundation, core and specialty training.<sup>xx</sup>

The table below shows recent years' recruitment numbers and fill rates for clinical radiology and clinical oncology:

YEAR	CR			CO		
	Places offered	Places filled	Fill rate	Places offered	Places filled	Fill rate
2023	5	5	100%	3	0	0%
2022	0	0	n/a	5	3	60%
2021	0	0	n/a	1	1	100%
2020	0	0	n/a	2	2	100%
2019	13	13	100%	5	5	100%

### RCR analysis of HSC specialty training plans

The training places offered in 2023 were small, when compared to the scale of the shortfalls Northern Ireland faces. In 2023, Northern Ireland suffered a shortfall of 56 consultant clinical radiologists (whole time equivalent) and a shortfall of 3 consultant clinical oncologists (WTE).<sup>xxi</sup> The five radiology places offered and taken up, however, fill **less than 10% of the shortfall** when accounting for the shortfall size, less than full time working and attrition rates. Whilst the three places offered in clinical oncology would have plugged most of the gap,<sup>xxii</sup> **none of the places were filled.**

Clearly, further action is needed to improve recruitment into radiology by increasing the number of specialty training places offered. The latest figures from NIMDTA show an enormous 123:1 competition ratio for clinical radiology ST1 places in 2023, demonstrating a clear demand for further training places.<sup>xxiii</sup>

The challenges of recruiting into clinical oncology are well-known in England; it is concerning that they may now be manifesting in Northern Ireland also, after years of successfully filling 100% of places offered. The RCR is working to boost clinical oncology's profile and attractiveness to undergraduate and foundation year doctors. The RCR would welcome collaborative work with HSC and NIMDTA on this important subject.

The ambition of the HSC Workforce Strategy 2026 is hugely welcome, as it its dual focus on recruitment and retention. It is also important to acknowledge the progress made since the first 2021-23 action plan. However, there remains a large gap between what has been achieved and where the Strategy aims to be by 2026.

Some things are notably missing from the Strategy and its action plans to date. A workforce review for clinical radiology, clinical oncology and other medical specialties is sorely needed, along the lines of those produced for diagnostic radiography, pharmacy and so on.

Also missing is a multi-year plan for workforce expansion that sets out the number of specialty training places that will be offered to close the shortfalls. RCR census data reveals a looming crisis. Trainees comprise just 23% and 24% of the radiology and oncology workforces; this is one reason why workforce shortfalls are projected to soar to 44% and 12% by 2028.

## NI Executive and HSC policies

Since 2000, there have been seven reviews of Northern Ireland's healthcare system. They all broadly agree on what needs to happen.<sup>xxiv</sup> The latest of these was the 2016 Bengoa Review. Though it received cross-party acceptance, suspension of devolved government in Northern Ireland from 2017-20 and then 2022-24 meant that little to no progress was made in implementing its recommendations.<sup>xxv</sup> Solutions to HSC's problems exist, but they remain to be implemented.

### Imaging services

In 2018, the DoH published the final report of their Strategic Framework for Imaging Services in Health and Social Care.<sup>xxvi</sup> The report made recommendations covering workforce, IT, and funding of both clinical and interventional radiology. Major recommendations include:

- Increasing the number of radiology training places to 54 by the 2020 intake
- An international recruitment campaign into radiology
- Developing retention strategies, to include measures to promote recently retired radiologists to return to work on a reduced basis
- A regional hub and spoke model for interventional radiology services
- A single Picture Archiving and Communication System (PACS) for Northern Ireland with expanded scope
- Recurrent funding for imaging services, including a strategic planning framework for updating the fleet of diagnostic imaging equipment

An 'Imaging Academy' for Northern Ireland has long been proposed, and would boost the number of training places available for clinical radiology specialty training. However, it has yet to be confirmed and launched. The RCR looks forward to working with all parties to support this endeavour.

### Cancer Services

In October 2020, the DoH published plans for the stabilisation and recovery of cancer services, following the Covid-19 pandemic.<sup>xxvii</sup> In the section covering short-term rebuilding of cancer services, the DoH set out 17 aims, including the redesign of pathways, introducing a single point of referral for breast cancer assessment, and a rapid review of SACT services led by NICaN. The section covering medium-term stabilisation of cancer services included: recruiting four additional consultant clinical oncologists (and ten medical oncologists) between 2019-26; stabilising and expanding Acute Oncology Services (AOS), including via supplying advanced nursing roles; and greater use of skills mix in radiotherapy, with therapeutic radiographers and medical physicists to be supported in order that clinical oncologists have greater time for complex patients and leading the service.



Subsequently, the DoH published its Cancer Strategy for Northern Ireland 2022-2032.<sup>xxviii</sup> The strategy has three aims: to reduce the number of people diagnosed with preventable cancers; to improve cancer survival; and to improve the experience of cancer patients. Notable actions include:

- Introducing a 28-day standard from first referral to confirmation of cancer (A13)
- Developing new pathways and diagnostic services, which the Strategy links to NHS England's Community Diagnostic Centre programme. Two 'rapid diagnosis centres' were opened in December 2022<sup>xxix</sup> (A15)
- Introducing new radiotherapy techniques and technology, in line with national guidance and including staffing and associated training. The Strategy acknowledges the need for a rolling replacement programme for LINACs (A20)
- Extending AOS across all Trusts to seven-day working (A26)
- Developing a regional, multiprofessional cancer workforce strategy, underpinned by a training plan (A52)
- Developing a cancer data framework to improve cancer services (A58)

It is important to note that at the time of publication, the DoH's cancer and workforce strategies had not been met with additional funding required to implement all their actions.

## **RCR analysis of HSC diagnostic imaging and cancer plans**

### Diagnostic imaging

The publication of the strategic framework for imaging services was very welcome. However, further progress is required. Whilst the expanded PACS system has gone live, other measures are yet to be delivered. In 2023, just 40% of Trusts reported having an adequate interventional radiology service in place – meaning 60% had neither an adequate 24/7 rota (minimum of 6 IR consultants) or formal networked arrangements to transfer patients.<sup>xxx</sup> No specific targets for expanding or lowering the age profile of diagnostic equipment were set, making progress against this aim difficult to assess. RCR census data shows that in 2020 there were 54 CR trainees in Northern Ireland. However, since then the total number of CR trainees has declined, suggesting this recommendation was only briefly met. In 2021-22, there were 52 posts in the NI Clinical Radiology training programme.<sup>xxxi</sup> An update from the DoH on progress against the report's targets would be warmly welcomed.

### Cancer services

The Department of Health's focus on cancer is extremely welcome. Measures to increase accessibility to screening, diagnosis and treatment are crucial. It is excellent that the four clinical oncology consultant posts committed to in the cancer recovery plans in 2020 have since been filled.

The Cancer Strategy is comprehensive and clearly addresses the main challenges of the present and the future. Alongside workforce, equipment and IT are pillars of a sustainable and effective service, so it is right that these are also addressed. Nonetheless, a concern remains about the potential impact of boosting the use of skills mix on oncology trainees' access to training opportunities; HSC must guarantee that this will not transpire. Additionally, further details are required on many of the commitments made – such as the acknowledgement of the need for a rolling replacement programme for LINACs and the introduction of the 28-day target. Future action plans should also be explicit in

linking cancer services to diagnostics, since long waits for diagnosis create knock-on effects for cancer treatment.

Finally, it is concerning that much of the Cancer Strategy and Workforce Strategy may not be implemented due to a lack of funding. The Health Minister's clear acknowledgement that the actions proposed cannot be funded is remarkable. The NI Executive and the UK Government must address this problem immediately.

## Policy recommendations

1. The Department of Health should task and support HSC to conduct a workforce review into diagnostic and interventional radiology, following the model of prior reviews for other specialties.
2. HSC should commit to expanding clinical radiology specialty training places, such that the workforce shortfall in radiology can be progressively eliminated.
3. HSC should work with the RCR to improve recruitment into clinical oncology and ensure all training places are filled.
4. HSC should set out in future Workforce Strategy Action Plans how they will ensure training and development of clinical oncology and clinical radiology trainees will be protected, in the context of greater use of skills mix.
5. The Department of Health and HSC should take further action to address retention by improving working conditions for staff. This could include 24/7 access to hot food and drink, access to flexible working arrangements, support with parking, support with childcare, and break areas.
6. The Northern Ireland Executive should come to an agreement to provide the necessary funding for HSC's workforce, imaging services and cancer plans.

## RCR Standing Northern Ireland Committee

The RCR has a Standing Northern Ireland Committee, whose purpose is to ensure the RCR is represented in Northern Ireland and, conversely, that relevant matters in Northern Ireland are brought to the RCR's attention. The Committee assists the RCR in providing advice to HSC, the Academy of Medical Royal Colleges in Northern Ireland and the NI Executive.

The Committee is comprised of clinical radiologists and clinical oncologists living and working in Northern Ireland.

The Standing Northern Ireland Committee can be contacted via the RCR governance team:

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

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<sup>xxi</sup> RCR, 2023 clinical radiology and clinical oncology workforce census reports

<sup>xxii</sup> Though it should be noted that it many years to complete specialty training in clinical oncology. Those starting clinical oncology specialty training now not receive their Certificate of Completion of Training (CCT) until (on average) 6.5 years from now – by which time, the current oncology workforce shortfall will have grown beyond where it is currently, if it carries on the same trajectory.

<sup>xxiii</sup> NIMDTA, *August 2023 Competition Ratios*. Available at: <https://www.nimdtg.gov.uk/recruitment/hospital-specialty-recruitment/>. 38 of the 614 who applied for the 5 places on offer were interviewed, and 28 were considered ‘appointable’, giving less extreme ratios of 7.6:1 and 5.6:1, respectively.

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<sup>xxxi</sup> Phillips, S. and McCann, C. (2022) *Clinical Radiology: NIMDTA Placement Quality Review 2022*. Available at: <https://www.nimdtg.gov.uk/quality-management/placement-quality/>