



CANCER WORKFORCE IN NORTHERN IRELAND

**A census of the cancer nursing
and support workforce in
Northern Ireland in 2021**



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Foreword

In 2016, Macmillan Cancer Support and the Northern Ireland Health and Social Care Board worked together to invest in a workforce plan for cancer Clinical Nurse Specialists (CNS), and Support Workers committing to creating around 43.3 (recurrently funded) new specialist cancer nursing and 19.6 support worker roles over the following five years (up to 2021)¹. This was a significant step in building a workforce that delivers high quality personalised care for people living with cancer. The posts were established, and their purpose shaped by an agreed work plan enabling recognition of the key functions of their role.

Despite this improvement, patients report a gap between their needs and the number of specialist cancer nurses available. Cancer Patient Experience Survey (CPES) data showed that the number of respondents stating they had been given the name of a CNS who would support them through their treatment increased from 72% in 2015 to 82% in 2018². Further progress will be needed to deliver the cancer strategy recommendation to “ensure that all patients, including children and young people, diagnosed with cancer have access to a Clinical Nurse Specialist throughout the entire care pathway.”³

This census has been undertaken within the context of increasing demands on the cancer workforce, a growing population of people living with cancer, a more complex cancer care environment and significant disruption to services during the COVID-19 pandemic. There are an estimated 82,000 people living with cancer in Northern Ireland, this will rise to 114,000 by 2030⁴. This means that within 10 years, the number of people living with cancer will be over 40% higher, the cancer workforce will need to meet this patient demand despite already being stretched now⁵.

The COVID-19 pandemic had a disruptive impact on cancer services, a backlog in cancer care has developed with professionals reporting seeing more people with apparent later stage presentation of cancers. This is within the context of services already under pressure, for instance Cancer Waiting Times targets were consistently missed before the impact of COVID-19⁶. The cancer nursing workforce have a key role to play in supporting services to rebuild better. This will include enabling new models of care, maximising skill mix and multidisciplinary working, and continued introduction of advanced nursing roles across care settings to address a more complex cancer care environment of the future. As we emerge from the pandemic and deal with its legacy, it will be important to take account of the longer-term workforce implications, including the ongoing physical and psychological strain on the wellbeing of our nursing workforce.

The 10-year Northern Ireland Cancer Strategy contains the ambitious vision of delivering “equitable and timely access to the most effective, evidence-based referral, diagnosis, treatment, support and person-centred cancer care”⁷. Clinical Nurse Specialists will be pivotal to delivering this vision, playing a key role across the pathway in delivering

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- 1 Cancer Clinical Nurse Specialist (CNS) Workforce Plan (HSCB/ PHA) Public Health Agency; personal communication. January 2022.
 - 2 [Northern Ireland Cancer Patient Experience Survey, 2018. All trusts report](#). Quality Health, published January 2019.
 - 3 [A Cancer Strategy for Northern Ireland 2021–2031](#). Department of Health NI. Accessed January 2022.
 - 4 [Calculating cancer prevalence](#). Macmillan Cancer Support. Accessed January 2022.
 - 5 [Cancer Incidence Projections in Northern Ireland to 2040](#). David W. et al; Cancer Epidemiology, Biomarkers & Prevention DOI: 10.1158/1055-9965.EPI-20-0098, published July 2020.
 - 6 [Northern Ireland waiting time statistics: cancer waiting times April to June 2021](#). Department of Health NI, published 30 September 2021.
 - 7 [A Cancer Strategy for Northern Ireland 2021–2031](#). Department of Health NI. Accessed January 2022.

person-centred care. Patient experience is an important consideration for those involved in workforce planning and access to a named Clinical Nurse Specialist can support a more positive experience. The Northern Ireland Cancer Patient Experience Survey (2018)⁸ has shown that the majority of people reported their overall experience of care positively (an average of 8.97/10), with increased positive experiences notable when there has been access to a Clinical Nurse Specialist, people who reported being given the name of their Clinical Nurse Specialist have statistically higher scores on 47 of the other 48 questions in the survey.

A census was undertaken in 2014 in NI across cancer services with key recommendations used for workforce planning purposes. The passage of time and advancements within the cancer workforce have influenced adaption from the criteria used in the 2014 to accommodate the 2021 intelligence required. Macmillan has undertaken this Census (2021) in partnership with Department of Health, and Lead Nurse Managers across Health and Social Care (HSC) Trusts to collate and describe the size and composition of the workforce supporting people living with cancer in Northern Ireland.

It can take years to see investment in training staff deliver improvements in the front end of healthcare and much work is going to be required to build the workforce capable of delivering the cancer strategy and meeting rising demand. This Census will provide key evidence to inform strategic workforce planning addressing future sustainability and supporting a framework for career progression that includes the next stage of Cancer Clinical Nurse Specialist expansion, developing the wider workforce skills mix and ensuring a balanced workforce age profile.

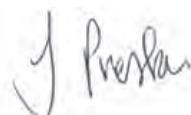
It will inform a commissioning perspective for a future cancer workforce in the face of a changing HSC infrastructure for NI and the workforce impacts of Brexit and the COVID-19 pandemic. The report offers valuable information which will be used by leaders, workforce planners and commissioners to enable transformation and modernisation of services. The point in time data provided will inform Department of Health high level workforce strategy and planning aligned to the Cancer Strategy 2021⁹, and Cancer Recovery plan 2021¹⁰. The census will also facilitate a view of the population health approach within nursing and support workforce to improve outcomes for all people living with cancer and ensure people with cancer have access to the right support at the right time.

The census will increase our understanding of the qualifications held by our workforce and their educational status. It will provide workforce planners with information to inform education commissioning and succession planning to ensure that cancer nurses and support workforce have the right knowledge and skills to deliver services for current and future cancer populations.

We would like to acknowledge our thanks to the Department of Health for the funding to enable the census to happen, the Public Health Agency and NICaN Lead Nurse Reference Group who were pivotal in ensuring the robustness of the data gathered. And finally, to Rocket Science, who led the way to provide clarity, information and data expertise to support the development of the census report.



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8 [Northern Ireland Cancer Patient Experience Survey, 2018. All trusts report.](#) Quality Health, published January 2019

9 [A Cancer Strategy for Northern Ireland 2021–2031.](#) Department of Health NI. Accessed January 2022.

10 [Cancer Recovery Plan 2021/22–23/24.](#) Department of Health NI, published 24 June 2021.

Executive summary

Macmillan Cancer Support, in partnership with the Department of Health (DoH), Northern Ireland (NI), commissioned a census of the cancer nurses and support staff delivering cancer care by type and locality on the 17th September 2021.

Overall, at the time of the census, there were 754 posts (672.4 WTE) who treat, support and manage the health concerns and wellbeing of cancer patients for more than 50% of their time.

This workforce is made up of (for definitions of each of these groups see [Appendix B](#)):

Adult cancer specialist nurses

165 posts **144.8** WTE

Adult cancer care nurses

67 posts **61.3** WTE

Adult chemotherapy nurses

266 posts **238.3** WTE

Children, teenager and young adult (CTYA) nurses

48 posts **38.5** WTE

Nursing support workforce

93 posts **83.2** WTE

includes cancer support workers:

26 posts **22.7** WTE

Growth since 2014

The number of adult cancer specialist nurses with the job title Clinical Nurse Specialist has grown.



41% of adult cancer specialist nurses have part-time roles

41%

Main areas of practice of adult cancer specialist nurses (% of all WTE)

19%
Breast

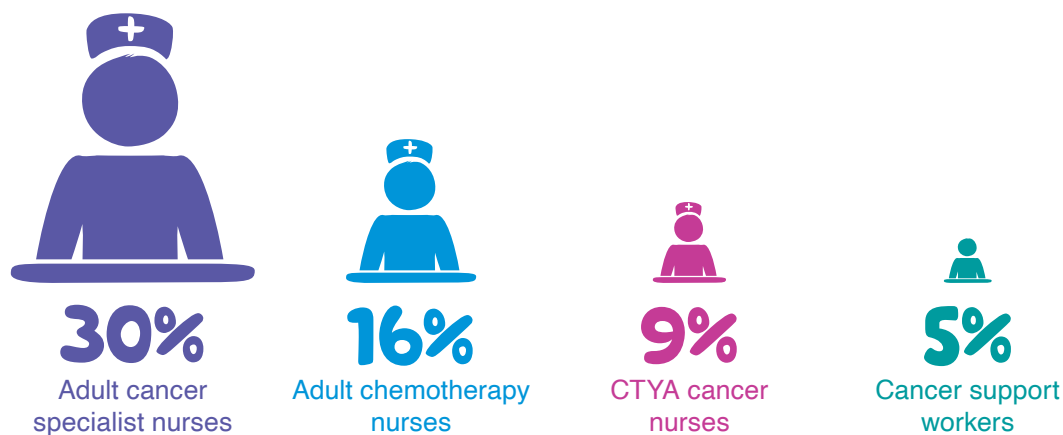
14%
Haematology

12%
Urology

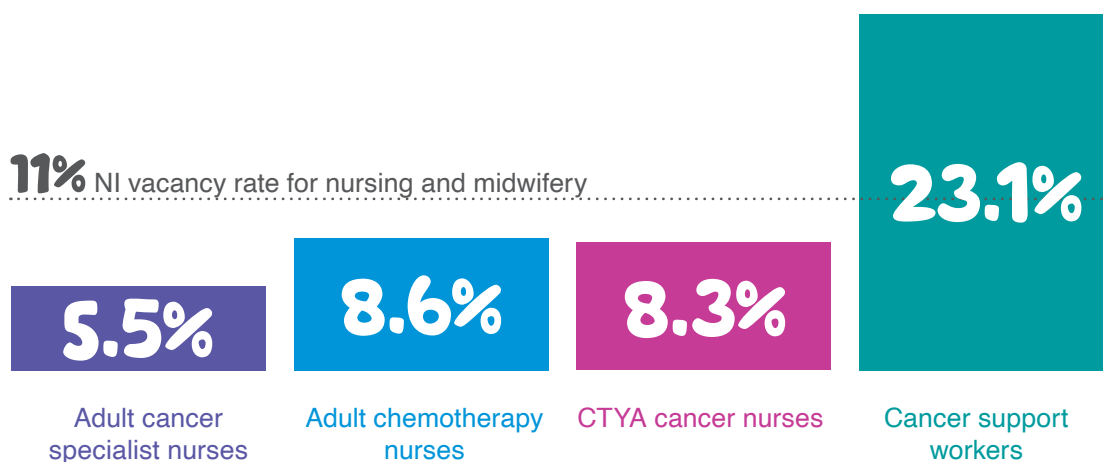
10%
Lung

Percentage of the workforce aged 50 or over (% filled posts)

23% of the overall cancer workforce is aged 50 or over.

**Vacancy rates**

At the time of the census, vacancy rates for nurses were lower than the Northern Ireland vacancy rate for nursing and midwifery (11%)¹¹.

**Training and development to support holistic personalised care**

Qualification	Adult cancer specialist nurses	Adult chemotherapy nurses	CTYA cancer nurses	Cancer support workers
Advanced communication skills training	74%	7%	14%	N/A
Trained in eHNA within the last 18 months	37%	0%	2%	24%

¹¹ [Northern Ireland Health and Social Care Workforce Vacancies Tables, June 2021](#). Department of Health, NI, published 25 August 2021. Accessed November 2021.

Background and methodology

Background

Macmillan Cancer Support, in partnership with the Department of Health (DoH) Northern Ireland (NI), commissioned a census of the nurses and support staff delivering cancer care in 2021. This research maps the workforce by cancer type and locality.

The census aims to provide a wide understanding of the cancer workforce. The current study includes nurses delivering adult cancer care (specialist and other), adult chemotherapy nurses, children, teenager and young adult cancer nurses, and support staff.

Although the methodology was based on previous censuses for other UK nations, comparison across the UK nations is difficult as national requirements resulted in variation in inclusion criteria.

The 2021 NI census will assist in understanding:

- variation of cancer nursing workforce across the country;
- where and what succession planning is needed;
- the skill mix of the workforce;
- potential for further development of specialist and advanced nursing roles;
- the commissioning of nurse education to support the cancer nursing workforce.

Methodology

The approach for the 2021 Northern Ireland (NI) census followed a similar methodology to that of the England and Wales 2017 census and the Scotland 2019 census^{12,13,14,15}. The main point of difference in the 2021 Northern Ireland census is that it

includes children, teenager and young adult cancer nurse posts, and does not include specialist palliative care nurses.

Full inclusion and exclusion criteria for this census can be found in [Appendix B](#).

Rocket Science designed a bespoke Excel tool to be completed by each of the five Health and Social Care Trusts (HSCTs) in NI, to gather a snapshot of the workforce on the 17th September 2021. The census tool, with accompanying guidance and a Frequently Asked Questions (FAQs) document, were circulated on 14th September 2021. An identified data lead from each HSCT was given until 15th October 2021 to gather and return their data. Weekly meetings with data leads were held to discuss and resolve any issues about data collection to ensure comparative data capture. As not all trusts were represented at every meeting the FAQs were updated to reflect decisions agreed in these meetings and re-circulated to all data leads.

The census attained a 100% response rate, data was collected from all five HSCTs in NI.

To ensure robustness in the results, a data audit process was built in, including sense checking analysis with the NICaN Nurse Leaders Reference Group and triangulation with ongoing work by the Public Health Agency of NI to support Clinical Nurse Specialist workforce planning. Whilst numbers do not totally align, small variances can be explained by the timing of the work and inclusion criteria in relation to which posts should be counted.

Full details of the process are provided in [Appendices B–D](#). In addition, for comparison purposes, [Appendix A](#) sets out differences in methodology between this and the 2014 NI census.

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- 12 [Specialist adult cancer nurses in Northern Ireland](#). A census of the specialist adult cancer nursing workforce in the UK, 2014. Macmillan Cancer Support.
 - 13 [Cancer workforce in England](#). A census of cancer, palliative and chemotherapy speciality nurses and support workers in England in 2017. Macmillan Cancer Support.
 - 14 [Cancer workforce in Wales](#). A census of cancer, palliative and chemotherapy speciality nurses and support workers in Wales in 2017. Macmillan Cancer Support.
 - 15 [Cancer workforce in Scotland](#). A census of cancer, palliative, chemotherapy speciality nurses, support workers and Improving the Cancer Journey link workers in Scotland in 2019. Macmillan Cancer Support.

Health and Social Care Trusts (HSCTs)

A range of sections in the analysis include data disaggregated by geography. Geography is indicated using the HSCTs in NI, whose areas are provided on the map below.

HSC Trust areas

1 **Belfast**
Incidence **1,934**
Population **359,230**

2 **Northern**
Incidence **2,572**
Population **480,194**

3 **South Eastern**
Incidence **1,972**
Population **364,191**

4 **Southern**
Incidence **1,831**
Population **388,688**

5 **Western**
Incidence **1,551**
Population **303,207**



Health and Social Care Trusts by single year of age and gender (mid-1991 to mid-2020). GOV.UK. Accessed December 2021.

[Cancer incidence, survival, mortality and prevalence by cancer type](#). 2019 data. Northern Ireland Cancer Registry. Accessed October 2021.



1. ADULT CANCER CARE WORKFORCE

This section describes nurses delivering adult cancer care in Northern Ireland (NI). These nurses were on Agenda for Change bands 5 to 9¹⁶ at the time of the census and spend over 50% of their time directly supporting people living with cancer.

16 NHS terms and conditions of service (Agenda for Change) NHS Employers. Accessed January 2022

Overall, the adult cancer care workforce captured through the census, comprises 347 posts (312.4 WTE). A summary analysis is provided in [section 1.1](#).

These nurses have been grouped as follows:

- 165 posts in **adult cancer specialist nurse roles** (144.8 WTE) this includes:
 - 139 posts for clinical nurse specialists, which includes acute oncology (121.2 WTE)
 - 26 posts for advanced practitioners (23.6 WTE)
- 67 posts in other **adult cancer care nurse roles** (61.3 WTE)
- 115 **staff nurse posts** working in haematology and oncology wards (106.3 WTE)

It should be noted that within the adult cancer specialist nurse roles, there are 5 part-time post-holders (3.1 WTE) who are also counted as part-time post-holders in the children, teenager and young adult cancer nurses in [section 3](#), as they split their time between work with adults and work with teenagers and young adults.

This work aimed to capture a comprehensive picture of the cancer nursing workforce. During data collection trusts agreed that it was appropriate to include staff nurses spending more than 50% of their time working directly with cancer patients. As a result, staff nurses working in haematology and oncology wards in cancer centres in Belfast and Western trusts spending more than 50% of their time working directly with cancer patients were captured. However, during the audit of this report it was clear that the data captured does not provide a full picture for this staff group.

Data on staff nurses gathered through the census are described separately in [Box 1](#) in [section 1.1.2](#) below. For more information on additional estimates for this nursing group provided after the census was concluded by the NICaN Nurse Leaders Reference Group, please go to [Appendix E](#).

[Section 1.2](#) provides a more detailed analysis of adult cancer specialist nurses. We have identified these ‘cancer specialist nurses’ as those posts which satisfy the following categories:

- the job title specifies ‘specialist’ or ‘practitioner’;
- Agenda for Change band 6 and above;
- over 50% of the post-holder’s time is spent supporting adults living with cancer;
- post-holders have a documented training record declaring them specialist in cancer care or have been appointed with their agreed willingness to undertake a cancer qualification.

This definition was shared and agreed by NICaN Nurse Leaders Reference Group and has been adhered to for reporting purposes.

Analysis of two subgroups of the cancer specialist nurses is provided:

- **‘clinical nurse specialists’** these roles function as key workers for cancer patients but have a variety of job titles (Clinical Nurse Specialist, Cancer Nurse Specialist and Nurse Specialist) This group includes those working in acute oncology services;
- **‘advanced practitioners’** these roles have specialist clinical practice but do not have a key worker function.

Full details on inclusion and exclusion criteria of posts captured can be found in [Appendix B](#) and nursing role definitions are in [Appendix C](#).

1.1 Adult cancer workforce – summary

Table 1 summarises the adult cancer care workforce and defines adult cancer specialist nurses as distinct from other cancer care nurse roles.

Table 1: Nurses delivering adult cancer care, job titles, number of posts, NI 2021

Job title	Number of posts	Percentage posts	WTE
Adult cancer specialist nurses	165	48%	144.8
Clinical Nurse Specialist	106	31%	93.0
Nurse Specialist	21	6%	17.6
Cancer Nurse Specialist	12	3%	10.6
Oncology Nurse Practitioner	14	4%	11.9
Haematology Nurse Practitioner	4	1%	4.0
Advanced Nurse Practitioner Trainee	3	1%	2.8
Nurse Practitioner	2	1%	1.9
Advanced Nurse Practitioner	1	0%	1.0
Haematology Transplant Coordinator	2	1%	2.0
Other adult cancer care nurses	67	19%	61.3
Clinical Research Nurse	23	7%	20.9
Deputy Sister	19	5%	17.8
Sister	8	2%	7.3
Nurse	8	2%	6.9
Triage Helpline Nurse	2	1%	2.0
Clinical Research Manager	1	0%	1.0
Lead CRN/Manager	1	0%	1.0
Clinical Staff Nurse	1	0%	1.0
Senior Nurse	1	0%	1.0
Lead Nurse	1	0%	1.0
Nurse Manager	1	0%	0.8
Pre-Assessment Nurse	1	0%	0.6
Sub-total (not including staff nurses)	232	67%	206.1
Staff Nurse	115	33%	106.3
Overall total (including staff nurses)	347	100%	312.4

Table 2: Nurses delivering adult cancer care, job title, HSCT, WTE, NI 2021

Job title	Belfast	Western	South Eastern	Southern	Northern	Total WTE
Adult cancer specialist nurses	57.5	20.7	27.3	20.2	19.2	144.8
Clinical Nurse Specialist	25.0	15.7	20.9	17.6	13.9	93.0
Nurse Specialist	14.0	1.0		0.6	1.9	17.6
Cancer Nurse Specialist	3.8	4.0	0.8	1.0	1.0	10.6
Oncology Nurse Practitioner	7.7	0.0	2.0	0.0	2.3	11.9
Haematology Nurse Practitioner	3.0	0.0	1.0	0.0	0.0	4.0
Advanced Nurse Practitioner	0.0	0.0	0.0	1.0	0.0	1.0
Nurse Practitioner	1.0	0.0	0.9	0.0	0.0	1.9
Advanced Nurse Practitioner Trainee	1.0	0.0	1.8	0.0	0.0	2.8
Haematology Transplant Coordinator	2.0	0.0	0.0	0.0	0.0	2.0
Other adult cancer care nurses	36.6	22.3	1.0	1.4	0.0	61.3
Clinical Research Nurse	16.7	1.8	1.0	1.4	0.0	20.9
Deputy Sister	10.1	7.7	0.0	0.0	0.0	17.8
Sister	5.3	2.0	0.0	0.0	0.0	7.3
Nurse	0.5	6.4	0.0	0.0	0.0	6.9
Triage Helpline Nurse	0.0	2.0	0.0	0.0	0.0	2.0
Clinical Research Manager	0.0	1.0	0.0	0.0	0.0	1.0
Lead CRN / Manager	1.0	0.0	0.0	0.0	0.0	1.0
Clinical Staff Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Senior Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Lead Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Nurse Manager	0.0	0.8	0.0	0.0	0.0	0.8
Pre-Assessment Nurse	0.0	0.6	0.0	0.0	0.0	0.6
Total (not including staff nurses)	94.1	43.0	28.3	21.6	19.2	206.1
Staff Nurse	73.0	33.3				106.3
Overall total	167.0	76.3	28.3	21.6	19.2	312.4

1.1.1 Adult cancer specialist nurses

Adult cancer specialist nurses are identified as a subset of the overall adult cancer care workforce. This workforce includes clinical specialist nurses and practitioners (see [Appendix B](#) for inclusion/exclusion criteria and [Appendix C](#) for definitions).

There are 165 posts in this group (144.8 WTE). The following roles are included:

Clinical nurse specialist roles

- Clinical Nurse Specialist (including acute oncology)
- Cancer Nurse Specialist
- Nurse Specialist

Advanced practitioner roles

- Oncology Nurse Practitioner
- Haematology Nurse Practitioner

- Advanced Nurse Practitioner
- Advanced Nurse Practitioner Trainee
- Haematology Transplant Coordinator
- Nurse Practitioner.

These posts are analysed in detail in [section 1.2](#).

1.1.2 Other adult cancer care nurses

Nursing roles which sit outside of the adult cancer specialist nurse definition ([Appendix B](#)) include the following roles in the tables below. These posts play a significant part within the cancer patient pathways of care. There are 67 posts within this group (61.3 WTE) including 60 filled posts and 7 vacant posts, a 10% vacancy rate. Most of these posts are in Belfast and Western HSCTs, which are cancer centres.

Table 3: Other adult cancer care nurses, job titles, HSCT, WTE, NI 2021

Job title	Belfast	Western	South Eastern	Southern	Northern	Total WTE
Clinical Research Nurse	16.7	1.8	1.4	1.0	0.0	20.9
Deputy Sister	10.1	7.7	0.0	0.0	0.0	17.8
Sister	5.3	2.0	0.0	0.0	0.0	7.3
Nurse	0.5	6.4	0.0	0.0	0.0	6.9
Triage Helpline Nurse	0.0	2.0	0.0	0.0	0.0	2.0
Senior Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Lead CRN/Manager	1.0	0.0	0.0	0.0	0.0	1.0
Clinical Research Manager	0.0	1.0	0.0	0.0	0.0	1.0
Clinical Staff Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Lead Nurse	1.0	0.0	0.0	0.0	0.0	1.0
Nurse Manager	0.0	0.8	0.0	0.0	0.0	0.8
Pre-Assessment Nurse	0.0	0.6	0.0	0.0	0.0	0.6
Total	36.6	22.3	1.4	1.0	0.0	61.3

Qualifications held by adult cancer care nurses (not including adult cancer specialist nurses or staff nurses) at the time of the census are shown in Table 4.

Table 4: Other adult cancer care nurses, number and percentage of qualifications and training, filled posts, NI 2021

	Number of filled posts with qualification	Percentage filled posts with qualification
Qualifications		
BSc in Nursing or other health-related subject	46	77%
Diploma in Nursing	24	40%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	12	20%
Health Assessment and Clinical Reasoning	8	13%
Advanced Methods in Research and Development in Health and Social Care	6	10%
Postgraduate Diploma in Specialist Practice – Palliative Care	3	5%
Non-Medical Prescribing Qualification V300	2	3%
Masters in Professional Nursing	1	2%
PhD	1	2%
MSc Advanced Nursing Practice or relevant programme	0	0%
Training in Radiotherapy Nursing	28	47%
Training		
PICC training (Central Venous Access Devices competency assessment)	49	82%
Chemotherapy Competency*	47	78%
Advanced Communications Skills training	22	37%
Sage and Thyme Communication Skills training	17	28%
Trained in eHNA** within the last 18 months	4	7%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

** Electronic Holistic Needs Assessment.

Table 5: Other adult cancer care nurses, number and percentage of qualifications and training, filled posts, Agenda for Change (AfC) band, NI 2021

	Number of filled posts with qualifications						Percentage filled posts with qualifications
AfC band	5	6	7	8A	8B	All	All
Number of filled posts – totals	4	39	14	1	2	60	100%
Qualifications							
BSc in Nursing or other health-related subject	3	33	8	1	1	46	77%
Diploma in Nursing	0	14	8	1	1	24	40%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	0	6	4	1	1	12	20%
Health Assessment and Clinical Reasoning	0	4	4	0	0	8	13%
Advanced Methods in Research and Development in Health and Social Care	0	2	2	1	1	6	10%
Postgraduate Diploma in Specialist Practice – Palliative Care	0	3	0	0	0	3	5%
Non-Medical Prescribing Qualification V300	0	1	1	0	0	2	3%
Masters in Professional Nursing	0	0	1	0	0	1	2%
PhD	0	1	0	0	0	1	2%
MSc Advanced Nursing Practice or relevant programme	0	0	0	0	0	0	0%
Training in Radiotherapy Nursing	2	17	8	1	0	28	47%
Training							
PICC training (Central Venous Access Devices competency assessment)	4	33	11	0	1	49	82%
Chemotherapy Competency*	4	34	8	0	1	47	78%
Advanced Communications Skills training	1	15	6	1	0	23	38%
Sage and Thyme Communication Skills training	0	10	7	0	0	17	28%
Trained in eHNA** within the last 18 months	1	2	1	0	0	4	7%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

** Electronic Holistic Needs Assessment.

Box 1 – Staff nurses delivering cancer care, Agenda for Change (AfC) band and HSCT, NI 2021

Staff nurses

This work aimed to capture a comprehensive picture of the cancer nursing workforce. During data collection trusts agreed that it was appropriate to include inpatient staff nurses spending more than 50% of their time working directly with cancer patients.

The posts captured are described below:

- These post-holders spending more than 50% of their time working with cancer patients, are based in haematology and oncology wards but do not have specialist status.
- 87% of these staff nurse posts are at AfC band 5.
- These captured posts are located in cancer centres in Belfast and Western Trusts.

The table below shows 115 (106.3 WTE) staff nurse posts captured across these two cancer centres. This includes 79 posts in Belfast Trust (73.0 WTE) and 36 posts in the Western Trust (33.3 WTE).

	Belfast			Western			Total		
AfC band	Number of posts	WTE	WTE %	Number of posts	WTE	WTE %	Number of posts	WTE	WTE %
5	64	59.1	81%	36	33.3	100%	100	92.4	87%
6	14	12.9	18%			0%	14	12.9	12%
7	1	1.0	1%			0%	1	1.0	1%
Total	79	73.0	100%	36	33.3	100%	115	106.3	100%

NB. After data was finalised, the NICaN Nurse Leaders Reference Group recognised that the number of staff nurses captured was incomplete during report review. Although the census data could not be altered at this stage, additional estimates for this nursing group were provided for all trusts by the NICaN Nurse Leaders Reference Group as personal communications and are provided in [Appendix E](#). The figures will enable more appropriate comparison of this staff group across trusts in NI.

1.2 Adult cancer specialist nurses

We have identified 'cancer specialist nurses' as those posts which satisfy the following categories:

- The job title specifies 'specialist' or 'practitioner';
- The AfC Band 6 and above;
- Over 50% of the post holder's time is spent supporting adults living with cancer;
- Post-holders have a documented training record declaring them specialist in cancer care or have been appointed with their agreed willingness to undertake a cancer qualification.

Analysis of two subgroups of the cancer specialist nurses is provided:

- **'clinical nurse specialists'** these roles function as key workers for cancer patients but have a variety of job titles

(Clinical Nurse Specialist, Cancer Nurse Specialist and Nurse Specialist). These also include those working in acute oncology services;

- **'advanced practitioners'** these roles have specialist clinical practice but do not have a key worker function.

Nursing role definitions can be found in [Appendix C](#).

Overall, there are 165 adult cancer specialist nurse posts across NI (144.8 WTE).

1.2.1 Job title

The most common role for adult cancer specialist nurses is Clinical Nurse Specialist at 64% (93.0 WTE), followed by Nurse Specialist at 13% (17.6 WTE). All other roles made up less than 10% of cancer specialist nurses.

Nursing role definitions can be found in [Appendix C](#).

Table 6: Adult cancer specialist nurse workforce, job titles, number of posts, NI 2021

Job title	Number of posts	Percentage	WTE
Clinical Nurse Specialist	106	64%	93.0
Nurse Specialist	21	13%	17.6
Cancer Nurse Specialist	12	7%	10.6
Total Clinical Nurse Specialists*	139	84%	121.2
Oncology Nurse Practitioner	14	8%	11.9
Haematology Nurse Practitioner	4	2%	4.0
Advanced Nurse Practitioner Trainee	3	2%	2.8
Nurse Practitioner	2	1%	1.9
Haematology Transplant Coordinator	2	1%	2.0
Advanced Nurse Practitioner	1	1%	1.0
Total Advanced Practitioners	26	16%	23.6
Total	165	100%	144.8

*Clinical Nurse Specialists include those working in acute oncology.

Table 7: Adult cancer specialist nurse workforce, WTE, HSCT, specialists and practitioners, NI 2021

HSCT	Clinical Nurse Specialist WTE	Percentage total	Advanced Practitioners WTE	Percentage total	Total adult cancer specialist nurses	Percentage total
Belfast	42.8	75%	14.7	25%	57.5	100%
South Eastern	21.7	79%	5.7	21%	27.3	100%
Western	20.7	100%	0	0%	20.7	100%
Southern	19.2	95%	1.0	5%	20.2	100%
Northern	16.9	88%	2.3	12%	19.2	100%
Total	121.2	84%	23.6	16%	144.8	100%

1.2.2 Age

The census showed that 40–49 was the most common age group among cancer specialist nurses, with 36% (56 filled posts) in this group. Cancer centres (Belfast and Western HSCT) have the highest proportion of nurses 30–39.

Table 8: Adult cancer specialist nurse workforce by age group, number of filled posts, NI 2021

Age group	Number of posts	Percentage
Under 30	3	2%
30–39	49	31%
40–49	56	36%
50–59	46	29%
60 and over	2	1%
Total	156	100%
Vacant	9	

Table 9: Adult cancer specialist nurse workforce by age, HSCT, number of filled posts NI 2021

	Under 30		30–39		40–49		50–59		60 and over		Total	
HSCT	N	%	N	%	N	%	N	%	N	%	N	%
Belfast		0%	23	38%	19	32%	18	30%	0	0%	60	100%
South Eastern	1	3%	8	26%	12	39%	10	32%	0	0%	31	100%
Northern	1	4%	7	29%	10	42%	4	17%	2	8%	24	100%
Southern		0%	3	14%	10	48%	8	38%	0	0%	21	100%
Western	1	5%	8	40%	5	25%	6	30%	0	0%	20	100%
Total	3	2%	49	31%	56	36%	46	29%	2	1%	156	100%

1.2.3 Gender

96% (149 filled posts) of cancer specialist nurses were female.

Table 10: Adult cancer specialist nurse workforce by gender, number of filled posts, NI 2021

Gender	Number of posts	Percentage
Female	149	96%
Male	3	2%
Other	0	0
Not disclosed	4	3%
Total	156	100%
Vacant	9	

1.2.4 Nationality

97% (151 filled posts) of cancer specialist nurses were from the UK.

Table 11: Adult cancer specialist nurse workforce by nationality, number of filled posts, NI 2021

Nationality	Number of posts	Percentage
UK	151	97%
EU*	5	3%
Rest of world	0	0%
Total	156	100%
Vacant	9	

*EU is likely to include some staff who identify as Irish.

1.2.5 Part-time roles

59% (97 filled posts) of cancer specialist nurses were full-time. The proportion of full-time roles varied across HSCTs with a maximum of 73% (16 filled posts) in Southern HSCT and minimum of 38% (9 filled posts) in Northern HSCT.

It should be noted that 5 of the part-time post holders in the table below are also counted as part-time posts in children, teenager and young adult cancer workforce section, as these post-holders also work with children, teenagers and young adults.

Table 12: Adult cancer specialist nurse workforce, full-time/part-time by HSCT, number of posts, NI 2021

HSCT	Full-time		Part-time		Total	
	N	%	N	%	N	%
Belfast	41	64%	23	36%	64	100%
South Eastern	18	58%	13	42%	31	100%
Northern	9	38%	15	63%	24	100%
Western	13	54%	11	46%	24	100%
Southern	16	73%	6	27%	22	100%
Total	97	59%	68	41%	165	100%

1.2.6 Setting

Just under half (44%) of the adult cancer specialist nurses WTEs work in cancer centres. The majority of adult cancer specialists (65%) work from hospital outpatients as the main location of care. No posts were located in a community setting.

Table 13: Adult cancer specialist nurse workforce, settings and main locations of care, WTE, NI 2021

Setting	Main location of care – WTE					Total
	Day care or day unit	Hospital outpatient	Inpatient	Telephone	Community settings*	
Cancer centre	11.8	48.6	3.9	0.4	0	64.7
Cancer unit	13.6	11.9	7.4	2.5	0	35.4
Non cancer-specific setting	1.9	33.7	8.2	1.0	0	44.7
Total	27.2	94.2	19.5	3.9	0	144.8

*Community settings include patient or care home, health clinic or centre.

A secondary location of care (where the post-holder delivers care for at least 25% of patient facing time) was reported for 108.1 WTEs. These additional care locations are provided in Table 14.

Table 14: Adult cancer specialist nurse workforce, other locations of care, WTE, NI 2021

Other location of care	WTE	Percentage
Inpatient	42.7	30%
Telephone	39.1	27%
Hospital outpatient	17.4	12%
Day care or day unit	8.9	6%
Care is concentrated in a single location	36.7	25%
Total	144.8	100%

1.2.7 Affiliation

46% (62.4 WTE) of filled cancer specialist nurse posts had Macmillan in the job title and 46% (62.8 WTE) had no affiliations in the job title. Just 8% (10.5 WTE) had another charity in the job title. Over half of cancer specialist nurse vacancies (54%, 3.9 WTE) have Macmillan in the job title.

Table 15: Adult cancer specialist nurse workforce, post affiliations, WTE, NI 2021

Affiliations	Filled		Vacant		Total	
	WTE	%	WTE	%	WTE	%
It has Macmillan in the job title	62.4	46%	3.9	54%	66.3	46%
It has no affiliations in the job title	62.8	46%	3.3	46%	66.0	46%
It has another charity in the job title	10.5	8%	0	0%	10.5	7%
Data not available	2.0	1%	0	0%	2.0	1%
Total	137.7	100%	7.1	100%	144.8	100%

Data was not available for 3 posts (2.0 WTE).

1.2.8 Vacancy rates

There is a 5.5% vacancy rate across HSCTs for cancer specialist nurses with this ranging from 0% in South Eastern HSCT and Northern HSCT, to 16.7% in Western HSCT.

Table 16: Adult cancer specialist nurse workforce by HSCT, vacancy rates, number of posts, NI 2021

HSCT	Filled	Vacant	Vacancy rate
Belfast	60	4	6.3%
South Eastern	31	0	0.0%
Northern	24	0	0.0%
Western	20	4	16.7%
Southern	21	1	4.5%
Total	156	9	5.5%

1.2.9 Agenda for Change (AfC) banding

Adult cancer specialist nurses are by definition AfC band 6 and above. In NI 73% (106.3 WTE) of cancer specialist nurses were at AfC band 7; 25% (36.5 WTE) were at band 6 and 1% (2.0 WTE) were at band 8A.

Table 17: Adult cancer specialist nurse workforce, AfC banding, WTE, NI 2021

AfC band	WTE	Percentage
6	36.5	25%
7	106.3	73%
8A	2.0	1%
Total	144.8	100%

The number of the adult cancer specialist nurse WTEs working in each area of practice varies. The areas of practice with the highest workforce are breast (27.5 WTE), haematology (20.9 WTE) and urology (16.7 WTE). The highest vacancy rate is within brain/central nervous system, at 50% (2 vacant posts). There are 9 filled posts that are 'not cancer type specific'; and 2 oncology posts.

Table 18: Adult cancer specialist nurse workforce, by area of practice, vacancy rates, number of posts, total WTE, NI 2021

Area of practice	Filled posts	Vacant posts	Vacancy rate	Total WTE
Breast	30	1	3.2%	27.5
Haematology	23	1	4.2%	20.9
Urology	17	1	5.6%	16.7
Lung	17	0	0.0%	15.1
Malignant dermatology	12	1	7.7%	11.2
Upper gastrointestinal	11	0	0.0%	9.6
Colorectal	10	1	9.1%	9.4
Gynaecology	8	1	11.1%	8.6
Head and neck	9	0	0.0%	8.1
Brain/central nervous system	2	2	50.0%	2.6
Sarcoma	3	0	0.0%	2.0
Hepato-pancreato-biliary	3	0	0.0%	2.5
Oncology	2	0	0.0%	1.8
Not cancer type specific	9	1	10.0%	8.9
Total	156	9	5.5%	144.8

Within the clinical specialist nurse subgroup, the most common areas of practice are breast (21.3 WTE) and lung (14.1 WTE)

Table 19: Adult cancer specialist nurse workforce, clinical nurse specialists, by area of practice, vacancy rates, number of posts, total WTE, NI 2021

Clinical specialist nurses* by area of practice	Filled posts	Vacant posts	Vacancy rate	Total WTE
Breast	23	1	4.2%	21.3
Lung	16	0	0.0%	14.1
Haematology	15	1	6.3%	12.9
Urology	14	1	6.7%	14.5
Malignant dermatology	10	1	9.1%	9.5
Colorectal	10	1	9.1%	9.4
Head and neck	9	0	0.0%	8.1
Upper gastrointestinal	8	0	0.0%	6.8
Gynaecology	7	1	12.5%	7.6
Brain/central nervous system	2	2	50.0%	2.6
Sarcoma	3	0	0.0%	2.0
Hepato-pancreato-biliary	3	0	0.0%	2.5
Oncology	2	0	0.0%	1.8
Not cancer type specific	8	1	11.1%	8.1
Total	130	9	6.5%	121.2

*This subgroup includes the following job titles: Clinical Nurse Specialist, Cancer Nurse Specialist and Nurse Specialist, and includes those working in acute oncology services.

For the nurse practitioner subgroup, the most common areas of practice are haematology (8.0 WTE) and breast (6.3 WTE).

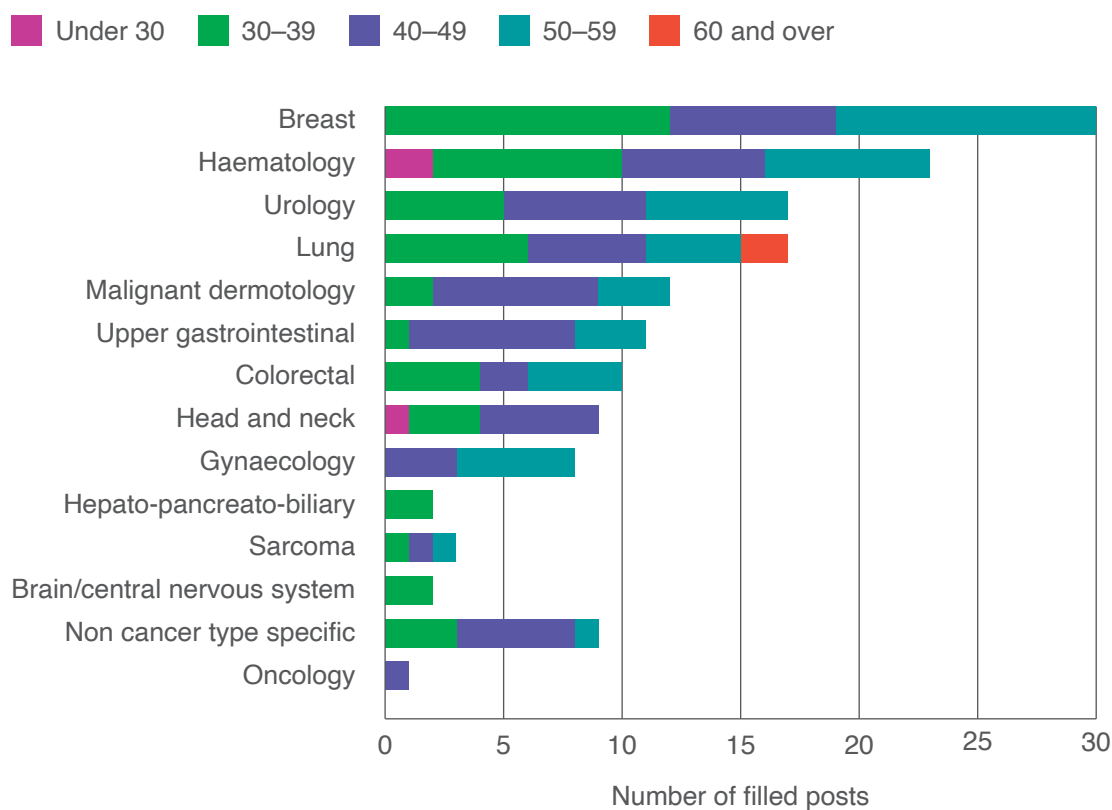
Table 20: Adult cancer specialist nurse workforce, practitioners, by area of practice, vacancy rates, number of posts, WTE, NI 2021

Practitioners* by area of practice	Filled posts	Vacant posts	Vacancy rate	WTE
Haematology	8	0	0%	8.0
Breast	7	0	0%	6.2
Urology	3	0	0%	2.1
Upper gastrointestinal	3	0	0%	2.8
Malignant dermatology	2	0	0%	1.7
Gynaecology	1	0	0%	1.0
Lung	1	0	0%	1.0
Not cancer type specific	1	0	0%	0.8
Total	26	0	0%	23.6

*This subgroup includes the following job titles: Oncology Nurse Practitioner, Haematology Nurse Practitioner, Advanced Nurse Practitioner Trainee, Nurse Practitioner, Haematology Transplant Coordinator, Advanced Nurse Practitioner.

Table 21: Adult cancer specialist nurse workforce, (including clinical nurse specialists and practitioners), areas of practice by HSCT, WTE posts, NI 2021

HSCT	Belfast		Northern		South Eastern		Southern		Western		Total	
Area of practice	WTE	%	WTE	%	WTE	%	WTE	%	WTE	%	WTE	%
Breast	9.9	17%	4.8	25%	5.6	20%	3.6	18%	3.6	17%	27.5	19%
Haematology	10.9	19%	2.0	10%	2.8	10%	2.2	11%	3.0	15%	20.9	14%
Urology	5.4	9%	0.7	4%	2.9	10%	3.0	15%	4.7	23%	16.7	12%
Lung	5.0	9%	3.6	19%	3.0	11%	2.0	10%	1.5	7%	15.1	10%
Malignant dermatology	2.6	5%	1.5	8%	3.7	13%	1.6	8%	1.8	9%	11.2	8%
Upper gastrointestinal	5.6	10%	1.0	5%	1.0	4%	1.0	5%	1.0	5%	9.6	7%
Colorectal	2.5	4%	2.5	13%	2.4	9%	1.0	5%	1.0	5%	9.4	6%
Gynaecology	4.0	7%	1.0	5%	1.0	4%	1.0	5%	1.6	8%	8.6	6%
Head and neck	3.7	7%	0	0%	1.4	5%	2.0	10%	1.0	5%	8.1	6%
Brain/central nervous system	2.6	4%	0	0%	0	0%	0	0%	0	0%	2.6	2%
Hepato-pancreato-biliary	2.5	4%	0	0%	0	0%	0	0%	0	0%	2.5	2%
Sarcoma	1.0	2%	0	0%	1.0	4%	0	0%	0	0%	2.0	1%
Oncology	1.8	3%	0	0%	0	0%	0	0%	0	0%	1.8	1%
Not cancer type specific	0	0%	2.0	10%	2.6	10%	2.8	14%	1.5	7%	8.9	6%
Total	57.5	100%	19.2	100%	27.3	100%	20.2	100%	20.7	100%	144.8	100%

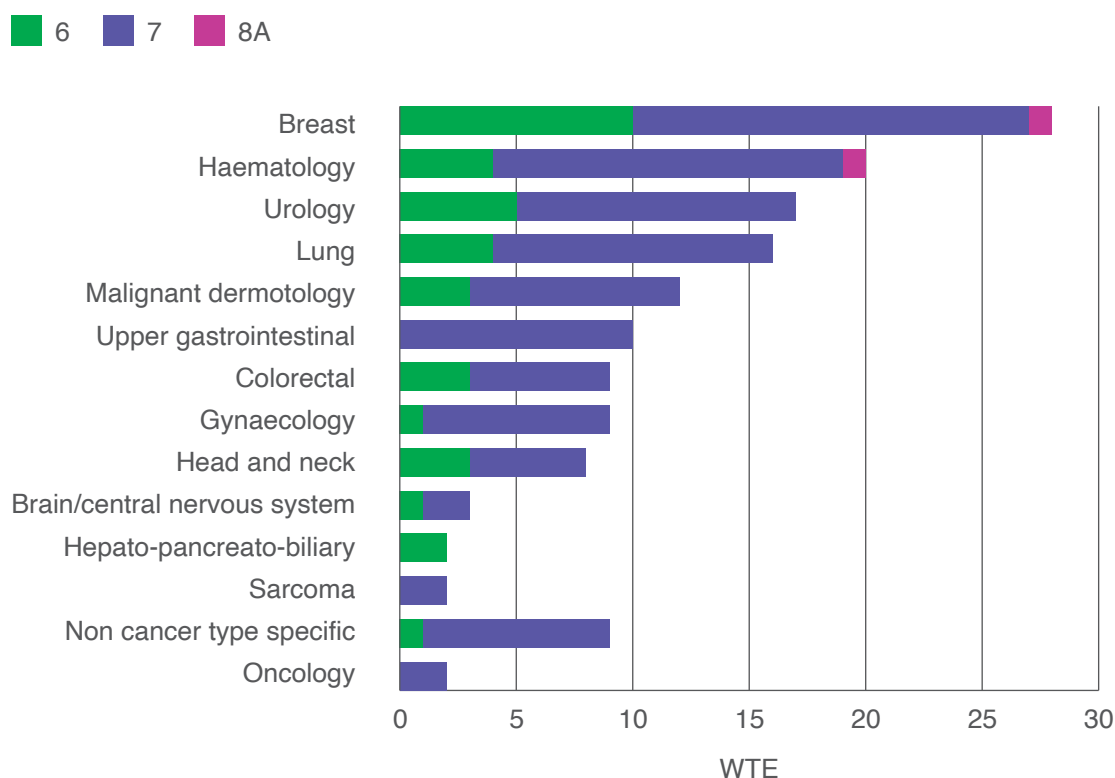
Figure 1: Adult cancer specialist nurse workforce, areas of practice, age, number of filled posts, NI 2021

17 posts (12%) also reported a secondary area of practice where the post holder delivers care for at least 25% of their patient facing time. These secondary areas of practice, and the associated numbers of posts, are provided below.

Table 22: Adult cancer specialist nurse workforce, secondary areas of practice, number of posts, NI 2021

Secondary area of practice	Number of posts	Percentage
Urology	3	2%
Colorectal	3	2%
Not cancer type specific	3	2%
Lung	3	2%
Gynaecology	2	1%
Head and neck	1	1%
Brain/central nervous system	1	1%
Malignant dermatology	1	1%
Not applicable (one area of practice only)	148	90%
Total	165	100%

Figure 2: Adult cancer specialist nurse workforce, AfC banding by area of practice, WTE, NI 2021



1.2.11 Cancer clinical specialist nurse caseloads

This section focuses on ‘**clinical nurse specialists**’ these roles function as key workers for cancer patients but have a variety of job titles (Clinical Nurse Specialist, Cancer Nurse Specialist and Nurse Specialist). This group includes nurses working in acute oncology services and are included in ‘not cancer type specific’ area of practice.

While there are many roles who support patients with cancer, cancer Clinical Nurse Specialists (CNSs) play an important role in the management of individual patients as their key worker¹⁷. Through the NI cancer

strategy the intention is that every cancer patient should have access to a cancer clinical nurse specialist. This section summarises the theoretical caseloads that the adult clinical nurse specialists currently experience in their area of practice.

Incidence and prevalence 2019 data has been sourced from the NI cancer registry. This is the most recent published data. Please see [Appendix A](#) for details in methodology.

The ratio of cancer incidence to adult clinical nurse specialist WTE varied by area of practice, from 139.0 new cases per WTE for urology to 53.5 for Sarcoma.

¹⁷ [A Cancer Strategy for Northern Ireland 2021-2031](#), Department of Health NI. Accessed January 2022.

Table 23: Adult cancer specialist nurse workforce, ratio of cancer incidence to cancer clinical nurse specialist WTE by area of practice, NI 2021

Area of practice	Clinical nurse specialists* WTE	Percentage of all adult cancer specialist nurses WTE**	Incidence ¹⁸	Ratio incidence to WTE posts
Breast	21.3	77%	1,685	79.1
Urology	14.5	87%	2,020	139.0
Lung	14.1	93%	1,353	95.9
Haematology	12.9	62%	739	57.4
Malignant dermatology [†]	9.5	85%	410	43.1
Colorectal	9.4	100%	1,222	130.0
Head and neck	8.1	100%	551	67.6
Gynaecology	7.6	88%	593	78.0
Upper gastrointestinal***	9.3	77%	916	98.9
Brain/central nervous system	2.6	100%	163	63.7
Sarcoma	2.0	100%	107	53.5
Not cancer type specific	8.1	91%	N/A	N/A
Oncology	1.8	100%	N/A	N/A
Total	121.2	84%	9,759	80.5

* Clinical nurse specialists = Clinical nurse specialists, cancer nurse specialists, nurse specialists.

** Adult cancer specialist nurses = cancer clinical nurse specialists + nurse practitioners.

*** In this analysis: upper gastrointestinal = upper gastrointestinal + hepato-pancreato-biliary.

† Please note that dermatology cancer clinical nurse specialists will support both malignant and some non-melanoma skin cancer patients. It is estimated by NI Public Health Agency that 20% of non-melanoma skin cancer patients require the support of clinical nurse specialists. These additional non-melanoma patients are not included in this calculation.

Across HSCTs, the ratio of cancer incidence to cancer clinical specialist nurse WTE was highest in Northern trust (152.5 new cases per WTE) and lowest in Belfast trust (47.4).

NB. Incidence data is based on the locality of patient regardless of where they are treated. The Belfast trust low incidence to WTE ratio does not reflect the demand they meet. As a tertiary cancer centre, they will deliver additional care for patients with complex need from the catchments of other trusts.

¹⁸ [Cancer incidence, survival, mortality and prevalence by cancer type](#). 2019 data by site. Northern Ireland Cancer Registry. Accessed October 2021.

Table 24: Adult cancer specialist nurse workforce, ratio of cancer incidence to clinical nurse specialist WTE by HSCT, NI 2021

HSCT	Clinical nurse specialist* WTE	Percentage of all adult cancer specialist nurses** WTE	Incidence	Ratio incidence to WTE posts
Belfast	40.8	74%	1,934	47.4
Northern	16.9	88%	2,572	152.5
South Eastern	22.3	80%	1,972	88.6
Southern	20.6	95%	1,831	88.9
Western	20.7	100%	1,551	75.1
Total	121.2	84%	9,860	81.4

* Clinical nurse specialist = Clinical Nurse Specialists, Cancer Nurse Specialists, Nurse Specialists.

** Adult cancer specialist nurses = cancer clinical nurse specialists + nurse practitioners.

The ratio of 5-year cancer prevalence to WTE posts was highest for Urology (512.4), Colorectal (393.9) and Breast (346.8).

Table 25: Adult cancer specialist nurse workforce, ratio of 5-year prevalence to clinical nurse specialist WTE by area of practice, NI 2021

Area of practice	Clinical nurse specialists* WTE	Percentage of all adult cancer specialist nurses** WTE	5-year prevalence ¹⁹	Ratio prevalence to WTE posts
Breast	21.3	77%	7,386	346.8
Urology	14.5	87%	7,447	512.4
Lung	14.1	93%	1,855	131.5
Haematology	12.9	62%	2,940	228.3
Malignant dermatology [†]	9.5	85%	1,748	183.6
Colorectal	9.4	100%	1,264	393.9
Head and neck	8.1	100%	1,706	209.4
Gynaecology	7.6	88%	3,703	264.2
Upper gastrointestinal***	9.3	77%	2,008	136.5
Brain/central nervous system	2.6	100%	270	105.5
Sarcoma	2.0	100%	313	156.5
Not cancer type specific	8.1	91%	N/A	N/A
Oncology	1.8	100%	N/A	N/A
Total	121.2	84%	30,640	252.8

* Clinical nurse specialist = Clinical Nurse Specialists, Cancer Nurse Specialists, Nurse Specialists.

** Adult cancer specialist nurses = cancer clinical nurse specialists + nurse practitioners.

*** In this analysis: upper gastrointestinal = upper gastrointestinal + hepato-pancreato-biliary.

[†] Please note that dermatology cancer clinical nurse specialists will support both malignant and some non-melanoma skin cancer patients. It is estimated by NI Public Health Agency that 20% of non-melanoma skin cancer patients require the support of clinical nurse specialists. These additional non-melanoma patients are not included in this calculation.

19 [Cancer incidence, survival, mortality and prevalence by cancer type](#). 5-year prevalence refers to patients diagnosed in 2015–2019 who were alive at the end of 2019. Northern Ireland Cancer Registry. Accessed October 2021. (Patients are included only once using their most recent diagnosis of this cancer type.)

1.2.12 Qualifications

The three most common qualifications for adult cancer specialist nurses (including clinical nurse specialists and practitioners) in post are BSc Nursing (91%, 142 filled posts), Advanced Communications Skills training (74%, 116 filled posts) and Postgraduate Diploma in Specialist Practice – Cancer Care Oncology (51%, 80 filled posts). Thirteen other qualification types are held by adult cancer specialist nurses in post.

Table 26: Adult cancer specialist workforce, number and percentage of qualifications and training, filled posts, NI 2021

	Number of filled posts with qualification	Percentage filled posts with qualification
Number of filled posts – totals	156	100%
Qualifications		
BSc nursing/other health-related subject	142	91%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	80	51%
Health Assessment and Clinical Reasoning	79	51%
Diploma in Nursing	65	42%
Non-Medical Prescribing Qualification V300	64	41%
Training in Radiotherapy Nursing	23	15%
Masters in Professional Nursing	14	9%
Postgraduate Diploma in Specialist Practice – Palliative Care	10	6%
Advanced Methods in Research and Development in Health and Social Care	8	5%
MSc Advanced Nursing Practice (or other relevant programme)	6	4%
PhD	2	1%
Training		
Advanced Communications Skills training	116	74%
PICC training (Central Venous Access Devices competency assessment)	77	49%
Chemotherapy Competency*	63	40%
Trained in eHNA** within the last 18 months	58	37%
Sage and Thyme Communication Skills training	47	30%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

** Electronic Holistic Needs Assessment.

Overall, a greater proportion of AfC band 7 compared to band 6 posts held qualifications in each of the areas listed; with the greatest difference seen for Health Assessment and Clinical Reasoning, Postgraduate Diploma in Specialist Practice – Cancer Care Oncology, and Advanced Communications Skills training. The exception is being trained in eHNA within the last 18 months, where just over half of band 6 (53%) were trained compared with a third of band 7 (33%) posts.

Table 27: Adult cancer specialist workforce, number and percentage of qualifications and training, filled posts, Agenda for Change (AfC) banding, NI 2021

	Number of filled posts with qualifications				Percentage filled posts with qualifications
AfC band	6	7	8A	All	All
Number of filled posts – totals	38	116	2	156	100%
Qualifications					
BSc in Nursing or other health-related subject	33	107	2	142	91%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	14	65	1	80	51%
Health Assessment and Clinical Reasoning	2	75	2	79	51%
Diploma in Nursing	10	54	1	65	42%
Non-Medical Prescribing Qualification V300	0	63	1	64	41%
Training in Radiotherapy Nursing	4	18	1	23	15%
Masters in Professional Nursing	2	11	1	14	9%
Postgraduate Diploma in Specialist Practice – Palliative Care	2	8	0	10	6%
Advanced Methods in Research and Development in Health and Social Care	0	7	1	8	5%
MSc Advanced Nursing Practice or relevant programme	0	5	1	6	4%
PhD	0	2	0	2	1%
Training					
Advanced Communications Skills training	26	88	2	116	74%
PICC training (Central Venous Access Devices competency assessment)	19	57	1	77	49%
Chemotherapy Competency*	14	48	1	63	40%
Trained in eHNA** within the last 18 months	20	38	0	58	37%
Sage and Thyme Communication Skills training	9	38	0	47	30%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

** Electronic Holistic Needs Assessment.

Table 28a: Adult cancer specialist workforce, number and percentage of qualifications and training, filled posts, areas of practice, NI 2021

Area of practice	Qualifications									
	Number of filled posts (total)	BSc in Nursing or other health-related subject	Health Assessment and Clinical Reasoning	Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	Non-Medical Prescribing Qualification V300	Diploma in Nursing	Masters in Professional Nursing	Postgraduate Diploma in Specialist Practice – Palliative Care	Advanced Methods in Research and Development in Health and Social Care	MSc Advanced Nursing Practice or relevant programme
Brain/central nervous system	2	2	1	1	0	0	1	0	0	0
Breast	30	27	7	12	5	12	0	0	0	1
Colorectal	10	10	3	7	1	4	1	1	1	0
Gynaecology	8	7	4	5	4	5	1	0	0	0
Haematology	23	23	17	14	17	11	5	1	1	2
Head and neck	9	9	2	6	2	3	0	0	1	0
Hepato-pancreato-biliary	3	0	0	0	0	2	0	0	0	0
Lung	17	16	11	6	8	5	1	6	0	1
Malignant dermatology	12	12	9	6	5	2	1	0	1	1
Not cancer type specific	9	8	5	7	4	3	2	0	1	0
Oncology	2	2	1	1	1	1	1	0	1	0
Sarcoma	3	1	1	1	0	3	0	0	0	0
Upper gastrointestinal	11	9	9	7	8	8	0	1	0	0
Urology	17	16	9	7	9	6	1	1	2	1
Total	156	142	79	80	64	65	14	10	8	6
Percentage	100%	91%	51%	51%	41%	42%	9%	6%	5%	4%

Table 28b: Adult cancer specialist workforce, number and percentage of qualifications and training, filled posts, areas of practice, NI 2021

Area of practice	Number of filled posts (total)	Qualification		Training				
		Training in Radiotherapy Nursing	PhD	PICC training*	Advanced Communications Skills training	Chemotherapy Competency**	Trained in eHNA*** within the last 18 months	Sage and Thyme Communication Skills training
Brain/central nervous system	2	0	0	2	1	0	0	2
Breast	30	1	0	10	24	11	10	5
Colorectal	10	1	0	5	8	3	4	5
Gynaecology	8	1	0	3	8	2	4	2
Haematology	23	3	0	17	16	20	6	6
Head and neck	9	2	1	4	7	1	6	3
Hepato-pancreato-biliary	3	1	0	1	1	1	3	1
Lung	17	1	0	8	13	3	4	4
Malignant dermatology	12	1	0	3	9	1	3	6
Not cancer type specific	9	3	0	9	5	9	1	2
Oncology	2	1	0	2	1	2	0	1
Sarcoma	3	0	0	0	2	1	3	0
Upper gastrointestinal	11	4	0	7	8	6	5	5
Urology	17	4	1	6	13	3	9	5
Total	156	23	2	77	116	63	58	47
%	100%	15%	1%	49%	74%	40%	37%	30%

* Central Venous Access Devices competency assessment.

** Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

*** Electronic Holistic Needs Assessment.





2. ADULT CHEMOTHERAPY NURSES

This section describes the adult chemotherapy nurse workforce in Northern Ireland (NI). These nurses were on Agenda for Change (AfC) bands 5 to 7 and spend over 50% of their time directly supporting adults living with cancer. The census includes nurses who deliver cytotoxic drugs and provide adult cancer patients with advice, education and support to ensure that the risks and toxicities were minimised. Full details on inclusion and exclusion criteria can be found in [Appendix B](#).

Based on the data returned by the five trusts, there were 266 (238.3 WTE) adult chemotherapy nurse posts in NI at the time of the census. This number includes both filled and vacant posts, as well as posts where data is not known. 65% (172 posts) of posts were full-time and 35% (94 posts) were part-time.

2.1 Job title

Adult chemotherapy nurses have a range of job titles, with the largest proportion working as Staff Nurses (62%, 150.4 WTE).

Table 29: Chemotherapy nurse workforce, job titles, number of posts, NI 2021

Job title	Number of posts	Percentage	WTE
Staff Nurse	164	62%	150.4
Clinical Staff Nurse	46	17%	36.4
Chemotherapy Nurse	19	7%	17.0
Deputy Sister	16	6%	15.6
Sister	8	3%	7.8
Unknown	7	3%	5.3
Chemotherapy Sister	4	2%	4.0
Deputy Charge Nurse	1	0%	1
Practice Education Development Nurse	1	0%	0.8
Total	266	100%	238.3

2.2 Age

The census showed that 30–39 was the most common age group among adult chemotherapy nurses at 36% (87 filled posts), closely followed by under 30 at 30% (72 posts filled).

Table 30: Chemotherapy nurse workforce by age group, number of filled posts, NI 2021

Age group	Number of posts	Percentage
Under 30	72	30%
30–39	87	36%
40–49	46	19%
50–59	34	14%
60 and over	4	2%
Total	243	100%
Vacant	23	

Four out of five HSCTs (South Eastern, Northern, Western, Southern) had 30–39 as the most common age group for adult chemotherapy nurses. For the remaining HSCT, the largest proportion of adult chemotherapy nurses were under 30.

Table 31: Chemotherapy nurse workforce by age, trust, number of filled posts, NI 2021

Age group	Under 30		30–39		40–49		50–59		60 and over		Total	
HSCT	N	%	N	%	N	%	N	%	N	%	N	%
Belfast	53	35%	45	29%	33	22%	20	13%	2	1%	153	100%
South Eastern	7	26%	10	37%	6	22%	4	15%	0	0%	27	100%
Northern	7	28%	15	60%	0	0%	2	8%	1	4%	25	100%
Southern	1	5%	10	53%	4	21%	4	21%	0	0%	19	100%
Western	4	21%	7	37%	3	16%	4	21%	1	5%	19	100%
Total	72	30%	87	36%	46	19%	34	14%	4	2%	243	100%

2.3 Gender

98% (239 filled posts) of adult chemotherapy nurses were female.

Table 32: Chemotherapy nurse workforce by gender, number of filled posts, NI 2021

Gender	Number of posts	Percentage
Female	239	98%
Male	4	2%
Other	0	0%
Not disclosed	0	0%
Total	243	100%
Vacant	23	

2.4 Nationality

Where nationality was reported, 88% (215 filled posts) of adult chemotherapy nurses were from the UK.

Table 33: Chemotherapy nurse workforce by nationality, number of filled posts, NI 2021

Nationality	Number of posts	Percentage
UK	215	88%
EU*	9	4%
Rest of world	19	8%
Total	243	100%
Vacant	23	

*EU is likely to include some staff who identify as Irish.

2.5 Part-time roles

The majority of adult chemotherapy nurses were in full-time posts at 65% (172 filled posts). This ranged from 74% (14 filled posts) in Western Trust to 57% (13 filled posts) in Southern Trust. Just over a third of adult chemotherapy nurses were in part-time posts (94 filled posts).

Table 34: Chemotherapy nurse workforce, full-time/part-time (including vacancies) by HSCT, number of posts, NI 2021

	Full-time		Part-time		Total	
HSCT	N	%	N	%	N	%
Belfast	111	65%	60	35%	171	100%
South Eastern	18	67%	9	33%	27	100%
Northern	16	62%	10	38%	26	100%
Southern	13	57%	10	43%	23	100%
Western	14	74%	5	26%	19	100%
Total	172	65%	94	35%	266	100%

2.6 Vacancy rates

The majority of adult chemotherapy nurse posts were filled (243) and 23 reported as vacant. The overall vacancy rate for adult chemotherapy nurses was 8.6%. This vacancy rate was higher for Oncology only, at 14%, compared to Haematology only or Both Haematology and Oncology at 5.7%, and 5.9% respectively.

Table 35: Chemotherapy nurse workforce by area of practice, vacancy rates, number of posts, NI 2021

Area of practice	Filled	Vacant	Vacancy rate
Oncology only	80	13	14.0%
Both Haematology and Oncology	83	5	5.7%
Haematology only	80	5	5.9%
Grand total	156	9	5.5%

Table 36: Chemotherapy nurse workforce by HSCT, vacancy rates, number of posts, NI 2021

HSCT	Filled	Vacant	Vacancy rate
Belfast	153	18	10.5%
South Eastern	27	0	0.0%
Northern	25	1	3.8%
Southern	19	4	17.4%
Western	19	0	0.0%
Total	243	23	8.6%

2.7 Areas of practice

Adult chemotherapy nurses were roughly evenly split between the three areas of practice: Oncology only at 35%, (82.8 WTE), Both Haematology and Oncology at 33% (79.4 WTE), and Haematology only at 32% (76.0 WTE).

Table 37: Chemotherapy nurse workforce, area of practice, WTE, NI 2021

Area of practice	WTE	Percentage
Oncology only	82.8	35%
Both Haematology and Oncology	79.4	33%
Haematology only	76.0	32%
Total	238.3	100%

2.8 Agenda for Change (AfC) banding

Over two-thirds (164.2 WTE) of adult chemotherapy nurses were at AfC band 5. The AfC banding profile varies between HSCTs; Southern Trust has the highest proportion of posts at band 5 at 84% (17.0 WTE), Belfast Trust has the highest proportion of posts at band 6 at 32% (49.2 WTE), and Northern Trust has the highest proportion of posts at band 7 at 8% (1.8 WTE).

Table 38: Chemotherapy nurse workforce, AfC Banding, WTE, NI 2021

AfC band	WTE	Percentage
5	164.2	69%
6	64.3	27%
7	9.8	4%
Total	238.3	100%

Table 39: Chemotherapy nurse workforce by HSCT, AfC banding, WTE, NI 2021

	AfC band 5		AfC band 6		AfC band 7		Total	
HSCT	WTE	Percentage	WTE	Percentage	WTE	Percentage	WTE	Percentage
Belfast	99.0	65%	49.2	32%	5.0	3%	153.2	100%
South Eastern	18.2	75%	5.2	21%	1.0	4%	24.4	100%
Northern	15.5	68%	5.6	24%	1.8	8%	22.9	100%
Southern	17.0	84%	2.3	11%	1.0	5%	20.3	100%
Western	14.4	83%	2.0	11%	1.0	6%	17.4	100%
Total	164.2	69%	64.3	27%	9.8	4%	238.3	100%

2.9 Affiliation

Practically all (99%) the filled adult chemotherapy nurses have no affiliation to a charity in their job title. Only 0.8 WTE have Macmillan in the job title and 1.0 WTE of vacant adult chemotherapy nurse posts have another charity.

Table 40: Chemotherapy nurse workforce, post affiliations, NI 2021

	Filled		Vacant		Total	
Affiliation	WTE	Percentage	WTE	Percentage	WTE	Percentage
It has no affiliations in the job title	215.0	100%	21.5	96%	236.5	99%
It has another charity in the job title	0	0%	1.0	4%	1.0	0%
It has Macmillan in the job title	0.8	0%	0	0%	0.8	0%
Total	215.8	100%	22.5	100%	238.3	100%

2.10 Setting

The majority (72%) of adult chemotherapy WTEs are located in cancer centres. Adult chemotherapy nurses in cancer units (26% of all WTE) deliver care in a day care or day unit location.

Table 41: Chemotherapy nurse workforce, settings and main locations of care, WTE, NI 2021

Setting	Main location of care – WTE		
	Day care or day unit	Inpatient	Total
Cancer centre	93.5	77.9	171.5
Cancer unit	61.2	0	61.2
Non-cancer specific setting	0	5.7	5.7
Total	154.8	83.6	238.3

2.11 Qualifications

The three most common qualifications for adult chemotherapy nurses in post are PICC training (96%, 234 filled posts). Chemotherapy Competency (88%, 213 filled posts) and BSc in Nursing or other health-related subject (85%, 205 filled posts). Nine other qualification types are held by adult chemotherapy nurses in post. Tables 42–44 provide details.

Table 42: Chemotherapy nurse workforce, number and percentage of qualifications and training, filled posts, NI 2021

	Number of filled posts with qualification	Percentage filled posts with qualification
Number of filled posts – totals	243	100%
Qualifications		
BSc in Nursing or other health-related subject	206	85%
Diploma in Nursing	55	23%
Training in Radiotherapy Nursing	15	6%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	14	6%
Health Assessment and Clinical Reasoning	3	1%
MSc Advanced Nursing Practice or relevant programme	2	1%
Postgraduate Diploma in Specialist Practice – Palliative Care	1	0%
Non-Medical Prescribing Qualification V300	1	0%
Masters in Professional Nursing	0	0%
PhD	0	0%
Advanced Methods in Research and Development in Health and Social Care	0	0%
Training		
PICC training (Central Venous Access Devices competency assessment)	234	96%
Chemotherapy Competency*	213	88%
Advanced Communications Skills training	18	7%
Sage and Thyme Communication Skills training	15	6%
Trained in eHNA** within the last 18 months	0	0%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

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Table 43: Chemotherapy nurse workforce, number and percentage of qualifications and training, filled posts, AfC

	Number of filled posts with qualifications, AfC band				Percentage filled posts with qualifications
AfC band	5	6	7	All	All
Number of filled posts – totals	159	74	10	243	100%
Qualifications					
BSc in Nursing or other health-related subject	142	55	9	206	85%
Diploma in Nursing	27	26	2	55	23%
Training in Radiotherapy Nursing	10	3	2	15	6%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	3	7	4	14	6%
Health Assessment and Clinical Reasoning	1	1	1	3	1%
MSc Advanced Nursing Practice or relevant programme	1	1	0	2	1%
Postgraduate Diploma in Specialist Practice – Palliative Care	0	1	0	1	0%
Non-Medical Prescribing Qualification V300	0	0	1	1	0%
Masters in Professional Nursing	0	0	0	0	0%
PhD	0	0	0	0	0%
Advanced Methods in Research and Development in Health and Social Care	0	0	0	0	0%
Training					
PICC training (Central Venous Access Devices competency assessment)	150	74	10	234	96%
Chemotherapy Competency**	131	73	9	213	88%
Advanced Communications Skills training	7	8	3	18	7%
Sage and Thyme Communication Skills training	8	5	2	15	6%
Trained in eHNA** within the last 18 months	0	0	0	0	0%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

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Table 44: Chemotherapy nurse workforce, number and percentage of qualifications and training, filled posts, area of practice, NI 2021

Area of practice	Number of filled posts with qualifications, area of practice				Total percentage
	Both Haematology and Oncology	Haematology only	Oncology only	Total	
Number of filled posts (total)	83	80	80	243	100%
Qualifications					
BSc in Nursing or other health-related subject	71	66	69	206	85%
Diploma in Nursing	23	16	16	55	23%
Training in Radiotherapy Nursing	8	1	6	15	6%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	7	3	4	14	6%
Health Assessment and Clinical Reasoning	2	0	1	3	1%
MSc Advanced Nursing Practice or relevant programme	0	0	2	2	1%
Postgraduate Diploma in Specialist Practice – Palliative Care	0	1	0	1	0%
Non-Medical Prescribing Qualification V300	1	0	0	1	0%
Masters in Professional Nursing	0	0	0	0	0%
PhD	0	0	0	0	0%
Advanced Methods in Research and Development in Health and Social Care	0	0	0	0	0%
Training					
PICC training (Central Venous Access Devices competency assessment)	81	75	78	234	96%
Chemotherapy Competency*	72	68	73	213	88%
Advanced Communications Skills training	14	4	0	18	7%
Sage and Thyme Communication Skills training	7	6	2	15	6%
Trained in eHNA** within the last 18 months	0	0	0	0	0%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

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3. CHILDREN, TEENAGER AND YOUNG ADULT CANCER NURSES

This section describes the children, teenager and young adult cancer nurse workforce in Northern Ireland (NI). These nurses were on Agenda for Change (AfC) bands 5 to 7, with over half (54%, 21 WTE) on AfC band 5.

Based on the data returned by the five trusts, there were 48 (38.5 WTE) children, teenager and young adult cancer posts in NI at the time of the census. This number includes both filled and vacant posts. 54% (26 posts) of posts were full-time and 46% (22 posts) were part-time.

3.1 Job title

There are six job titles for children, teenager and young adult cancer nurses, with the largest population working as Paediatric Haematology and Oncology Nurses.

Table 45: Children, teenager and young adult cancer nurse workforce, job titles, number of posts, NI 2021

Job title	Number of posts	Percentage	WTE
Paediatric Haematology and Oncology Nurse	23	48%	21.0
Deputy Sister	9	19%	7.4
Teenage and Young Adult Clinical Nurse Specialist	8	17%	3.5
Paediatric Haematology and Oncology Nurse Specialist	5	10%	4.1
Clinical Research Nurse	2	4%	1.5
Sister	1	2%	1.0
Total	48	100%	38.5

3.2 Age

The census showed that 30–39 was the most common age group among children, teenager, and young adult cancer nurses, with 39% (17 filled posts) in this group. This was followed by under 30, with 34% (15 filled posts) in this category.

Table 46: Children, teenager and young adult cancer nurse workforce by age group, number of filled posts, NI 2021

Age group	Number of posts	Percentage
Under 30	15	34%
30–39	17	39%
40–49	8	18%
50–59	3	7%
60 and over	1	2%
Total	44	100%
Vacant	4	

Table 47: Children, teenager and young adult cancer nurse workforce by age, trust, number of filled posts, NI 2021

Age group	Under 30		30–39		40–49		50–59		60 and over		Total	
HSCT	N	%	N	%	N	%	N	%	N	%	N	%
Belfast	15	38%	15	38%	6	15%	2	5%	1	3%	39	100%
Southern	0	0%	2	100%	0	0%	0	0%	0	0%	2	100%
Western	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%
Northern	0	0%	0	0%	1	100%	0	0%	0	0%	1	100%
South Eastern	0	0%	0	0%	1	100%	0	0%	0	0%	1	100%
Total	15	34%	17	39%	8	18%	3	7%	1	2%	44	100%

3.3 Gender

95% (42 filled posts) of children, teenager and young adult cancer nurses were female.

Table 48: Children, teenager and young adult cancer nurse workforce by gender, number of filled posts, NI 2021

Gender	Number of posts	Percentage
Female	42	95%
Male	2	5%
Other	0	0%
Not disclosed	0	0%
Total	44	100%
Vacant	4	

3.4 Nationality

89% (39 filled posts) of children, teenager and young adult cancer nurses were from the UK.

Table 49: Children, teenager and young adult cancer nurse workforce by nationality, number of filled posts, NI 2021

Nationality	Number of posts	Percentage
UK	39	89%
EU*	4	9%
Rest of world	1	2%
Total	44	100%
Vacant	4	

*EU is likely to include some staff who identify as Irish.

3.5 Part-time roles

Overall, just under half (46%, 22 filled posts) of children, teenager and young adult cancer nurses were part-time. In all HSCTs except Belfast Trust, 100% of the workforce were part-time. In Belfast, 60% (26 filled posts) were full-time. It should be noted that 5 of the part-time post holders in the table below are also counted as part-time posts in the adult cancer care workforce section, as these post-holders also work with adults.

Table 50: Children, teenager and young adult cancer nurse workforce, full-time/part-time by HSCT, number of posts, NI 2021

HSCT	Full-time (37.5 hours per week)		Part-time (<37.5 hours per week)		Total	
	N	%	N	%	N	%
Belfast	26	60%	17	40%	43	100%
Southern	0	0%	2	100%	2	100%
Western	0	0%	1	100%	1	100%
Northern	0	0%	1	100%	1	100%
South Eastern	0	0%	1	100%	1	100%
Total	26	54%	22	46%	48	100%

3.6 Vacancy rates

The majority of children, teenager and young adult cancer nurses were filled with only 4 posts reported as vacant, compared to 44 that were filled. The overall vacancy rate for children, teenager and young adult cancer nurses was 8.3%. Belfast was the only HSCT in which there was a vacancy rate higher than 0%.

Table 51: Children, teenager and young adult cancer nurse workforce by area of practice, vacancy rates, number of posts, NI 2021

Area of practice	Filled	Vacant	Vacancy rate
Not cancer type specific	40	4	9.1%
Bone marrow transplant	1	0	0.0%
Solid tumour	1	0	0.0%
Leukaemia	1	0	0.0%
Neuro-oncology	1	0	0.0%
Total	44	4	8.3%

Table 52: Children, teenager and young adult cancer nurse workforce by HSCT, vacancy rates, number of posts, NI 2021

HSCT	Filled	Vacant	Vacancy rate
Belfast	39	4	9.3%
Southern	2	0	0.0%
Western	1	0	0.0%
Northern	1	0	0.0%
South Eastern	1	0	0.0%
Total	44	4	8.3%

3.7 Areas of practice

90% (34.6 WTE) of children, teenager and young adult cancer nurses do not have a specific area of practice. The remaining children, teenager and young adult cancer nurses work fairly evenly across five areas of practice.

Table 53: Children, teenager and young adult cancer nurse workforce, area of practice, WTE, NI 2021

Area of practice	WTE	Percentage
Not cancer type specific	34.6	90%
Bone marrow transplant	1.0	3%
Solid tumour	1.0	3%
Leukaemia	1.0	3%
Neuro-oncology	0.9	2%
Total	38.5	100%

3.8 Agenda for Change (AfC) banding

Just over half (55%, 21 WTE) of children, teenager and young adult cancer posts were at AfC band 5. 24% of children, teenager and young adult cancer nurses were at band 6 (9.1 WTE) and 22 % were at band 7 (8.4 WTE).

Table 54: Children, teenager and young adult cancer nurse workforce, AfC banding, WTE, NI 2021

AfC band	WTE	Percentage
5	21.0	55%
6	9.1	24%
7	8.4	22%
Total	38.5	100%

Table 55: Children, teenager and young adult cancer nurse workforce, AfC banding by trust, WTE, NI 2021

	AfC band 5		AfC band 6		AfC band 7		Total	
HSCT	WTE	Percentage	WTE	Percentage	WTE	Percentage	WTE	Percentage
Belfast	21.0	57%	8.9	24%	7.0	19%	36.9	100%
Southern	0	0%	0.2	50%	0.2	50%	0.4	100%
Western	0	0%	0	0%	0.4	100%	0.4	100%
South Eastern	0	0%	0	0%	0.4	100%	0.4	100%
Northern	0	0%	0	0%	0.4	100%	0.4	100%
Total	21.0	55%	9.1	24%	8.4	22%	38.5	100%

3.9 Affiliation

90% (31.3 WTE) of filled posts for children, teenager and young adult cancer nurses have no affiliation for Macmillan or another charity in their job title, and 100% (3.5 WTE) of vacancies for children, teenager and young adult cancer nurses have no affiliations in their job title.

Table 56: Children, teenager and young adult cancer nurse workforce, post affiliations, NI 2021

	Filled		Vacant		Total	
Affiliation	WTE	Percentage	WTE	Percentage	WTE	Percentage
It has no affiliations in the job title	31.3	90%	3.5	100%	34.8	90%
It has another charity in the job title	3.7	10%	0	0%	3.7	10%
It has Macmillan in the job title	0	0%	0	0%	0	0%
Total	35.0	100%	3.5	100%	38.5	100%

3.10 Setting

58% of the children teenager and young adult cancer nurse workforce (22.2 WTE) works in an inpatient location. 97% (37.3 WTE) work in a cancer centre.

Table 57: Children, teenager and young adult cancer nurse workforce, settings and main locations of care, WTE, NI 2021

Setting	Main location of care – WTE			
	Day care or day unit	Hospital outpatient	Inpatient	Total
Cancer centre	11.8	3.4	22.2	37.3
Cancer unit	1.2	0	0	1.2
Total	12.9	3.4	22.2	38.5

3.11 Qualifications

The three most common qualifications for children, teenager and young adult cancer nurses in post are BSc in Nursing or other health-related subject (98%, 43 filled posts), PICC training (95%, 42 filled posts), and Chemotherapy Competency (77%, 34 filled posts). Ten other qualification types are held by children, teenager and young adult cancer nurses in post.

Table 58: Children, teenager and young adult cancer nurse workforce, number and percentage of qualifications and training, filled posts, NI 2021

	Number of filled posts with qualification	Percentage filled posts with qualification
Qualifications		
BSc in Nursing or other health-related subject	43	98%
MSc modules in teenager and young adult cancer care	7	16%
Diploma in Nursing	5	11%
Health Assessment and Clinical Reasoning	5	11%
Haematology modules from Queen's University Belfast	5	11%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	4	9%
Non-Medical Prescribing Qualification V300	4	9%
Masters in Professional Nursing	1	2%
Postgraduate Diploma in Specialist Practice – Palliative Care	0	0%
MSc Advanced Nursing Practice or relevant programme	0	0%
PhD	0	0%
Advanced Methods in Research and Development in Health and Social Care	0	0%
Training in Radiotherapy Nursing	0	0%
Training		
PICC training (Central Venous Access Devices competency assessment)	42	95%
Chemotherapy Competency*	34	77%
Advanced Communications Skills training	6	14%
Sage and Thyme Communication Skills training	3	7%
Trained in eHNA** within the last 18 months	1	2%
Cancer survivorship module	0	0%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

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Table 59: Children, teenager and young adult cancer nurse workforce, number and percentage of qualifications and training, filled posts, AfC band, NI 2021

Qualification	Number of filled posts with qualifications, AfC band				Percentage filled posts with qualifications
	5	6	7	All	
AfC band					
Number of filled posts – totals	22	9	13	44	100%
Qualifications					
BSc in Nursing or other health-related subject	22	8	13	43	98%
MSc modules in teenager and young adult cancer care	1	2	4	7	16%
Diploma in Nursing	0	2	3	5	11%
Health Assessment and Clinical Reasoning	0	0	5	5	11%
Haematology modules from Queen's University Belfast	0	2	3	5	11%
Postgraduate Diploma in Specialist Practice – Cancer Care Oncology	0	1	3	4	9%
Non-Medical Prescribing Qualification V300	0	0	4	4	9%
Masters in Professional Nursing	0	0	1	1	2%
Postgraduate Diploma in Specialist Practice – Palliative Care	0	0	0	0	0%
MSc Advanced Nursing Practice or relevant programme	0	0	0	0	0%
PhD	0	0	0	0	0%
Advanced Methods in Research and Development in Health and Social Care	0	0	0	0	0%
Training in Radiotherapy Nursing	0	0	0	0	0%
Training					
PICC training (Central Venous Access Devices competency assessment)	22	9	11	42	95%
Chemotherapy Competency*	13	9	12	34	77%
Advanced Communications Skills training	0	0	6	6	14%
Sage and Thyme Communication Skills training	0	1	2	3	7%
Trained in eHNA** within the last 18 months	0	0	1	1	2%
Cancer survivorship module	0	0	0	0	0%

* Please note that Chemotherapy Competency training includes both academic modules and training delivered internally by trusts.

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4. NURSING SUPPORT WORKFORCE

This section describes the cancer support workforce in Northern Ireland (NI). These individuals were on Agenda for Change (AfC) bands 3 and 4 and spend over 50% of their time directly supporting adults living with cancer. Administrative roles and band 2 roles have not been included in these numbers.

The posts captured at the time of the census include:

- **26 (22.7 WTE) cancer support worker** roles, which were introduced in 2016 during the first Clinical Nurse Specialist (CNS) expansion to work alongside the CNS;
- **67 (60.5 WTE) other support roles**, mostly **health care assistants (60 posts)** within cancer services.

Full details on inclusion and exclusion criteria are in [Appendix B](#), cancer support worker role definition can be found in [Appendix C](#).

Based on the data returned by the five trusts, there were overall 93 cancer support workforce posts in Northern Ireland at the time of the census (83.2 WTE). This number includes both filled and vacant posts. 64% (60 posts) were full-time and 36% (34 posts) were part-time.

Additionally, Belfast Trust has band 4 link workers 4 WTE (5 posts) working to a social prescribing model of support and upskilled in undertaking holistic needs assessment. These link workers have been included in the census as supporting people living with cancer will be a part of their role, but they are not aligned to the CNS workforce and are counted within the other support roles.

All trusts also have band 3 Information and Support workers, but these have not been included in the census.

4.1 Job title

Support workers have a wide range of job titles, with the largest proportion working as Healthcare Assistants (52%, 43.9 WTE). Overall, there are 26 support worker posts (22.7 WTE) that work with adult clinical nurse specialists to deliver personalised care for people living with cancer.

Table 60: Cancer support workforce, job titles, number of posts, NI 2021

Job title	Number of posts	Percentage	WTE
Support Worker	11	12%	9.4
Clinical Nurse Specialist Support Worker	6	6%	5.5
Cancer Support Worker	9	10%	7.7
Subtotal – cancer support worker	26	28%	22.7
Healthcare Assistant	49	52%	43.9
Senior Healthcare Assistant	11	12%	10.6
Link Worker	5	5%	4.0
Healthcare Support Worker	2	2%	2.0
Subtotal – other support roles	67	72%	60.5
Total	93	100%	83.2

4.2 Age

The census showed that 30–39 was the most common age group among the cancer support workforce, with 37% (32 filled posts) in this group.

Table 61: Cancer support workforce by age group, number of filled posts, NI 2021

Age group	Number of posts	Percentage
Under 30	14	16%
30–39	31	37%
40–49	18	21%
50–59	18	21%
60 and over	5	6%
Total	86	100%
Vacant	7	

Table 62: Cancer support workforce by age, trust, number of filled posts, NI 2021

All roles	Under 30		30–39		40–49		50–59		60 and over		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Belfast	11	19%	20	34%	10	17%	14	24%	3	5%	58	100%
Western	2	13%	5	31%	5	31%	3	19%	1	6%	16	100%
Southern	1	25%	1	25%	1	25%	0	0%	1	25%	4	100%
Northern	0	0%	3	60%	2	40%	0	0%	0	0%	5	100%
South Eastern	0	0%	2	67%	0	0%	1	33%	0	0%	3	100%
Total	14	16%	31	36%	18	21%	18	21%	5	6%	86	100%

Cancer support workers only	Under 30		30–39		40–49		50–59		60 and over		Total	
	N	%	N	%	N	%	N	%	N	%	N	%
Western	1	14%	4	57%	2	29%	0	0%	0	0%	7	100%
Belfast	0	0%	4	80%	0	0%	1	20%	0	0%	5	100%
Northern	0	0%	3	60%	2	40%	0	0%	0	0%	5	100%
Southern	1	50%	1	50%	0	0%	0	0%	0	0%	2	100%
South Eastern	0	0%	1	100%	0	0%	0	0%	0	0%	1	100%
Total	2	10%	13	65%	4	20%	1	5%	0	0%	20	100%

4.3 Gender

90% (78 filled posts) of the cancer support workforce were female.

Table 63: Cancer support workforce by gender, number of filled posts, NI 2021

Gender	Number of posts	Percentage
Female	77	90%
Male	9	10%
Other	0	0%
Not disclosed	0	0%
Total	86	100%
Vacant	7	

4.4 Nationality

91% (79 filled posts) of the cancer support workforce were from the UK.

Table 64: Cancer support workforce by nationality, number of filled posts, NI 2021

Nationality	Number of posts	Percentage
UK	79	91%
Rest of world	4	5%
Not known	2	3%
EU*	1	1%
Total	86	100%
Vacant	7	

*EU is likely to include some staff who identify as Irish.

4.5 Part-time roles

Part-time posts were common among the cancer support workforce. However, most posts were full-time across all HSCTs.

Table 65: Cancer support workforce, full-time/part-time by HSCT, number of posts, NI 2021

HSCT	Full-time (37.5 hours per week)		Part-time (<37.5 hours per week)		Total	
	N	%	N	%	N	%
Belfast	37	60%	25	40%	62	100%
Western	13	76%	4	24%	17	100%
Southern	4	80%	1	20%	5	100%
Northern	4	67%	2	33%	6	100%
South Eastern	2	67%	1	33%	3	100%
Total	60	65%	33	35%	93	100%

4.6 Vacancy rates

Most cancer support workforce posts were filled, with only 7 posts (5.7 WTE) reported as vacant. The overall vacancy rate was 7.4.

Table 66: Cancer support workforce by area of practice, vacancy rates, number of posts, total WTE, NI 2021

All roles	Filled posts	Vacant posts	Vacancy rate	Total WTE
Oncology	32	1	3.0%	29.1
Not cancer type specific	26	5	16.1%	28.3
Haematology	18	0	0.0%	16.8
Breast	3	0	0.0%	2.5
Colorectal	1	1	50.0%	1.5
Lung	2	0	0.0%	1.5
Malignant dermatology	1	0	0.0%	1.0
Hepato-pancreato-biliary	1	0	0.0%	0.5
Gynaecology	1	0	0.0%	1.0
Upper gastrointestinal	1	0	0.0%	1.0
Total	86	7	7.5%	83.2

Cancer support workers only	Filled posts	Vacant posts	Vacancy rate	Total WTE
Not cancer type specific	8	5	38.5%	11.6
Breast	3	0	0.0%	2.5
Haematology	2	0	0.0%	2.0
Colorectal	1	1	50.0%	1.5
Lung	2	0	0.0%	1.5
Hepato-pancreato-biliary	1	0	0.0%	0.5
Upper gastrointestinal	1	0	0.0%	1.0
Malignant dermatology	1	0	0.0%	1.0
Gynaecology	1	0	0.0%	1.0
Grand total	20	6	23.1%	22.7

Vacancies were recorded in all areas except for the South Eastern trust.

Table 67: Cancer support workforce by HSCT, vacancy rates, number of posts, total WTE, NI 2021

All roles	Filled posts	Vacant posts	Vacancy rate	Total WTE
Belfast	58	4	6.5%	54.9
Western	16	1	5.9%	15.6
Southern	4	1	20.0%	5.4
Northern	5	1	16.7%	5.3
South Eastern	3	0	0.0%	2.5
Total	86	7	7.4%	83.7

Cancer support workers only	Filled posts	Vacant posts	Vacancy rate	Total WTE
Belfast	5	3	37.5%	7.0
Western	7	1	12.5%	6.8
Southern	2	1	33.3%	3.0
Northern	5	1	16.7%	5.3
South Eastern	1	0	0.0%	0.5
Total	20	6	23.1%	22.7

4.7 Areas of practice

51% (11.6 WTE) of cancer support workers were non-cancer type specific and 48% (29.1 WTE) of other support roles worked in oncology. 48% (11 WTE) of cancer support workers have an area of practice, with the main area being breast (11%, 2.5 WTE).

Table 68: Cancer support workforce, area of practice, WTE, NI 2021

Area of practice	Cancer support worker		Other support roles		Total	
	WTE	Percentage	WTE	Percentage	WTE	Percentage
Breast	2.5	11%	0	0%	2.5	3%
Colorectal	1.5	7%	0	0%	1.5	2%
Gynaecology	1.0	4%	0	0%	1.0	1%
Haematology	2.0	9%	14.8	24%	16.8	20%
Hepato-pancreato-biliary	0.5	2%	0	0%	0.5	1%
Lung	1.5	7%	0	0%	1.5	2%
Malignant dermatology	1.0	4%	0	0%	1.0	1%
Upper gastrointestinal	1.0	4%	0	0%	1.0	1%
Not cancer type specific	11.6	51%	16.6	28%	28.3	34%
Oncology	0	0%	29.1	48%	29.1	35%
Total	22.7	100%	60.5	100%	83.2	100%

4.8 Agenda for Change (AfC) banding

94% (78.9 WTE) of support workers were at AfC band 3.

Table 69: Children, teenager and young adult cancer nurse workforce, AfC banding, WTE, NI 2021

AfC band	WTE	Percentage
3	78.4	94%
4	4.8	6%
Total	83.2	100%

94% of all posts were at band 3. The AfC banding profile varies between HSCTs, with Belfast and Northern Trusts having posts at both bands 3 and 4, and other trusts having all posts at band 3.

Table 70: Cancer support workforce by HSCT, AfC banding, WTE, NI 2021

	AfC band 3		AfC band 4		Total	
HSCT	WTE	%	WTE	%	WTE	%
Belfast	50.9	93%	4.0	7%	54.9	100%
Western	15.6	100%	0	0%	15.6	100%
Southern	4.9	100%	0	0%	4.9	100%
Northern	4.5	85%	0.8	15%	5.3	100%
South Eastern	2.5	100%	0	0%	2.5	100%
Total	78.4	94%	4.8	6%	83.2	100%

4.9 Affiliation

30% (25.2 WTE) of the cancer support workforce have 'Macmillan' in their job title. Most have no affiliations in the job title.

Table 71: Cancer support workforce, post affiliations, NI 2021

Affiliation	Filled		Vacant		Total	
	WTE	%	WTE	%	WTE	%
It has no affiliations in the job title	54.5	70%	1.0	17%	55.5	66%
It has Macmillan in the job title	20.9	27%	3.7	65%	24.6	30%
It has another charity in the job title	2.0	3%	1.0	17%	3.0	4%
Total	77.5	100%	5.7	100%	83.2	100%

4.10 Setting

Just under three-quarters (61.7 WTE) of support workers are based in cancer centres; and just under a third (26 WTE) provide care as day care or in a day unit.

Table 72: Cancer support workforce, settings and main locations of care, WTE, NI 2021

Setting	Main location of care – WTE					Total
	Inpatient	Day care or day unit	Hospital outpatient	Not known	Patient home	
Cancer centre	26.5	20.3	8.5	6.5	0	61.7
Non cancer specific setting	0.5	1.8	5.3	3.0	4.0	15.1
Cancer unit	0	3.9	3.0	0	0	6.9
Total	27.0	26.0	16.8	9.5	4.0	83.2

4.11 Qualifications

Only 23% of all support workers have Sage and Thyme Communications Skills training and another 24% have been trained in eHNA within the last 18 months.

Table 73: Cancer support workforce, qualifications, filled posts, NI 2021

	Qualifications				Training			
	NVQ Level 2 (Administration or Health and Social Care)		NVQ Level 3 (Administration or Health and Social Care)		Sage and Thyme Communications Skills training		Trained in eHNA* within the last 18 months	
	N	%	N	%	N	%	N	%
Yes	46	53%	54	62%	20	23%	20	24%
No	22	26%	14	17%	60	70%	64	74%
Not known	18	21%	18	21%	6	7%	2	2%
Total	86	100%	86	100%	86	100%	86	100%
Vacant posts	7							

*Electronic Holistic Needs Assessment.

Conclusions

This census provides the latest snapshot of the cancer nursing workforce in Northern Ireland (NI) and allows mapping across locality and cancer type. A key aim in conducting this census was to feed into cancer workforce planning currently ongoing as part of the NI cancer workforce strategy development.

Overall, at the time of the census (17th September 2021), we captured 754 posts (672.4 WTE) who treat, support and manage the health concerns and wellbeing of cancer patients for more than 50% of their time.

This cancer workforce is made up of the following (for definitions of each of these groups see [Appendix B](#)):

- 165 posts in **adult cancer specialist** roles (144.8 WTE) (inclusive of cancer clinical nurse specialists and advanced practice roles)
- 67 posts in other **adult cancer care** roles (61.3 WTE)
- 115 posts in **staff nurse** roles working in adult wards delivering cancer care (106.3 WTE)
- 266 posts in **adult chemotherapy nurse** roles administering SACT (238.3 WTE)
- 48 posts in **children, teenager and young adult cancer nurse** roles (38.5 WTE),
- 93 posts in the **nursing support workforce** (83.2 WTE) with 22.7 WTE **cancer support workers** working directly with Cancer Nurse Specialists (CNS) to support people with a cancer from diagnosis and enable personalised care during treatment and into aftercare.

All cancer nurses and nursing support workforce are focused within an acute inpatient or outpatient setting. Only five link workers (band 4 community posts) deliver care within patients' homes, but they do not have a focused cancer remit.

Overall, just under 1 in 5 (19%) of the wider cancer workforce is affiliated to a charity. This increases to over 1 in 2 (56%) of clinical nurse

specialists and all of the cancer support workers. 46% of the adult cancer specialist nurses are affiliated to Macmillan and 92% of the cancer support workers. 10% of all children, teenager and young adult cancer nursing posts are affiliated to a charity, all are non-Macmillan.

Part-time roles were more common for children, teenager and young adult cancer nurses (46%) compared with the adult cancer specialist workforce (41% of filled posts) and adult chemotherapy nurses (35%).

The overall vacancy rate for the cancer workforce identified through this census (8%) is lower than that for all registered Nursing and Midwifery staff in June 2021 published by the Department of Health²⁰ (11% for all registered Nursing and Midwifery staff). However, there is variation:

- adult cancer specialist nurses have the lowest vacancy rate at 5.5% compared with 8.6% for adult chemotherapy nurses;
- brain/central nervous system (50%) and gynaecology (12.5%) are the areas of practice with the highest vacancy rates for adult cancer clinical nurse specialists;
- Western HSC Trust has the highest vacancy rates in adult cancer specialist nurses with 16.7% of posts unfilled;
- Southern HSC Trust has the highest vacancy rates in adult chemotherapy nurses (17.4% of posts unfilled) and support workers (17%).

Whilst direct comparisons cannot be made with the data from the 2014 census as the inclusion criteria differ (please see [Appendix A](#)), it is worth noting the following points:

- the total reported specialist adult cancer nursing workforce for the Northern Ireland Cancer Census in 2014 was 57.4 WTE. This increased to 144.8 WTE in 2021;
- in 2014, 55.6 WTE had a job title of Adult Clinical Nurse Specialist (97.0% of all specialists) and in 2021, 93 WTE shared the same job title (64% of all specialists).

20 [Northern Ireland Health and Social Care Workforce Vacancies Tables, June 2021](#). Department of Health NI, published 25 August 2021.

There are indications that the adult cancer specialist nursing workforce has grown since the last census. However, it is important to set this growth within the context of increased demand.

In 2019 there were 984 more new cancer cases than in 2014, (an increase of 10%). Additionally, between 2014 and 2019 an additional 6,155 people were added to the 10-year prevalence population (an increase of 15%).²¹

So, it is important to understand the ratio of new cases to each Clinical Nurse Specialist (CNS) WTE. Across all main area of practice the ratio of new cases to WTE has decreased, except for Breast where in 2014, the ratio of new cases per adult cancer clinical specialist nurse WTE (those performing a key worker role) was 75, compared with 79.1 new cases per CNS WTE in 2021. The two areas of practice showing the greatest change are:

- upper gastrointestinal cancer, a change from 365 new cases per WTE in 2014 compared with 98.9 new cases per WTE in 2021;
- urology, a change from 374 new cases per WTE in 2014 compared with 139 new cases per WTE in 2021.

Despite the improved ratios, developing the workforce and succession planning to identify the Clinical Nurse Specialists of the future needs consideration.

The census showed that 40–49 was the most common age group among adult cancer specialist nurses, (36%), whilst 30–39 was the most common age group among adult chemotherapy nurses (36%), and children, teenager and young adult cancer nurses (39%). Adult cancer specialist nurses aged 50 or over accounts for 30% of this group, while only 16% of adult chemotherapy nurses are aged 50 or over and just 9% of those supporting children, teenagers and young people.

There may be opportunities to develop nurses in adult chemotherapy and children, teenager

and young adult cancer nurses into future adult cancer specialist nurses, especially the 142 band 5 nurses aged under 40.

Additionally, the 2021 census has demonstrated that there are some gaps in the qualifications held by staff in post.

Advanced communication skills can enhance the delivery of personalised care and the Department of Health in NI have committed to ensure that all health care professionals who are expected to carry out sensitive communication complete an advanced communication skills training programme²². However, only three-quarters (74%) of the adult cancer specialist nurses have undertaken Advanced Communications Skills training, compared with just 7% of adult chemotherapy nurses, and 14% of children, teenage and young adult cancer nurses.

It is also worth noting that just over half (51%) of adult cancer specialist nurses have achieved a Postgraduate Diploma in Specialist Practice – Cancer Care Oncology, and just over a third (37%) have been trained in eHNA within the last 18 months.

Overall, 93 (83.2 WTE) nursing support workforce posts were captured in Northern Ireland, mostly band 3 and, of these, 22.7 WTEs are cancer support workers aligned to adult cancer clinical specialist nurses. Over half of the support workforce (53%) is aged under 40 and three quarters of cancer support workers (75%) are under 40. There might be opportunity to support the career progression for these roles and grow them into band 4 roles.

Only 58% of the cancer support workers were trained in eHNA within the last 18 months and 23% had undertaken Sage and Thyme Communication Skills training.

The findings of this census point to areas for further development and contribute to the evidence base being used to understand the demand-based workforce needs of the future.

21 [All Cancers exclude \(NMSC\)1993–2019](#). Cancer incidence, survival, mortality and prevalence. Northern Ireland Cancer Registry. Accessed October 2021.

22 [A Cancer Strategy for Northern Ireland 2021–2031](#). Department of Health NI. Accessed November 2021.

Suggested actions

The findings of this census demonstrate the importance of a strategic approach to ensuring cancer workforce sustainability, this is the focus of recommendations set out below. Such an approach will require a number of components, including supporting adoption of best practice, addressing training challenges, funding barriers, high vacancy rates in some areas and ensuring workforce planning can offer opportunities for career progression. Workforce planning should include a focus on skill mix and flexible working to empower the nursing and support worker professions to continue to enhance the personalised care experienced by people living with cancer. There is a need to continue to grow and develop the cancer workforce, identify talent and interest in cancer specialisation early in the nursing career, provide opportunity to release staff for training and development and support the retention of cancer nursing staff.

1. The Department of Health should enhance career pathways to support nurses to develop skills and qualifications necessary to become specialist cancer nurses.

Cancer workforce planning should include a strong emphasis on the need for succession planning and developing the skills and competencies required to build and sustain the cancer clinical nurse specialist workforce. This should encompass consideration of what skills will be required to deliver the high-quality cancer care through implementing the cancer strategy. The census results show that some trusts have particularly high vacancy rates when compared within NI and with other UK jurisdictions, resolving this on a sustained basis will require a strategic approach to developing pathways to become specialist cancer nurses. There is a need to map out where cancer nurses interface with patients during their cancer pathway, what skills are required at each point and how nurses can be supported in developing these.

2. The information gathered through this census should support Health and Social Care workforce planning to help inform training, recruitment and retention.

The census results demonstrate differences between trusts on the uptake of part-time working and availability of promoted posts, as well as a wide variety of training courses being undertaken by staff. A strategic approach to workforce planning will need to address workforce sustainability by ensuring there are opportunities for progression. A co-ordinated approach from commissioners, academics, services and professional bodies will support consistent and robust recruitment and training pathways.

A workforce retention plan will require exploring opportunities for flexible working, continuing professional development and career progression. New and more flexible ways of working will be essential in ensuring the Health and Social Care Northern Ireland (HSC NI) is a modern employer and is able to keep pace with employment practices in the wider public and private sector. Finally, the nursing workforce is in general ageing²³. More needs to be done to keep this workforce, with all the skills it has acquired, in place for longer. Flexible working initiatives may be particularly effective if they are especially attentive to those at the end of their careers.

3. A skills mapping approach should be applied to all roles. This should include setting up regional task group on career progression and training opportunities.

Census results demonstrate considerable variation in the training undertaken within some parts of the cancer workforce. A skills mapping approach should focus first on skills rather than roles, and consider how to build necessary skills, knowledge

23 [Nursing workforce not growing fast enough to meet demand warns RCN](#), May 2021, Royal College of Nursing. Accessed November 2021.

and experience to deliver high-quality and personalised care for people with cancer. This should also provide a basis for a flexible workforce, moving across traditional boundaries. Addressing this should form part of the focus of skills mapping alongside development and alignment of competency frameworks.

We captured 93 nursing support posts in NI to support people with cancer alongside clinical professionals. These roles are utilised in a variety of ways to meet patient needs and a strategic approach to building the capacity of this workforce through training could help ensure that clinical staff time is used as effectively as possible, freeing up time and skills of clinical staff to focus on patients with more complex needs. Analysis is required to highlight the reasons for differences between trusts in the deployment of these roles in relation to the variation and reason for this. The outcome of this work should determine potential for a more consistent approach across the five trust areas.

4. The Department of Health should support all cancer nurses to undertake communications training.

The census demonstrates that NI cancer services are a significant distance away from meeting the cancer strategy recommendation to ensure all health care professionals who are expected to carry out sensitive communication complete an advanced communication skills training programme. A regional training programme should be explored to support the cancer workforce to complete these programmes. Special attention should be given to professions where uptake has been lower such as chemotherapy nurses and those supporting children, teenagers and young adults.

5. The Department of Health should ensure every person diagnosed with cancer is offered a holistic needs assessment (HNA).

This should ensure every person diagnosed with cancer is offered an opportunity to be assessed, has a quality person centred conversation around their individual needs and receives a care plan which wraps around support based on their individual needs. The cancer workforce is vital to implementing HNA and the DoH should work with Macmillan Cancer Support and others to embed HNA, including electronic holistic needs assessment (eHNA), training across the cancer workforce. Embedding HNA and care planning as an essential part of the pathway is key to delivering personalised care for everyone with cancer in NI.

6. Department of Health to continue with Cancer Nurse Specialist expansion and progress the next stage within the workforce planning process.

These census results demonstrate the success of the CNS expansion programme in recent years, most cancer types have experienced a large improvement in the ratio between people living with cancer and number of CNSs. However, the census also shows this improvement hasn't been uniform and there is significant work to be done to ensure that everyone living with cancer can access a named CNS regardless of where they live, across all cancer types and at all of stages their journey. To resolve this the DoH should progress the next stage of CNS expansion and should ensure there is sufficient funding to train the staff for these roles. This should include budget to both facilitate backfill within the service to accommodate uptake of specialist and advanced levels of training required to sustain a knowledgeable, skilled and competent workforce (including postgraduate qualification). This is important in enabling continued career progression thereby, maintaining a strong pipeline of candidates with the skills and competencies required to take up higher banded roles.

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Appendices

Appendix A: Comparison to Northern Ireland census 2014

Inclusion criteria for this census were broader than criteria for the 2014 census. A comparison of the main differences between 2014 and 2021 inclusion and exclusion criteria is provided in the table below.

Inclusion criteria

2014	2021
Adult cancer nurses working in adult cancer care only	Registered nurses who are working in provision of cancer care with children, teenagers and young adults, and support workers/healthcare assistants were also included in the 2021 census
Are registered (Agenda for Change bands 5 to 9 only)	Unregistered posts (support workers and healthcare assistants who frequently see people with cancer) were included in this census
Deliver predominantly secondary care	Provide secondary and tertiary care in both hospitals and the community
Are funded by any source (e.g. NHS, charity, pharmaceutical)	HSCT employees only – including those who see private patients treated in the HSCTs

Exclusion criteria

2014	2019
Specialise only in chemotherapy, radiotherapy, palliative care, pain management or non-patient facing roles	Adult chemotherapy nurses were included in the 2021 census. All other 2014 exclusion criteria apply.
Work 'as and when required', e.g. bank and agency staff	Bank and agency staff were also excluded from the 2021 census
Work in paediatrics or with teenagers and young adults	Registered nurses who are working in provision of cancer care with children, teenagers and young adults were included in the 2021 census
Research nurses	Research nurses who spend more than 50% of their time in direct person to person activity in cancer care were included in the 2021 census

Incidence and prevalence data for the 2014 and all other census conducted by Macmillan have been calculated through bespoke analysis of ICD10 codes as shown below:

Area of practice	Cancer types used in 2014 NI census (ICD10 code)
Brain/central nervous system	Incidence is based on brain and nervous system (C47, C70–C72, C75.1–C75.3), two-year prevalence is based on brain, nervous system and eye, including benign neoplasm (C47, C69, C70–C72, D33)
Breast	Breast with in situ (C50, D05)
Colorectal	Colorectal with anus (C18–21)
Gynaecology	Gynaecology (C51–C58)
Haematology	Haematology (C81–C85, C88, C90–C96)
Head and neck	Head and neck with thyroid (C00–C14, C30–C32, C73)
Lung	Respiratory (C33–C34, C37–C39, C45)
Malignant dermatology	Skin – malignant melanoma (C43)
Upper gastrointestinal and hepato-pancreato-biliary	Upper GI (C15–C16, C22–C25)
Urology	Urology including prostate and testicular (C60–C68) and bladder in situ (D09 in the incidence data)
Sarcoma	Sarcoma (C40–C41, C46, C48–C49)

This bespoke analysis was not possible for 2021. Published data for 2019 was used to reproduce the area of practice groups as far as possible. The rows highlighted show that identical codes have been used. The following ICD10 codes were included in the 2021 census:

Area of practice	Cancer types used in 2021 NI census from public data referring to 2019 data (ICD10 codes)
Brain/central nervous system	C70–C72, C75.1–C75.3, C47
Breast	Breast (malignant and in situ) (C50, D05)
Colorectal	C18–C20
Gynaecology	C53–C57.4
Haematology	C81–C86, C90–C95
Head and neck	C00–C14, C30–C32, C73
Lung	C33–C34
Malignant dermatology	C43
Upper gastrointestinal and hepato-pancreato-biliary	C15–C16
Urology	C61, C62, C64, C67
Sarcoma	Coding not specified in released dataset

Where comparisons to 2014 have been made, 2014 data was recalculated to mirror the groups used for 2019 data.

Appendix B: Methodology

The methodology that Rocket Science adopted to carry out the research was outlined in the following steps:

1. Rocket Science designed a bespoke Microsoft Excel tool to be completed by each of the Health and Social Care Trusts (HSCTs) in Northern Ireland (NI) in order to gather a snapshot of the workforce on 17th September 2021.
2. A feedback session was held with Cancer Lead Nurses and Managers from across the five HSCTs and other key stakeholders, including staff at Macmillan, to review the tool and to share feedback.
3. The census tool was circulated to HSCTs on 14th September 2021 with an instruction manual and FAQs on how to use the tool, inclusion/exclusion criteria, and instructions on secure data transfer. A Data Protection Impact Assessment (DPIA) was in place between Macmillan (data controllers), Rocket Science (data processors) and HSCTs.
4. HSCTs were asked to return their data by 15th October 2021. Continuous support was provided by Rocket Science to assist the completion and return of the data. This included four 'data clinics', online drop-in sessions which were jointly run by Rocket Science and Macmillan to support the identified lead from each trust to draw on comparable data to complete the template.
5. The study received a 100% response rate, meaning that data for the cancer nurse workforce was collected from all five HSCTs in NI.
6. Rocket Science audited the data to ensure accuracy and consistency, which included follow-up contact with each HSCT. Data amendments were recorded accordingly. Macmillan also audited to confirm data amendment for further quality control.

7. Analyses were double-checked with the NICaN Nurse Leaders Reference Group and triangulated with ongoing work by the Public Health Agency of NI to support CNS workforce planning.

Analysis and reporting took place in October and November 2021.

Inclusion and exclusion criteria

Inclusion criteria for all parts of the census

This work aimed to capture a comprehensive picture of the cancer nursing workforce. For all posts:

- posts who treat, support and manage the health concerns and health and wellbeing of cancer patients (includes organisation of recovery package);
- posts who spend more than 50% of their time in direct person to person activity in cancer care, including over the telephone;
- HSCT employees only – including those who see private patients treated in the HSCTs;
- provide secondary and tertiary care in both hospitals and the community;
- clinical research or clinical trial nurses within cancer care;
- any post vacant or filled on the 17th of September 2021.

In reporting the following groups were identified:

- **Nurses delivering adult cancer care.** Registered nurse working in provision of cancer care and bands 5–9. These included:
- **Adult cancer specialist nurses.** The following definition was agreed with the NICaN Nurse Leaders Reference Group. Please note that this group includes 'clinical specialist nurses' who function as key workers for cancer patients and 'practitioners' that have specialist clinical practice roles.

Posts which satisfy the following categories:

- the job title specifies nurse ‘specialist’ or ‘practitioner’ (please see [Appendix C](#) for role definitions);
- Agenda for Change band 6 and above;
- the post holder’s time is spent supporting adults living with cancer;
- post-holders have a documented training record declaring them specialist in cancer care or have been appointed with their agreed willingness to undertake a cancer qualification.
- **Other adult cancer care nurses.** Other nurses meeting the general census inclusion criteria that do not meet the cancer specialist criteria.
- **Staff nurses.** Nurses working in wards that meet the census criteria and who are band 5.
- **Adult chemotherapy nurses.** Registered in cancer care (posts that require a registered health professional who has been assessed as being competent and has a documented training record which declares them capable of the unsupervised administration of systemic anti-cancer therapy) and AfC bands 5–9. Includes those who deliver cytotoxic drugs and provide adult cancer patients with advice, education, and support to ensure that the risks and toxicities were minimised. Includes those who were in ambulatory/outpatient chemotherapy units (solid tumour, haematology) or inpatient wards.
- **Children, teenage and young adult cancer nurses.** Registered nurses who are working in provision of cancer care with children, teenagers and young adults, and bands 5–9.
- **Support workforce who frequently see people with cancer.** Unregistered posts, more than 50% of time spent in person to person activity in cancer care, under supervision by a registered cancer professional, band 3–4. Excludes those not employed by the HSCT and those working in Macmillan Cancer Information and Support Centres. Please note that this group includes ‘cancer support

workers’ that work with clinical specialist nurses to provide personalised support to people living with cancer and ‘other support workers’ which are part of the support network for cancer patients but work in a different way. (Please see [Appendix C](#) for role definitions).

Exclusion criteria for all parts of the census

- Student nurses
- Agency nurses
- Band 1 and 2 staff
- Bank and agency staff
- Palliative care nurses
- Surgical nurses.

Analysis notes

The reader should bear in mind the following when studying the census results:

- **Raw Whole Time Equivalent:** as per reporting on England and Wales census (2017) and the Scotland census (2019) we have calculated the Whole Time Equivalent (WTE) and this is indicated where you see WTE in the results. For instance, 2 people x 0.5 (18.75 hrs) = 1 WTE ie. 37.5 hrs. WTEs are reported to 1 decimal place. Please note that as a result of rounding up/down the decimals involved in WTE calculations, some totals will not always match the number of WTEs listed.
- **Demographic details:** including age, gender and nationality were only applicable for filled posts.
- **Data gaps:** the majority of census responses were full and comprehensive. However, there were some data gaps for individual posts. The following table provides a breakdown of the gaps in data:

Variable	Number of posts missing data
Affiliation (to Macmillan/another charity)	8 – adult cancer care
Primary area of practice	3 – adult cancer care
Secondary area of practice	3 – adult cancer care
Proportion of time spent supporting people with a cancer diagnosis	4 – adult cancer care 1 – children TYA 3 – support workers
Type of place where the post holder delivers care	3 – adult cancer care 11 – support workers
Other key location of care	3 – adult cancer care 14 – support workers
Gender	5 – adult cancer care
Qualifications	1 – adult cancer care 5 – support workers
Does the post holder delivery chemotherapy	1 – children TYA
Acute oncology service (Y/N)	1 – children TYA
Secondary metastatic disease (Y/N)	1 – children TYA 2 – support workers

Appendix C: Nursing roles definitions

The following cancer specialist nursing role definitions are in use in Northern Ireland:

Advanced Nurse Practitioner²⁴ – A nurse who works autonomously using a person-centred approach within the expanded scope of practice. They undertake comprehensive health assessment and differential diagnosis. They can prescribe care and treatment or appropriately refer and/or discharge patients. They provide complex care using expert decision – making skills and act as an educator, leader, innovator and contributor to research.

Oncology Nurse Practitioner²⁴ – A nurse practitioner (NP) in either Oncology or Haematology is an advanced practice registered nurse. A NP will have undertaken additional post registration training to assess patient needs, order and interpret diagnostic and laboratory tests, diagnose disease, formulate and prescribe treatment plans. NP training covers basic disease prevention, coordination of care, and health promotion. NPs work as part of a clinical team, the Consultant retains overall responsibility for the patient.

The scope of practice for a NP is defined by legal jurisdiction. In some places, NPs are required to work under the supervision of a physician, and in other places they can practice independently.

Clinical Nurse Specialist^{25,26} – Clinical Nurse Specialists (CNSs) are dedicated to a particular area of nursing; caring for patients suffering from long-term conditions and diseases such as cancer. The high-level activities of CNSs consist of:

- Providing a keyworker role, acting as a key point of contact for patients, ensuring that patients have access to information and support services and providing holistic assessments
- Using and applying technical knowledge of cancer and treatment to oversee and coordinate services, personalise ‘the cancer pathway’ for individual patients and to meet the complex information and support needs of patients and their families.
 - Acting as the key accessible professional for the multidisciplinary team.
 - Providing direct and indirect nurse- led activity including nurse led clinics and telephone follow up.
- Education, training and audit are inherent aspects of the cancer CNS role and permeate all aspects of their work
- Contributing to service improvements and policy development

Cancer Support Worker²⁵ – A key role which assists in the delivery and co-ordination of care, education and support under the supervision of the Clinical Nurse Specialist, for patients with Cancer. They are able to obtain and collate data for reports, governance and patient care.

24 [Develop a Career Framework for Specialist Nurses](#). Northern Ireland Practice & Education Council for Nursing and Midwifery. Accessed November 2021.

25 Cancer Clinical Nurse Specialist Workforce Plan. 2016 Department of Health NI. Accessed November 2021.

26 [Impact briefs](#) Clinical nurse specialist. Macmillan Cancer Support. Accessed November 2021.

Appendix D: Information collected

The census asked each HSCT to collect data on the following variables:

Variable	Task
Record Number	Please take the next allocated record number on the sheet.
Job Title	Please select from the drop-down menu (values available will differ depending on role type). Please select 'Other' if appropriate.
Other Job Title	Enter job title (only use if 'Other' selected for Job Title).
Macmillan Cancer Support or other charity in job title	Please select from 'It has Macmillan in the job title', 'It has another charity in the job title', or 'It has no affiliations in the job title'.
Banding	Please select from the drop-down menu (values available will differ depending on role type).
Area of Practice	Please select the area of practice in which the post holder most frequently delivers care from the drop-down menu (e.g. lung, sarcoma, neurology).
Secondary Area of Practice	If more than 25% of patient facing time is spent on a secondary area of practice, please select this area.
Is this post based on an Acute Oncology Service?	Please select 'Yes' or 'No' from the drop-down menu.
Does the post cover secondary/metastatic disease	Please select 'Yes' or 'No' from the drop-down menu as appropriate.
Proportion of time spent supporting people with a cancer diagnosis	Please enter a whole number between 0–100. For example, if the post works 2 days a week and 1 day is supporting people with cancer, then please record 50.
Type of Setting	<p>Please select from the drop-down menu. Please use the following definitions to select the correct value. Available options are 'Cancer unit', 'Cancer centre', 'Non cancer specific setting'.</p> <p>A Cancer Unit treat people with more common oncology and haemato-oncology diagnosis, but do not have a radiotherapy service.</p> <p>A Cancer Centre is a designated facility providing treatment for people with oncology and haemato-oncology diagnosis including common and rarer cancers. Both Belfast and North West Cancer Centres provide radiotherapy services.</p>

Variable	Task
Type of place where the postholder delivers care	<p>Please select the main location where the post holder delivers care from the drop-down menu options.</p> <p>If applicable, please also select the other key location of care for the post (more than 25% of patient facing time is spent). If this is not applicable, please select the option 'Care is concentrated in a single location'.</p>
Contracted Whole Time Equivalent (WTE) of the post	<p>Please record the WTE (the value should include all contracted hours of the post not just time patient facing activity or cancer care). This should be an appropriate decimal value between 0 and 1 (e.g. 0.5).</p> <p>Only complete this section if you have not completed the Contracted Hours per Week column.</p>
Contracted hours per week	<p>Please include all contracted hours of the post not just time patient facing activity or cancer care. For example, 18.75 hours.</p> <p>Only complete this section if you have not completed the Contracted WTE of the post column.</p>
Is post Filled or Vacant	<p>Please select from the drop-down menu options Filled or Vacant. If a post used to exist but has been reconfigured it should not be counted as a vacancy.</p>
Length of Vacancy	<p>Please select from the drop-down menu options the length of time the post has been vacant if applicable.</p>
Education and Training	<p>Please select yes or no for each of the education and training options offered along the top of the page. Do not complete for vacant posts.</p>

The following information was collected for filled roles only:

Variable	Task
Gender	Please select from the drop-down menu Options Male, Female, Other, Prefer not to say, Not known, Not applicable.
Age range	Options Under 30, 30–39, 40–49, 50–59, 60 and over, Not applicable.
Nationality	<p>Please select from the drop-down menu.</p> <p>Options UK, EU excluding the UK, Rest of world, Declined, Not known.</p> <p>For EU please include those from the EU's (European Union) member states or European Economic Area. These are: Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Iceland, Liechtenstein, Norway and Switzerland.</p>
Education and Training	Please select yes or no for each of the education and training options offered along the top of the page. Do not complete for vacant posts.

Appendix E: Limitations

Potential limitations in the census methodology include:

- Gaps in the data. Some HSCTs submitted partial or incomplete data, as detailed in [Appendix B](#).
- Inconsistencies in the data. Despite support and auditing, it was likely that there were still inconsistencies in the data, where different HSCTs have interpreted the criteria in different ways.
- Misreported data. The data were all self-reported, usually by a single individual who collected data on a wide range of posts and post-holders. It was not possible to verify individual returns, and therefore misreported data may be included.
- The census was a snapshot of one single day (17th September 2021).

Additional information on staff nurses:

This work aimed to capture a comprehensive picture of the cancer nursing workforce.

During data collection trusts agreed that it was appropriate to include staff nurses spending more than 50% of their time working directly with cancer patients. The data captured in this census represented staff nurses in haematology and oncology wards in cancer centres only.

After data was finalised, the NICaN Nurse Leaders Reference Group recognised that the number of staff nurses captured was incomplete. Although the census data could not be altered at this stage, additional estimates for this nursing group were provided for all five trusts by the NICaN Nurse Leaders Reference Group as personal communications.

These estimates are based on nurses required for the number of funded inpatient beds. The cancer nurse to bed ratios in cancer centres vary, with a range between 1.6–2 WTE nurses per bed depending on use of side rooms. The resulting estimates are:

Belfast	165.9 WTE
NWCC	46.91 WTE
SET	14.0 WTE
NHSCT	10.8 WTE
SHSCT	14.4 WTE

At Macmillan, we give people with cancer everything we've got. If you're diagnosed, your worries are our worries. We will move mountains to help you live life as fully as you can.

**For information, support or just someone to talk to,
call 0808 808 00 00 or visit macmillan.org.uk.**

