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Specialist adult cancer nurses in Northern Ireland

A census of the specialist adult cancer nursing workforce in the UK, 2014


THINGS TO DO

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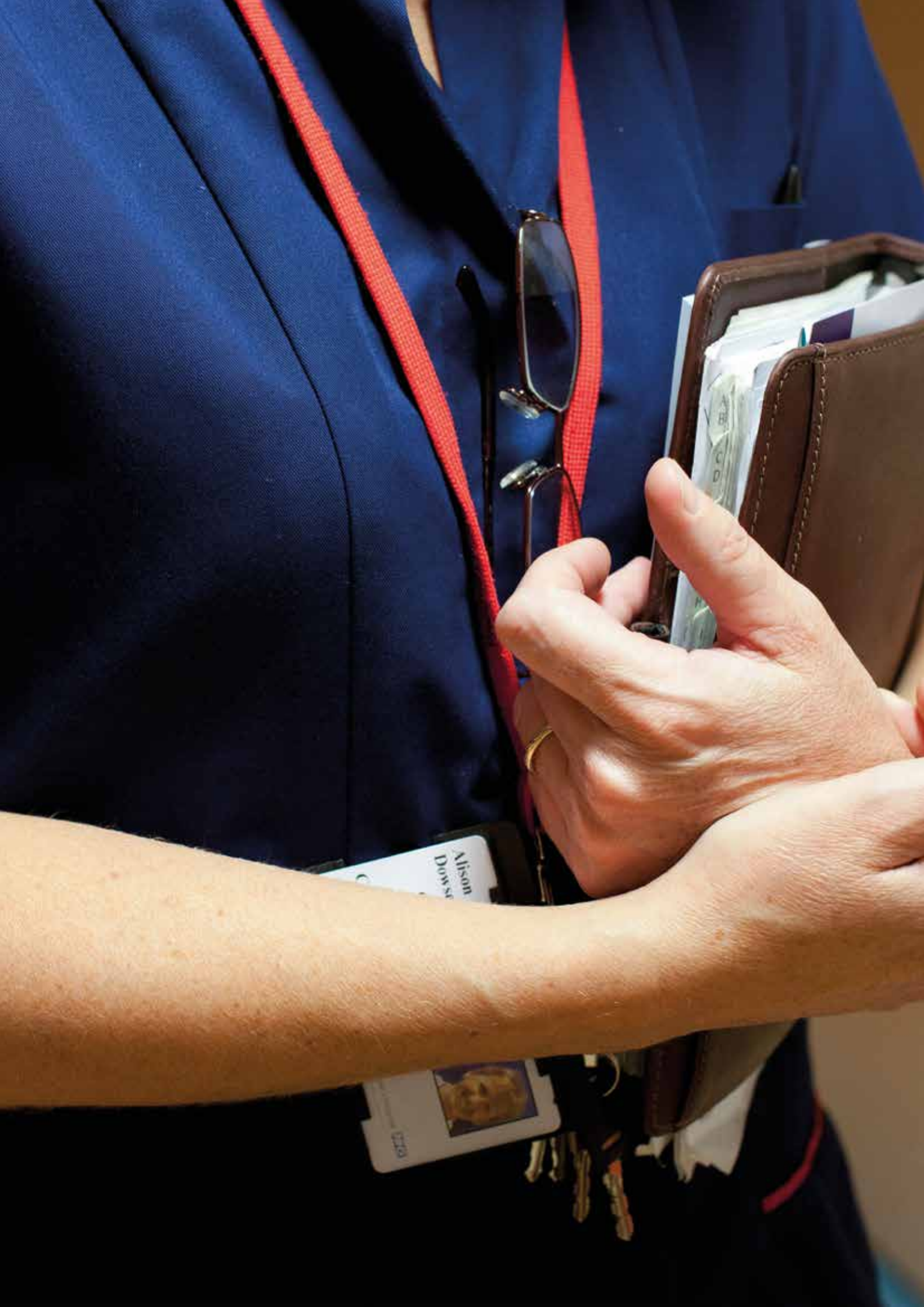

Foreword

Macmillan first established Clinical Nurse Specialists (CNS) in the 1970s. Since then the numbers have grown so that now there are 1,305 whole time equivalent specialist adult cancer nurses with Macmillan in their job title across the UK.

We have therefore long been a strong advocate for the role that specialist cancer nurses play in supporting people affected by cancer, and in ensuring they receive timely and person-centred care. Recent cancer patient experience surveys in England and Wales have provided evidence that patients who had a named Clinical Nurse Specialist (CNS) in charge of their care reported more favourably on aspects of their experience[1,20].

It is therefore fitting that this year we have commissioned the first UK-wide census of the specialist cancer nurse workforce, to provide a robust picture of the numbers and location of these nurses across all four of the UK nations. This report presents the findings of the census in Northern Ireland.

In completing this census, we have relied on our partners in Health and Social Care to provide information and have been heartened to receive tremendous support for our approach. In a time of considerable change and financial constraint across the UK, the census returned an overall response rate of 97%. In Northern Ireland the response was better still: 100%.

We have learnt a lot about the workforce and how it is changing to respond to environmental, demographic and policy challenges. These challenges are different in the four nations of the UK, and so the data presented in this report should be interpreted in light of the local context.

The specialist adult cancer nurse workforce in Northern Ireland has grown by just 2% since the last census of this kind was carried out in 2011. This compares to a 10% increase in England and shows the size of the workforce in Northern Ireland is not keeping pace with the increasing number of people diagnosed with cancer each year.

There are two themes that emerge strongly across the UK, as things we need to respond to soon:

- Our specialist cancer nurse workforce is ageing. In some areas of practice in some parts of the UK, our data suggests that as many as half of the nurses currently providing cancer care are over 50. It is likely that the majority of these will retire in the next five to 10 years.

- In Northern Ireland, the age profile of our lung and colorectal CNS workforce, in particular, gives rise for concern.

- There are considerable variations in the provision of specialist cancer nurse expertise for those diagnosed with different cancer types and across different geographic locations.

We at Macmillan would welcome the opportunity to work with providers, commissioners and workforce planners to support planning to address these challenges, with the aim of ensuring that everyone affected by cancer has good outcomes and experience of care through access to a specialist cancer nurse.

Heather Monteverde
General Manager for Northern Ireland
Macmillan Cancer Support

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Macmillan Cancer Support

1. Introduction

1.1 Background

The specialist adult cancer nursing census was originally designed to map the specialist adult cancer nursing population by cancer type and locality in order to inform commissioning intentions and workforce planning.

The first two censuses in 2007[2] and 2008[3] were developed and led by the cancer network nurse director and colleagues, before they handed over management to the National Cancer Action Team (NCAT) and Mouchel Management Consulting Limited, who led on the 2010[4] and 2011[5] censuses respectively. Further iterations expanded data collection to include role title, banding and geography. In 2014, Macmillan Cancer Support commissioned the census working with Mouchel (the partner of the Centre of Workforce Intelligence).

The 2014 census of specialist adult cancer nurse workforce has leant on the significant experience and expertise provided by the continued involvement of three senior cancer nurses and healthcare scientists/professional colleagues: Professor Alison Leary and Paul Trevatt, who had developed the original census, and Steve Candler.

It is the first UK-wide census, however, to take account of the significant differences in policy and delivery of cancer care in the Celtic nations, the data has been presented in separate reports and should be interpreted in light of the relevant national context.

The census took place at a time of significant financial constraint across the UK and a budget crisis in Northern Ireland against a background of rising demand and demographic pressures.

It may be useful to read this document in conjunction with other resources such as: ·

- *Excellence in cancer care: The contribution of the Clinical Nurse Specialist.* NCAT, 2010[6].
- *Clinical nurse specialists in cancer: Provision, proportion and performance.* NCAT 2010[4] and 2011[5].
- *Advanced level nursing: A position statement.* Department of Health, 2010[7].
- *Manual of cancer services.* Department of Health, 2004[8].
- *National Cancer Action Team. Cancer peer review report – Northern Ireland cancer network*[9]
- *Coordinated cancer care: better for patients, more efficient.* NHS Confederation briefing, 2010[10].

While this document does offer information regarding the ratio of specialist cancer nurses to incidence of cancer and two-year prevalence across Northern Ireland, this does not represent guidance on appropriate caseload. It merely demonstrates variance of provision of these posts by tumour type.

This report aims to strengthen the argument for maintaining and expanding the provision of specialist nurse expertise in Northern Ireland in order to ensure that the growing number of people being diagnosed and living with cancer receive a good patient experience.

1.2 Methods

This census was primarily based on the approach adopted for previous censuses, in particular the work undertaken by NCAT in the most recent census in England[5].

A census of the specialist cancer nursing workforce was undertaken in Northern Ireland in 2008[3]. This included nurses specialising in paediatrics and young adults, who are excluded from this census. Numbers of cancer CNSs were also reported in a discussion paper by the Northern Ireland Cancer Network Public Health Agency[11], but there has been no systematic means of monitoring the specialist cancer nursing workforce.

In 2011, the Northern Ireland cancer network undertook an internal census using similar methodology as that used by NCAT in England. Whilst this work was not published, the data was validated by nurse directors and is used as a comparison for the data in the 2014 census.

Data was collected over an eight-week period between April and June 2014. However, the workforce numbers collected were a 'snapshot' of the population on the day of the census, 24 April 2014. The data was primarily collected using a bespoke spreadsheet with drop-down menus.

Areas of enquiry were informed by the previous four censuses undertaken in England.

Areas of practice are broadly based on the NICE Improving Outcomes Guidance definitions[12]. Consistent with 2011, the areas of practice include 'acute oncology services' (AOS), as it was recommended in the 2009 NCAG report *Chemotherapy services in England: Ensuring quality and safety* that all hospitals with emergency departments should establish this service[13].

All posts are recorded as whole time equivalents (WTE) in adult cancer care where 1 WTE is equivalent to a 37.5 hour week.

Additional information was collected on the age and gender of post holders and on vacant posts. Data was also collected on if nurses cover 'cancer of unknown primary'.

Spreadsheets were returned from lead cancer nurses / cancer managers in hospital trusts. Some further checking and completion was undertaken to ensure complete records were provided where possible. NHS Trust Lead Cancer Nurses and Directors of Nursing were involved, as well as the Nurse Consultant for the Northern Ireland Cancer Network as appropriate. Data was returned electronically from trusts to Mouchel for analysis. One month was given for data to be returned, with a further extension to enable appropriate dissemination and support for returns. Collection was completed by 13 June 2014.

Census process:

- Project team and Mouchel agreed census tool design and data fields
- Spreadsheet and instructions for completion were sent out to lead cancer nurses or equivalent in each trust or hospital across the UK
- Data entry completed at trust level
- Completed spreadsheets returned to Mouchel
- Records checked with respondents for completeness and accuracy as appropriate
- Analysis by Mouchel and project team
- Data tables produced for review and key findings identified
- Report

1.3 Selection criteria

The census was aimed at hospital-based specialist adult cancer nurses working in adult cancer care only.

Inclusion criteria were kept consistent with previous censuses where possible.

Inclusion criteria: all nurse posts that:

- treat, support and manage the health concerns of adult cancer patients and work to promote the health and wellbeing of the patients they care for (including post holders who perform a role in education, research and audit in adult cancer care)
- deliver predominantly secondary care
- are registered (Agenda for Change bands 5 to 9 only)
- are funded by any source (e.g. NHS, charity, pharmaceutical)
- are vacant posts as well as those filled on 24 April 2014.

Exclusion criteria: posts that:

- specialise only in chemotherapy, radiotherapy, palliative care, pain management or non-patient facing roles
- work 'as and when required', e.g. bank and agency staff
- are community nurse specialists
- work in paediatrics or with teenagers and young adults
- are research nurses.

All posts reported that met the inclusion criteria are referred to as specialist cancer nurses. In this report we also refer to Clinical Nurse Specialists (CNS), who have a specific job title and are a subset of specialist cancer nurses. For Northern Ireland, these terms are almost coterminous as 96.9% of the total specialist cancer nurse workforce is made up of CNSs.

2. Context and background

The Northern Ireland Cancer Services Framework (2009) states that all patients should be assessed by a CNS at the time of diagnosis, at the end of each stage of treatment and, where necessary, throughout their cancer journey.[14] The results of this latest specialist adult cancer nurses census in Northern Ireland will help commissioners and service providers to monitor the success of this service framework standard by looking at geographical variations and tumour group differences.

At the last Northern Ireland Assembly Election in 2011, there was cross-party support for an increase in CNS numbers to ensure that everyone newly diagnosed with cancer had access to one. However, despite broad political backing for the service framework standard, the intervening years have seen only a small rise in specialist adult cancer nurses numbers. The 2011 Northern Ireland cancer network census identified 56 nurses[15], this census identified only one additional nurse. This growth is not sufficient to keep pace with the growing cancer population.

Every year in Northern Ireland, 9,000 people are diagnosed with cancer (this excludes 3,738 cases of common but not generally serious non-melanoma skin cancer)[26]. In total, 55,000 people are currently living with cancer – and that number is expected to rise to more than 110,000 by 2030, if current trends continue.[16]

Now, more than ever, the specialist workforce has a vital role to play in delivering high-quality, compassionate and person-centred care. In line with the Department of Health's 'Transforming Your Care' policy (2011)[17], this includes providing care closer to home and supporting a drive for efficiency, while improving health outcomes and maximising resources.

The CNS role is at the heart of Macmillan's strategic partnership with the Health and Social Care Board on Transforming Cancer Follow Up (TCFU), which is designed to change the way cancer services are delivered. The TCFU initiative extends beyond the hospital setting into the local community. It focuses on informed individual care planning that enables patients to self-manage their condition, while ensuring appropriate surveillance is provided in a timely manner. As the first point of contact, the CNS works closely with patients and clinical colleagues to respond to patients' emerging needs, reducing emergency admissions and unplanned care and arranging rapid access to support if required.

The sustainability and growth of TCFU depends on the provision of adequate CNS numbers. The programme has not yet achieved its full potential in some tumour groups due to the lack of specialist cancer nurses.[18]

The National Cancer Peer Review Report for Northern Ireland (2010) consistently highlighted the lack of adequate CNS staffing as a limitation on the quality of services provided across the different health trusts. The 2010 report called for a review of specialist workforce numbers.[19] A second round of the review of cancer multidisciplinary teams (MDTs) in Northern Ireland will take place later this year, and will provide an opportunity to compare the two sets of data in order to draw further insights.

The Public Health Agency has also commissioned Northern Ireland's first cancer patient experience survey (CPES) in partnership with Macmillan, which will start in November 2014. The results are expected to be published in mid 2015 and will provide further information about the impact of the specialist workforce and the percentage of patients who have access to a CNS.

Recent analysis of patient experience surveys in England and Wales have clearly demonstrated the correlation between patients reporting they had a named CNS in charge of their care and more favourable patient experience. The results in Wales showed that, where a CNS took on the role of key worker, patient experience was further improved.[20]

Patients frequently identify CNSs as one of the most important health care professionals they come into contact with.[20] This survey of the specialist workforce will allow commissioners, service providers and clinical teams to benchmark the provision and deployment of CNS staff. Understanding patterns of access is fundamental when it comes to matching the specialist workforce to patients' needs. Every cancer patient should have access to a CNS, regardless of their type of cancer or where they live.

2.1 Headline findings

Total specialist adult cancer nursing workforce

The census of the specialist adult cancer nursing workforce in Northern Ireland achieved a response rate of 100%. Returns were received from all five Health and Social Care Trusts in the Northern Ireland Cancer Network.

The total reported specialist adult cancer nursing workforce for the Northern Ireland Cancer Network in 2014 was 57.4 WTE, compared with 56.1 in 2011 (after community oncology posts are excluded). This represents a 2% increase in WTE over three years.

Breast cancer is the most common majority area of practice (33.8% of specialist adult cancer nurses WTE). This is the same as in 2011. This was followed by lung (13.1%) and colorectal cancer specialists (11.3%). There are important variations in the numbers of CNSs per tumour site, in particular the census found only one brain / central nervous system (CNS), one Acute Oncology Service and one sarcoma nurse in Northern Ireland.

Numbers of posts have marginally increased in five areas of practice (breast, colorectal, gynaecology, urology and upper GI), reduced in two others (haematology and malignant dermatology) and stayed the same in five (acute oncology services, brain and central nervous system, head and neck, lung and sarcoma) since 2011.

Of the total specialist cancer nursing workforce WTE in Northern Ireland, 15% (8.6 WTE) were reported as providing cover for cancers of unknown primary. The main areas of practice reporting providing this cover were breast (4 out of 19 WTE) and colorectal (2 out of 7 WTE) specialist adult cancer nurses.

Clinical Nurse Specialists
The largest section of the specialist adult cancer nursing workforce by job title was adult Clinical Nurse Specialist – equivalent to 55.6 WTE (97.0% of the total workforce). There were 1.8 WTE nurse practitioners.

Overall, 79.4% of CNSs were banded at Agenda for Change (AfC) band 7; the remaining were band 6. There are no band 8 AfC (nurse consultant posts or other senior practitioners) reported in the specialist adult cancer nursing workforce in Northern Ireland.

Macmillan specialist cancer nurses
In total, 31% of the specialist adult cancer nursing population in Northern Ireland are titled Macmillan Cancer Support posts, compared to 31% in 2011.

Vacancies
This census was the first specialist adult cancer nurse census to collect data on vacancies. The reported vacancy rate is relatively low compared to the job vacancies per 100 employee jobs in human health and social work activities (not specific to any area of practice) in the UK measured by the Office for National Statistics vacancy survey[20].

Workforce characteristics
All reported post holders were female.

Data on the age profile of filled posts highlights that 30% of the total specialist cancer nursing workforce in Northern Ireland were reported as being over 50 years of age, with one post holder under 30 years of age.

Out of the 6.5 WTE in nurses in lung cancer care 3 were over 50. 3.4 WTE of the 6.5 WTE nurses in colorectal cancer care are aged 50 or over.

There are no reported specialist cancer nurses over the age of 59 in Northern Ireland.

Ratio of nurses
When provision of specialist adult cancer nursing posts is mapped to incidence of cancer in Northern Ireland, the ratio varies from 70 in sarcoma to 355 in urology.

When provision of specialist adult cancer nursing posts is mapped to the number of people living up to two years post a cancer diagnosis (two-year prevalence in 2010), the ratios vary from 103 in sarcoma to 577 in urology.

3. 2014 census results

This section presents detailed data collected in the census supporting headline findings. New data is presented for the first time on the age and gender of post holders, posts that are vacant and data on WTEs that reported supporting cancer of unknown primary.

Table 1: Total specialist adult cancer nursing workforce by area of practice and Health and Social Care Trust, WTE, Northern Ireland, 2014.

The area of practice with the largest proportion of the workforce is reported as breast cancer, accounting for about 34% of the total reported specialist cancer nursing workforce. This is followed by lung (about 13%) and colorectal (about 11%).

Health and Social Care Trust	Acute oncology service	Brain/central nervous system	Breast	Colorectal	Gynaecology	Haematology	Head and neck	Lung	Malignant dermatology	Sarcoma	Upper gastrointestinal	Urology – Prostate only*	Urology – All uro-oncology*	Total
Belfast Health and Social Care Trust	0	1.0	7.0	1.0	2.0	2.0	1.0	2.0	0	1.0	2.0	0.6	1.0	20.6
Northern Health and Social Care Trust	0	0	3.4	0.5	0	1.0	0	1.5	0	0	0	0	0	6.4
South Eastern Health and Social Care Trust	0	0	2.8	2.0	1.0	1.0	1.0	1.0	1.8	0	0	0	1.0	11.6
Southern Health and Social Care Trust	1.0	0	2.6	2.0	0.5	1.0	0	1.0	0	0	0.5	0	0	8.6
Western Health and Social Care Trust	0	0	3.6	1.0	0.6	0	1.0	2.0	0	0	0	0	2.0	10.2
Total	1.0	1.0	19.4	6.5	4.1	5.0	3.0	7.5	1.8	1.0	2.5	0.6	4.0	57.4

*The urology specialist adult cancer nurse workforce has been divided into two groups to uncover the size of the specialist prostate cancer workforce. A majority area of practice of 'Urology – prostate only' was defined as a nurse post where 95% or more of the time the nurse spends in adult cancer care is in prostate cancer or suspected prostate cancer. 'Urology -All uro-oncology' is the rest of the urology specialist adult cancer nurse workforce who spend less than 95% of their time in adult cancer care in prostate cancer or suspected prostate cancer. This definition is designed to identify only the most specialised nurses as a generalist urology nurse may expect to see frequent cases of prostate cancer given the high incidence of prostate cancer. It can be difficult for lead cancer nurses to accurately and consistently classify nurses so the data should be used to build a general picture of the urology workforce rather than draw detailed quantitative conclusions.

Fig. 1: Total specialist adult cancer nursing workforce by area of practice, WTE, Northern Ireland, 2014.

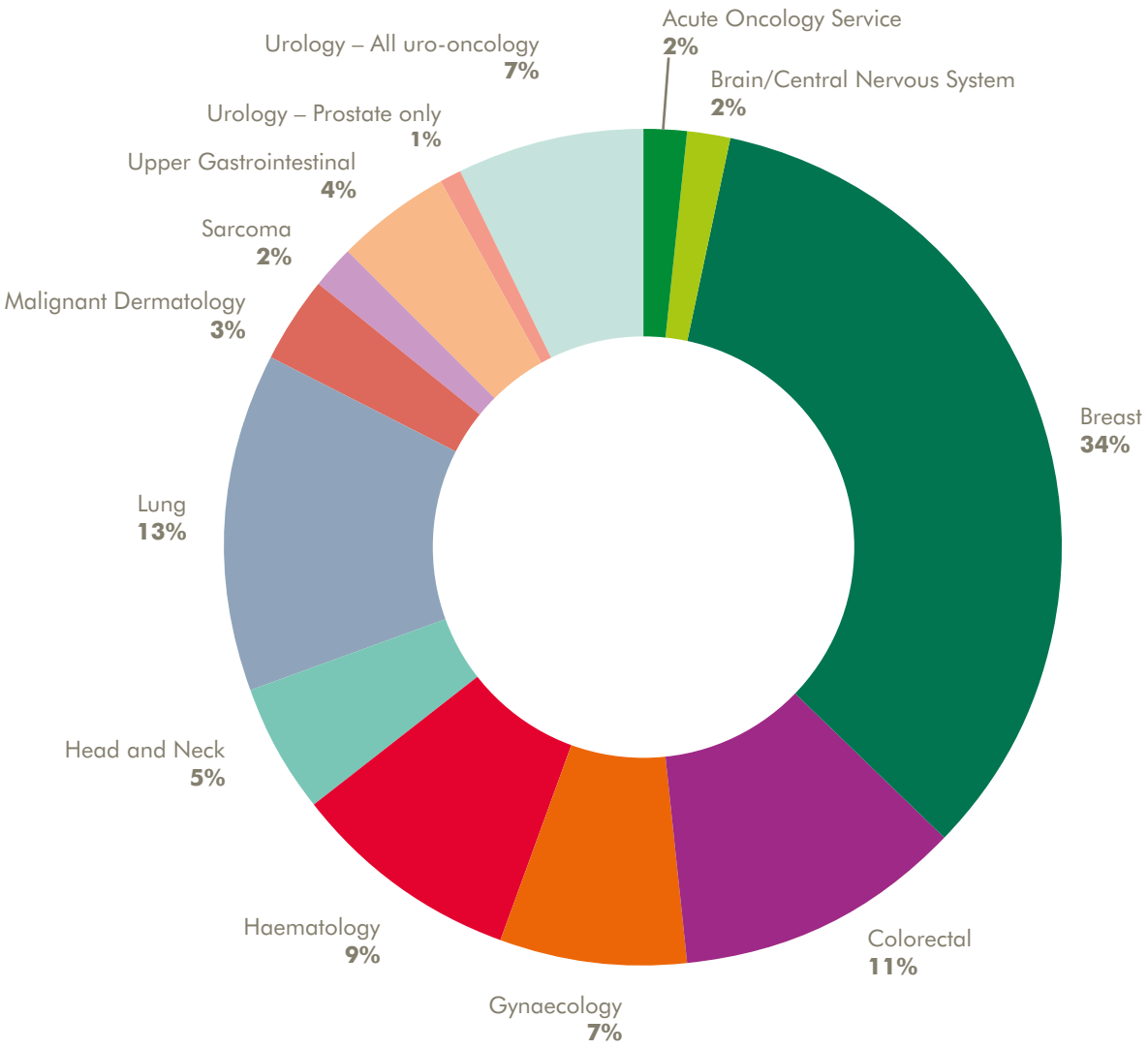


Table 2: Clinical Nurse Specialist (CNS) workforce by area of practice and Health and Social Care Trust, WTE, Northern Ireland, 2014

The area of practice with the largest proportion of the CNS workforce is reported as breast cancer, accounting for about 33% of CNSs, followed by lung (about 13%) and colorectal (about 12%).

Health and Social Care Trust	Acute oncology service	Brain/central nervous system	Breast	Colorectal	Gynaecology	Haematology	Head and neck	Lung	Malignant dermatology	Sarcoma	Upper gastrointestinal	Urology – Prostate only	Urology – All uro-oncology	Total
Belfast Health and Social Care Trust	0	1.0	5.8	1.0	2.0	2.0	1.0	2.0	0	1.0	2.0	0	1.0	18.8
Northern Health and Social Care Trust	0	0	3.4	0.5	0	1.0	0	1.5	0	0	0	0	0	6.4
South Eastern Health and Social Care Trust	0	0	2.8	2.0	1.0	1.0	1.0	1.0	1.8	0	0	0	1.0	11.6
Southern Health and Social Care Trust	1.0	0	2.6	2.0	0.5	1.0	0	1.0	0	0	0.5	0	0	8.6
Western Health and Social Care Trust	0	0	3.6	1.0	0.6	0	1.0	2.0	0	0	0	0	2.0	10.2
Total	1.0	1.0	18.2	6.5	4.1	5.0	3.0	7.5	1.8	1.0	2.5	0	4.0	55.6

Fig. 2: Total CNSs by area of practice, percentage, Northern Ireland, WTE, 2014

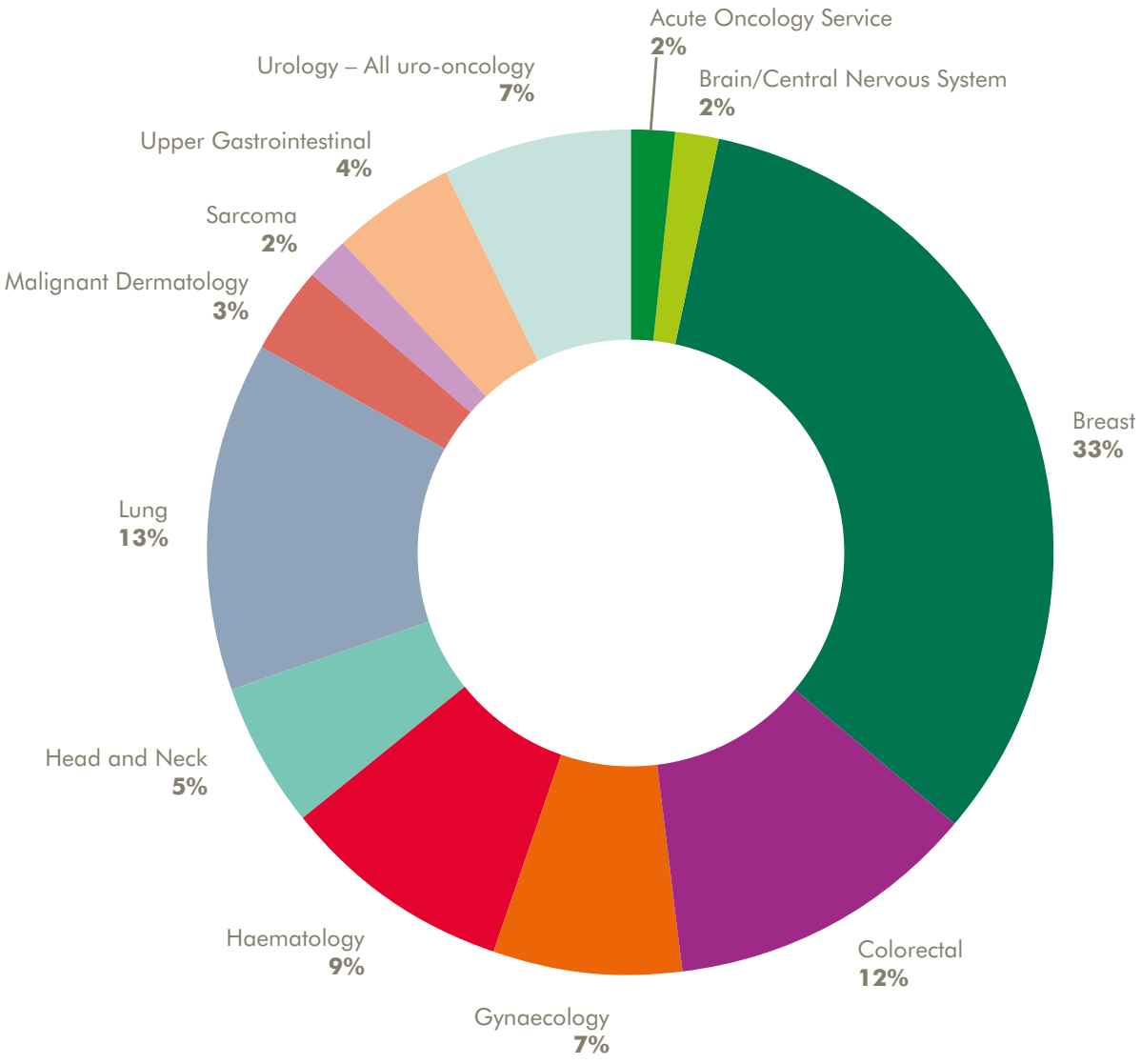


Table 3: Total specialist adult cancer nursing workforce by job title and area of practice, WTE, Northern Ireland, 2014

There was no reported advanced nurse practitioners, nurse consultants or nurse specialists across all areas of practice.

Area of practice	Advanced nurse practitioner	Clinical nurse specialist	Nurse consultant	Nurse practitioner	Nurse specialist	Other	Total
Acute oncology service	0	1.0	0	0	0	0	1.0
Brain/central nervous system	0	1.0	0	0	0	0	1.0
Breast	0	18.2	0	1.2	0	0	19.4
Colorectal	0	6.5	0	0	0	0	6.5
Gynaecology	0	4.1	0	0	0	0	4.1
Haematology	0	5.0	0	0	0	0	5.0
Head and neck	0	3.0	0	0	0	0	3.0
Lung	0	7.5	0	0	0	0	7.5
Malignant dermatology	0	1.8	0	0	0	0	1.8
Sarcoma	0	1.0	0	0	0	0	1.0
Upper gastrointestinal	0	2.5	0	0	0	0	2.5
Urology – prostate only	0	0	0	0.6	0	0	0.6
Urology – All uro-oncology	0	4.0	0	0	0	0	4.0
Total	0	55.6	0	1.8	0	0	57.4

Fig. 3: Total specialist adult cancer nursing workforce by job title, WTE, Northern Ireland, 2014

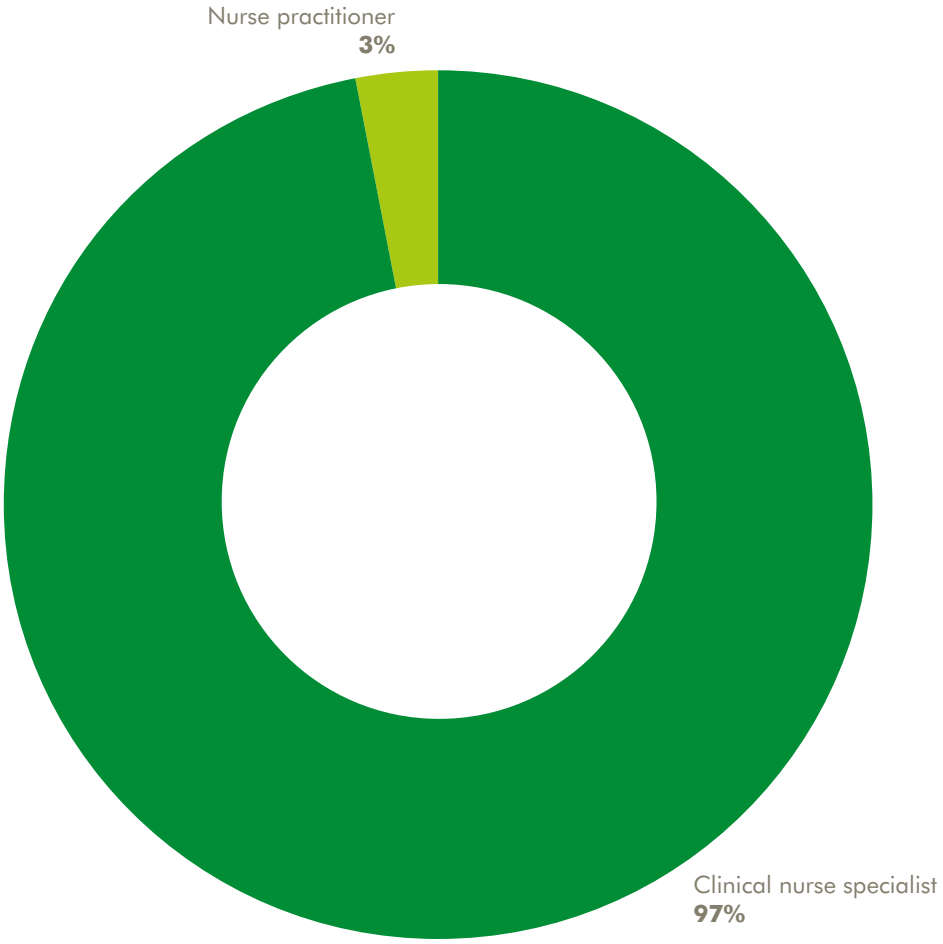


Table 4: CNS workforce by Agenda for Change (AfC) banding and area of practice, WTE, Northern Ireland, 2014

Band 7 posts make up the largest proportion of the reported WTE, accounting for about 79%. The band 6 posts are mainly in breast cancer care. 49% of the breast cancer workforce (WTE) is in band 6. The rest of the band 6 workforce is in colorectal cancer care.

Area of practice	Band 6	Band 7	Band 8a and above	Not known	Total
Acute oncology service	0	1.0	0	0	1.0
Brain/central nervous system	0	1.0	0	0	1.0
Breast	9.4	8.8	0	0	18.2
Colorectal	2.0	4.5	0	0	6.5
Gynaecology	0	4.1	0	0	4.1
Haematology	0	5.0	0	0	5.0
Head and neck	0	3.0	0	0	3.0
Lung	0	7.5	0	0	7.5
Malignant dermatology	0	1.8	0	0	1.8
Sarcoma	0	1.0	0	0	1.0
Upper gastrointestinal	0	2.5	0	0	2.5
Urology – Prostate only	0	0	0	0	0
Urology – All uro-oncology	0	4.0	0	0	4.0
Total	11.4	44.2	0	0	55.6

No band 5 posts were reported

Fig. 4: Total specialist adult cancer nursing workforce by Agenda for Change banding, percentage, Northern Ireland, 2014

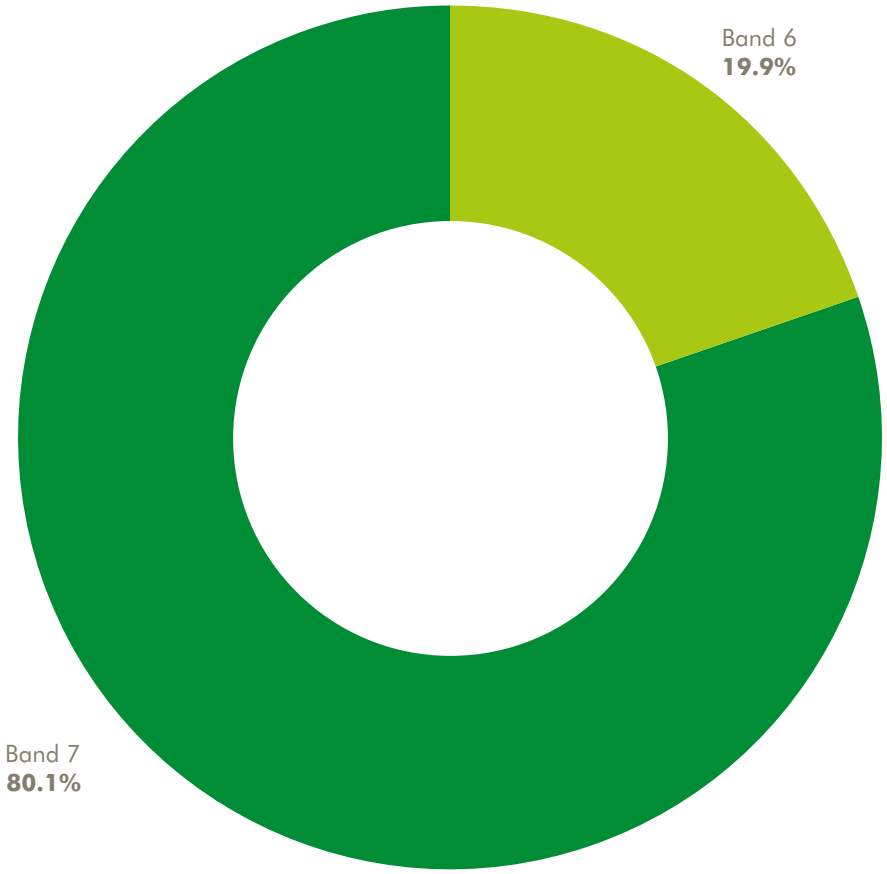


Table 5: Macmillan specialist cancer nurse workforce, WTE, Northern Ireland, 2014

Macmillan Cancer Support continues to provide support for 31% of the reported WTE.

Macmillan Cancer Support posts	WTE
Macmillan CNS	16.8
Other Macmillan cancer specialists	1.0
Total	17.8

Fig. 5: Specialist adult cancer nursing workforce Macmillan Cancer Support posts, CNS and other, percentage, WTE, Northern Ireland, 2014

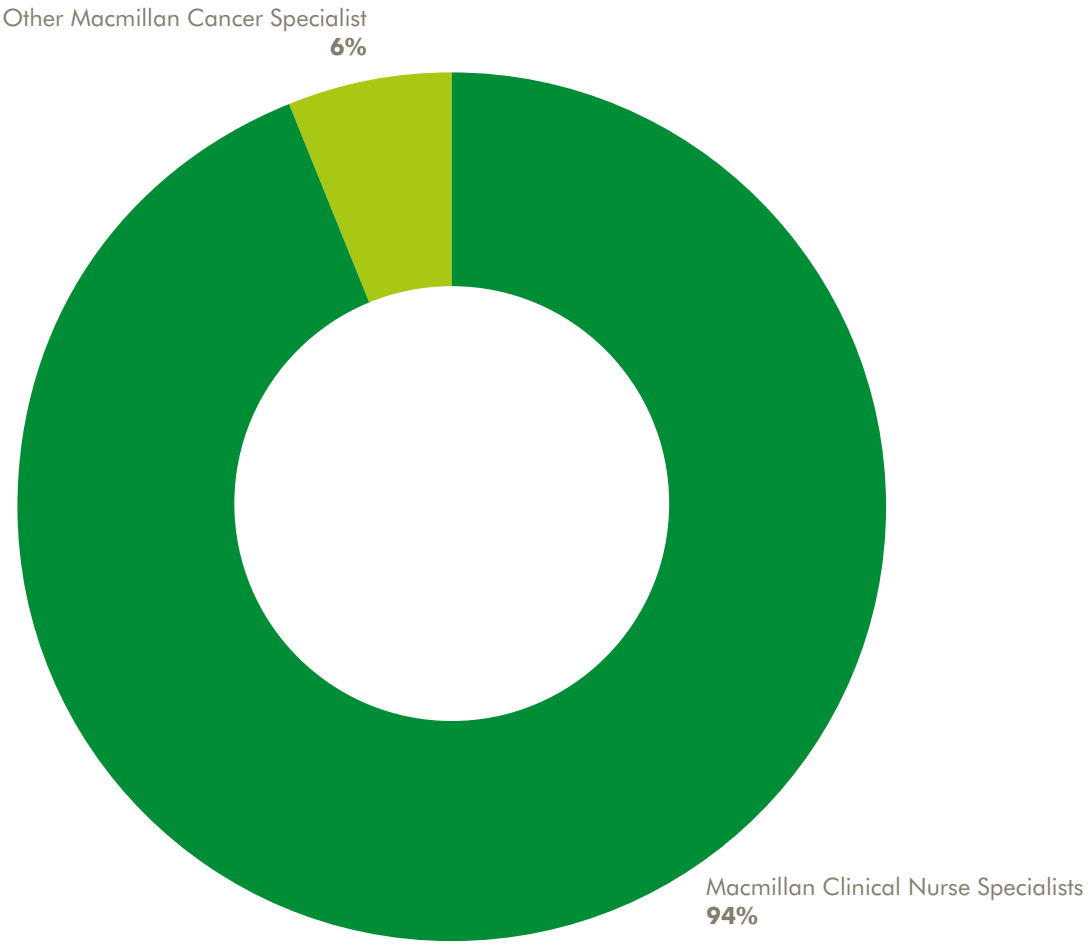


Fig. 5a: Macmillan Cancer Support specialist adult cancer nursing workforce as a proportion of total specialist adult cancer nursing workforce by area of practice, WTE, Northern Ireland, 2014

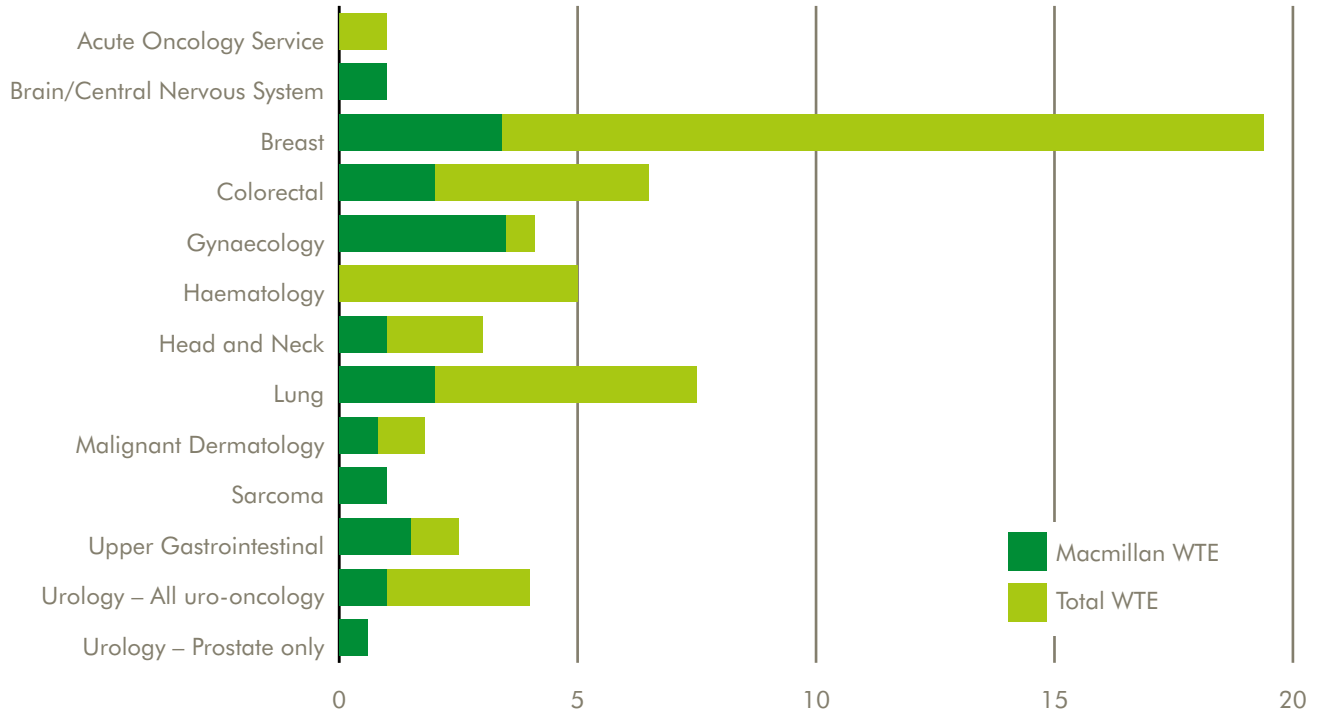


Table 6: Total specialist adult cancer nursing workforce reporting cover for cancer of unknown primary, WTE, Northern Ireland, 2014

This is the first time that this data has been collected and reported. About 15% of the total WTE (filled and vacant posts) was reported as covering cancer of unknown primary.

Does the post/post holder cover cancer of unknown primary?	WTE
Yes	8.6
No	48.8
Not known	0
Total	57.4

Table 7: Total specialist adult cancer nursing workforce reporting cover for cancer of unknown primary by area of practice, WTE, Northern Ireland, 2014

The highest proportion of the posts reported as covering cancer of unknown primary were in breast cancer (about 42% of the total reported WTE covering cancer of unknown primary).

Majority Area of practice	WTE that cover CUP	% of all nurses covering CUP (WTE)
Acute oncology service	1.0	11.6%
Brain/central nervous system	0	0.0%
Breast	3.6	41.9%
Colorectal	2.0	23.3%
Gynaecology	0.5	5.8%
Haematology	0	0.0%
Head and neck	0	0.0%
Lung	1.0	11.6%
Malignant dermatology	0	0.0%
Sarcoma	0	0.0%
Upper gastrointestinal	0.5	5.8%
Urology – prostate only	0	0.0%
Urology – All uro-oncology	0	0.0%
Total	8.6	100.0%

Table 8: Total specialist adult cancer nursing workforce by gender, WTE, Northern Ireland, 2014

This is the first time that this data has been collected and reported. All of the WTEs are reported as female.

Gender	WTE	% of total (WTE)
Female	56.4	100.0%
Male	0.0	0.0%
Declined	0.0	0.0%
Not known	0.0	0.0%
Total	56.4	100.0%

Table 9: Total specialist adult cancer nursing workforce by Agenda for Change banding and gender, WTE, Northern Ireland, 2014

The majority of reported WTE are females populating band 7 posts (about 81%). There are no WTE reported at bands 8a and above.

Gender	5	6	7	8a	8b	8c	8d	9	Not known	Total
Female	0	11.4	45.0	0	0	0	0	0	0	56.4
Male	0	0	0	0	0	0	0	0	0	0
Declined	0	0	0	0	0	0	0	0	0	0
Not known	0	0	0	0	0	0	0	0	0	0
Total	0	11.4	45.0	0	0	0	0	0	0	56.4

Table 10: Total specialist adult cancer nursing workforce by area of practice and gender, WTE, Northern Ireland, 2014

The highest proportion of WTE by area of practice for females is reported as breast cancer (about 34% of filled posts). There were no reported WTE for males. The lowest WTE was reported in acute oncology service, brain/central nervous system and sarcoma (1 filled post in each).

Area of practice	Female	Male	Declined	Not known	Total
Acute oncology service	1.0	0	0	0	1.0
Brain/central nervous system	1.0	0	0	0	1.0
Breast	19.4	0	0	0	19.4
Colorectal	6.5	0	0	0	6.5
Gynaecology	4.1	0	0	0	4.1
Haematology	5.0	0	0	0	5.0
Head and neck	3.0	0	0	0	3.0
Lung	6.5	0	0	0	6.5
Malignant dermatology	1.8	0	0	0	1.8
Sarcoma	1.0	0	0	0	1.0
Upper gastrointestinal	2.5	0	0	0	2.5
Urology – Prostate only	0.6	0	0	0	0.6
Urology – All uro-oncology	4.0	0	0	0	4.0
Total	56.4	0	0	0	56.4

Table 11: Total specialist adult cancer nursing vacancies by Agenda for Change band, WTE, Northern Ireland, 2014

In the United Kingdom in April and June 2014, there were 2.4 vacancies per 100 employee jobs overall and 2.4 vacancies per 100 employee jobs in human health and social work activities[21]. In this census, in Northern Ireland, we found one vacant post per 67 filled jobs – equivalent to 1.5 vacancies per 100 filled jobs. Although the rates are not directly comparable, this suggests that there may be fewer vacancies amongst specialist cancer nurses in Northern Ireland than there are across the UK as a whole.

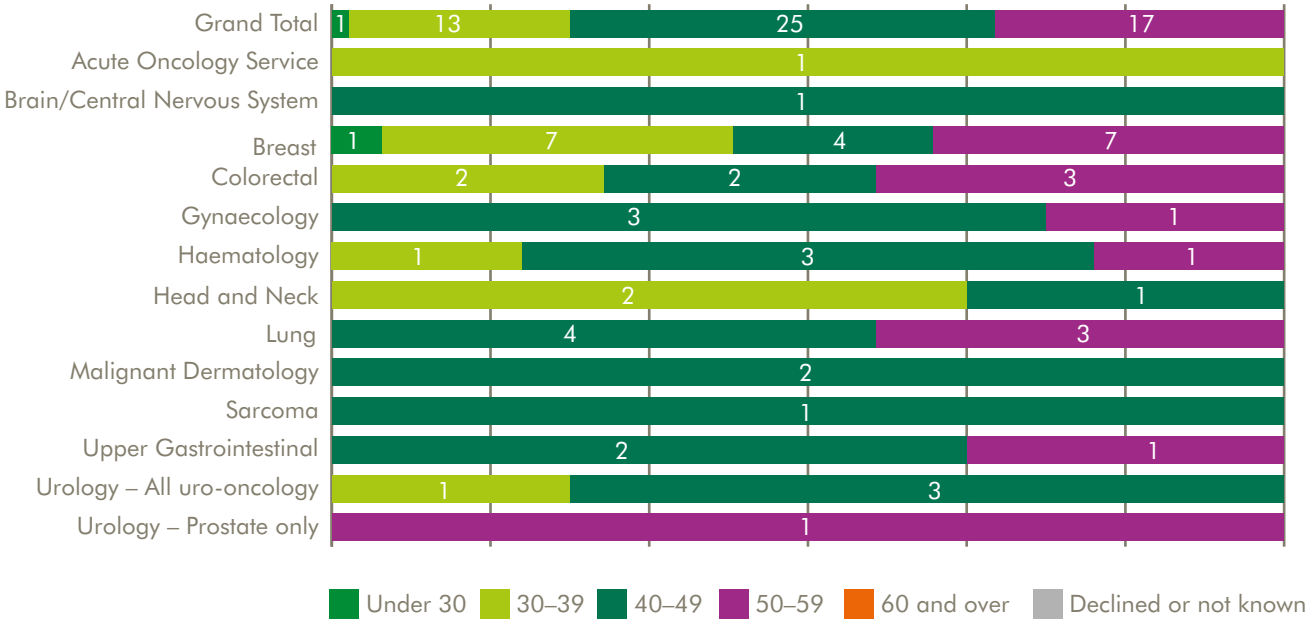
Band	5	6	7	8a	8b	8c	8d	9	Total
Number of vacancies (WTE)	0	0	1.0	0	0	0	0	0	1.0

Table 12: Specialist adult cancer nursing workforce by area of practice and age banding, WTE, Northern Ireland, 2014

The highest WTE is reported as age 40–49 (about 44% of the total reported WTE). None of the total reported WTE were age 60 and over. (Data may indicate that the specialist cancer nursing workforce stops working before they reach the age of 60 as there are many nurses in the age 50 to 59 age group).

Age range	Acute oncology service	Brain/ nervous system	Breast	Colorectal	Gynaecology	Haematology	Head and neck	Lung	Malignant dermatology	Sarcoma	Upper gastrointestinal	Urology – Prostate only	Urology – All uro-oncology	Percentage of total
Under 30	0.0% (0.0)	0.0% (0.0)	100.0% (1.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	1.8% (1.0)
30–39	7.4% (1.0)	0.0% (0.0)	50.9% (6.8)	11.9% (1.6)	0.0% (0.0)	7.4% (1.0)	14.9% (2.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	7.4% (1.0)	23.8% (13.4)
40–49	0.0% (0.0)	4.0% (1.0)	16.6% (4.2)	6.0% (1.5)	12.4% (3.1)	12.0% (3.0)	4.0% (1.0)	14.0% (3.5)	7.2% (1.8)	4.0% (1.0)	8.0% (2.0)	0.0% (0.0)	12.0% (3.0)	44.4% (25.1)
50–59	0.0% (0.0)	0.0% (0.0)	43.8% (7.4)	20.1% (3.4)	5.9% (1.0)	5.9% (1.0)	0.0% (0.0)	17.8% (3.0)	0.0% (0.0)	0.0% (0.0)	3.0% (0.5)	3.6% (0.6)	0.0% (0.0)	30.0% (16.9)
60 and over	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)
Declined	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)
Not known	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)	0.0% (0.0)
% of total	1.8% (1.0)	1.8% (1.0)	34.4% (19.4)	11.5% (6.5)	7.3% (4.1)	8.9% (5.0)	5.3% (3.0)	11.5% (6.5)	3.2% (1.8)	1.8% (1.0)	4.4% (2.5)	1.1% (0.6)	7.1% (4.0)	100.0% (56.4)

Fig. 6: Filled specialist cancer nursing workforce, by majority area of practice and age banding, WTE, Northern Ireland, 2014



4. Ratio of specialist adult cancer nursing workforce to incidence and two year-prevalence

It is important to put the variation in the distribution of specialist cancer nurses in the context of the varying levels of need. It is impossible to do this while fully taking into account the many aspects of need and service design. However, as a very crude measure, we have mapped WTE onto new cancer cases (incidence in 2012) and onto the number of people living up to two years post a cancer diagnosis (two-year prevalence in 2010).

However, there are many caveats to this approach. These ratios do not, therefore, reflect the caseload of the specialist nurse, nor do they demonstrate the variations in the level of support needed depending on the type and stage of cancer.

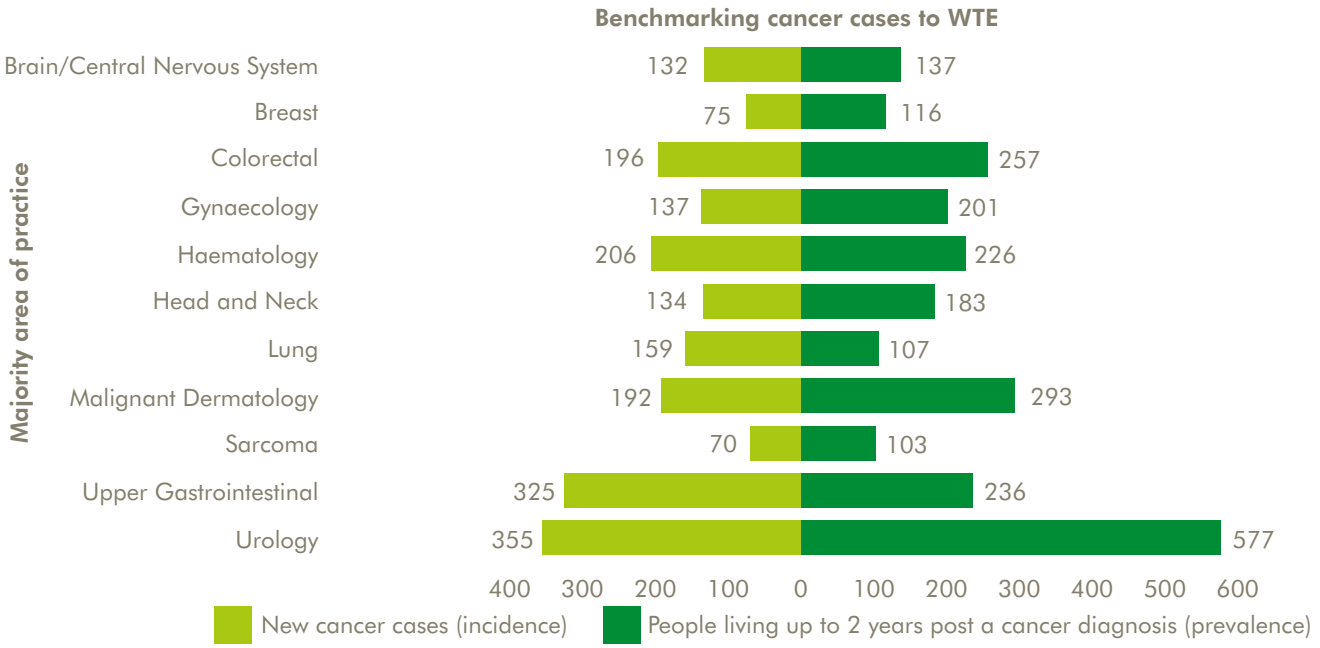
Table 13: Range of ratios of incidence and two-year prevalence per WTE by area of practice, Northern Ireland, 2014

	New cancer case (incidence) per WTE	People living up to two years post cancer diagnosis (prevalence) per WTE
Brain/central nervous system	132	137
Breast	75	116
Colorectal	196	257
Gynaecology	137	201
Haematology	206	226
Head and neck	134	183
Lung	159	107
Malignant dermatology	192	293
Sarcoma	70	103
Upper gastrointestinal	325	236
Urology	355	577

Source: Two-year prevalence data sourced from National Cancer Intelligence Network. 2014. Macmillan-NCIN work plan – 20-year cancer prevalence for the period 1991–2010 by cancer type for each UK nation, the UK combined and England Strategic Clinical Networks. Data sourced and presented in collaboration with the Welsh Cancer Intelligence and Surveillance Unit, Health Intelligence Division, Public Health Wales, the Information Services Division Scotland and the Northern Ireland Cancer Registry. For cancer definitions, see appendix.

Source: Incidence data sourced from personal correspondence with the biostatisticians/researchers at the Northern Ireland Cancer Registry (August 2014).

Fig. 7: Specialist cancer nursing workforce ratios against incidence and prevalence for Northern Ireland overall, WTE, 2014



The figure above shows the variation in the ratios across tumour types. For both measures, urology has the highest ratio of cases per WTE. This is based on the assumption that urology nurses are responsible for a diverse cancer population that includes large numbers of prostate cancer cases as well as bladder, kidney, testicular cancer and carcinoma in situ cases.

The differences in the pattern seen in the ratio of new cases and people living up to two years post a cancer diagnosis mainly reflects the differences in short term survival. This also highlights the complexity of the issue and the sophistication needed in workforce planning.

5. Observations and areas for further exploration

There appears to have been a very small increase in the numbers of specialist adult cancer nurses (WTE) since 2011.

As both incidence and prevalence of cancer increase in Northern Ireland[16], inequities exist between different tumour types in terms of the provision of specialist adult cancer nursing posts.

The previously identified gaps in CNS provision have increased and this must be addressed to fulfil the commitment that everyone newly diagnosed with cancer has access to a CNS.

This census has found only one acute oncology services post – the same as in 2011. Funding has now been agreed with Macmillan for seven posts across Northern Ireland, to deliver a Northern Ireland-wide service.

The variation in area of practice of posts holders covering cancer of unknown primary suggests that there are no clearly agreed care pathways. Further work is required to establish how best to meet the needs of people with cancer of unknown primary and how to support the workforce to deliver this care. This will be addressed through the development of the acute oncology service within Northern Ireland.

Macmillan continues to develop new posts to support clinical nurse specialist and advanced nurse practitioner posts to improve their expertise, as support worker roles have been demonstrated to release as much as 30% of CNS capacity.[25]

Clearly, the combination of an increase in incidence and prevalence and a lack of growth in specialist cancer nurse capacity requires concerted and coordinated plans to address.

Summary

There appears to have been a marginal increase in CNS posts since 2011.

However, the specialist adult cancer nursing workforce in general is not expanding sufficiently to keep pace with the growing numbers of people being diagnosed and living with cancer.

This census provides intelligence in assessing how far commitments set out in the Northern Ireland Cancer Services Framework (2009) have been achieved.

However, despite broad political backing for the service framework standard, the intervening years have seen only a small rise in CNS numbers. The 2011 Northern Ireland cancer network census identified 56 nurses[15], this census identified only one additional nurse. This growth is not sufficient to keep pace with the growing cancer population.

Furthermore, delivery of the joint initiative between Macmillan and the Health and Social Care Board TCFU, which relies on the provision of adequate CNS numbers, has not yet achieved its full potential in some tumour groups due to the lack of specialist cancer nurses.[18]

Future planning and recommendations

Those responsible for commissioning services will undoubtedly be expecting value for money as well as high-quality services for patients. Workforce planning will be crucial in achieving improvements in outcomes, and the specialist cancer nursing census is a valuable tool to inform commissioning networks and other funding bodies in the drive for world-class cancer services.

There are still marked inequities in the provision of specialist nursing expertise for those diagnosed with different cancer types, as well as some degree of variance across geographical locations. Evidence from all the recent National cancer patients experience surveys in England and Wales pointed towards the provision of specialist nursing expertise as an important indicator of the quality of cancer services and the experience of care reported by patients.

Commissioners and providers may therefore be interested in examining the ratio of specialist nurses to new cases of cancer within their localities more closely, along with data from hospital trust patient experience surveys and other sources such as the National Cancer Peer Review programme.

In the context of the severe financial constraints in Northern Ireland, Macmillan service development teams would wish to support this analysis and to work in partnership to establish a joint plan to reform and modernise the specialist cancer nursing workforce.

Proposals for future work
In thinking about the future specialist cancer nursing workforce, Macmillan has published a discussion document to encourage consideration and debate about how best to respond to the challenges facing the UK's health and social care systems. As people live longer, the incidence of cancer and other long-term conditions continues to rise, leading to an increase in the number of people with multiple health issues. Multiple morbidities are becoming the norm, with many people with cancer also living with two or more other conditions.[24]

In this context, Macmillan is looking at what the cancer care teams of the future must look like. They will need to be more flexible, working with people living with cancer to identify their concerns and support them in managing their own care. The specialist cancer nursing workforce will be a key part of a whole system of care that will need to be required to support the growing numbers of people living in the community after a cancer diagnosis.

Macmillan's plans include:
- identifying how best to optimise the specialist cancer nurse workforce, building on the success of introducing skill mix in our One-to-One Support pilots, where support workers have been demonstrated to release CNS time for more complex care;

- re-establishing a role development programme that will support nurses wishing to establish themselves as specialists in cancer care;

- developing new roles that will support people with complex care coordination at key points in their care pathway;

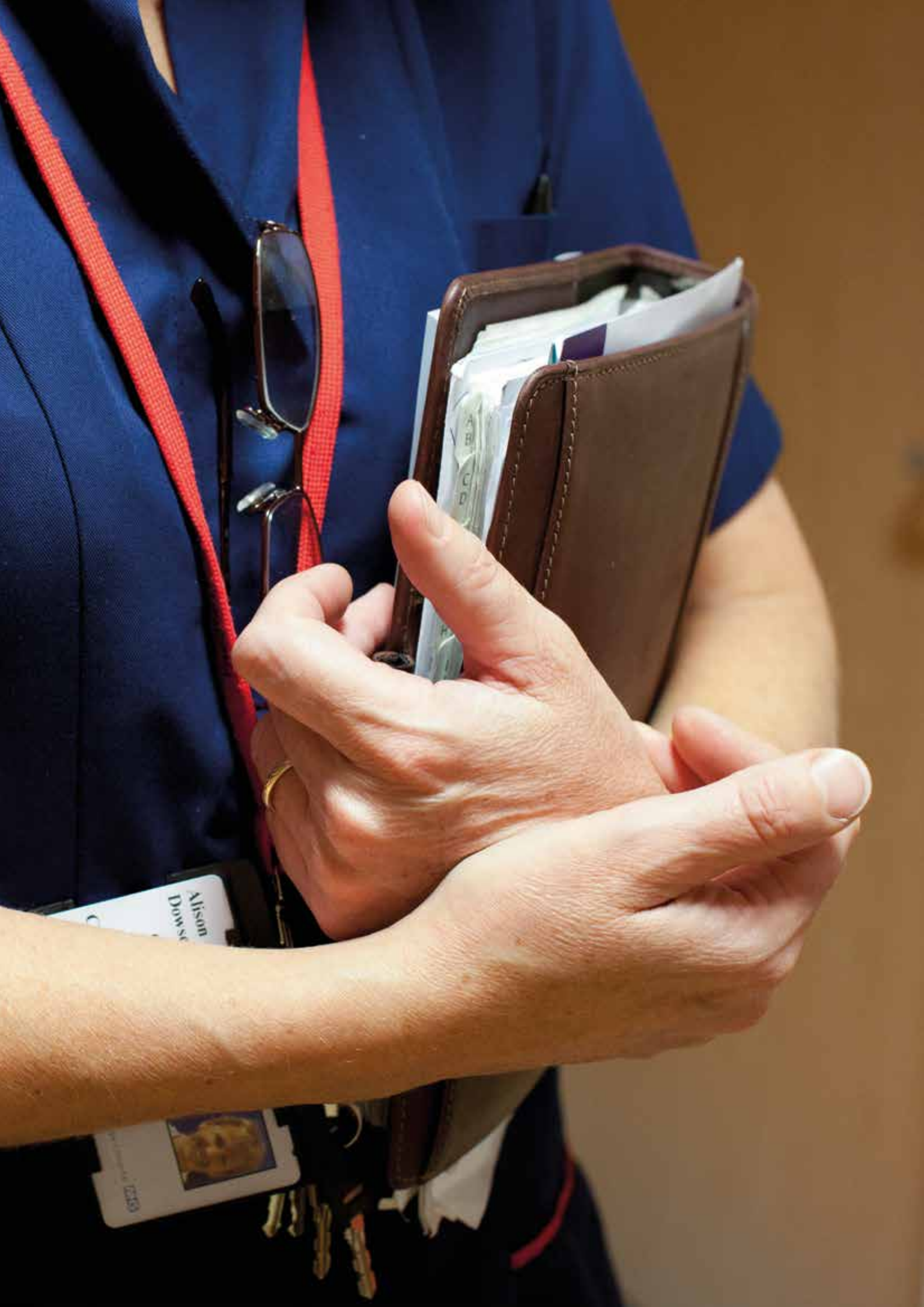
- mapping interventions that specialist nurses offer across different cancer patient pathways to determine best practice; and

- continuing the specialist cancer nursing census every two years.

The Public Health Agency has also commissioned Northern Ireland's first cancer patient experience survey, in partnership with Macmillan. The results are expected to be published in mid 2015 and will provide further information about the impact of the specialist workforce and the percentage of patients with access to a CNS. Recent analysis of patient experience surveys in England and Wales have clearly demonstrated the correlation between access to a CNS and more favourable patient experience. The results also showed that in Wales, where a CNS took on the role of key worker, patient experience was further improved.[20]

Macmillan will continue work with partners to explore the use of markers other than incidence and two-year prevalence to help estimate the true caseload of specialist nurses, such as volume of patients seen by a multidisciplinary team.

Additionally, Macmillan will continue to work with its partners at the Health and Social Care Board, Public Health Agency, National Cancer Peer Review team, the Northern Ireland Cancer Network, Department of Health, Social Service and Public Safety, charitable organisations and the Centre for Workforce Intelligence, with the aim of providing robust data on this important element of the specialist cancer workforce and addressing inequities wherever they are identified.



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Appendix

Cancer definitions used calculating the ratio of specialist adult cancer nursing workforce by incidence and two-year prevalence

Majority area of practice	**Cancer types used in the ratios**
Brain/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)
Sarcoma	Sarcoma (C40–C41, C46, C48–C49)
Upper gastrointestinal	Upper GI (C15–C16, C22–C25)
Urology	Urology including prostate and testicular (C60–C68) and bladder in situ (D09 in the incidence data and D090 in the two-year prevalence)

The census and report is endorsed by the following bodies:

British Association of Head and Neck Oncology Nurses

National Lung Cancer Forum for Nurses

Breast Cancer Care

National Colorectal Cancer Nurses network

British Association of Urological Nurses

United Kingdom Oncology Nursing Society

Centre for Workforce Intelligence

Mouchel

National Forum of Gynaecological Oncology Nurses

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