

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**



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Foreword

The number of people being diagnosed and living with cancer in Scotland is growing. Over the last decade, almost 50% more people have been referred on the referral pathway for urgent suspicion of cancer¹, and the number of people diagnosed with cancer has increased to more than 32,200 people per year². In addition, research from Macmillan Cancer Support estimates, there are now a quarter of a million people living with cancer in Scotland, which is around a 15% increase on five years ago. This number is predicted to rise to almost 300,000 by 2025, representing a third more people living with cancer in just a decade³.

Whilst the overall risk of dying from cancer has fallen over the past 10 years, there are more annual deaths from cancer due to the ageing and growing population⁴ as well as more people living longer due to advances in treatment. Whilst it is good news that people are living longer, many will experience poor health and may have complex needs.

Ensuring that the growing population of people living with cancer has access to the best possible care and support is dependent on the NHS having the right workforce in place, both in specialist cancer services, as well as across the whole of health and social care. The Transforming Roles Programme⁵ and the publication of *An Integrated Health and Social Care Workforce Plan for Scotland*⁶ are welcome steps towards creating a sustainable future workforce.

Patient experience is also an important consideration for those involved in workforce planning. The Scottish Cancer Patient Experience Survey (2018)⁷ has shown that the vast majority of people in Scotland (95%) reported their overall experience of care positively, with increased positive experiences notable when there has been access to a Clinical Nurse Specialist (CNS), which is a reflection of the dedication and hard work of the workforce. However, the survey also highlighted some specific gaps. For example, around 11% of those surveyed could not easily contact their CNS. In addition, only around half of those surveyed were given information or support from third sector organisations after their cancer treatment finished. Furthermore, evidence from Macmillan suggests some people living with cancer report that they are still not getting enough support with all of their needs and are often afraid to ask over-worked staff⁸.

Macmillan is proud of the role it has played in growing and developing the cancer workforce. Since our previous census in 2014, we have invested almost six million pounds in funding frontline cancer-specific roles. This is reflected in the finding that 39% of WTE cancer nurse posts had 'Macmillan' in their job title in 2019. We have also supported the redesign of pathways and tested new ways of working to utilise resources more efficiently and respond to the changing needs of people with cancer. For example, the introduction of support workers in the community to address people's non-clinical needs has helped to reduce pressures on clinical staff and improve patient experience⁹. This service will be further rolled out across Scotland as part of the Transforming Cancer Care (TCC) partnership announced in 2019 between Macmillan Cancer Support and the Scottish Government. This partnership will also

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- 1 Scottish Referral Guidelines for Suspected Cancer Abstract 2018.
 - 2 Information Services Division, 2019, Cancer diagnosis in Scotland in 2017.
 - 3 Macmillan Cancer Support article 2019.
 - 4 Information Services Division, 2019, Cancer Mortality in Scotland (2018).
 - 5 Scottish Government (in partnership with Scotland's Executive Nurse Directors), 2017–18, Transforming Roles Programme.
 - 6 COSLA, 2019, An Integrated Health and Social Care Workforce Plan for Scotland.
 - 7 Scottish Government, 2019, Scottish Cancer Patient Experience Survey 2018.
 - 8 Macmillan cancer Support, 2019, Voices from the Frontline.
 - 9 Macmillan Cancer Support, 2018, Evaluation of the Glasgow RTS programme: Improving the Cancer Journey.

support the spread of learning from redesign projects which formed part of the Transforming Care After Treatment (TCAT) programme.

While this work will help to enhance the care available to people with cancer, it is vital there are also enough nurses and other health and care professionals to fully meet the physical, emotional and practical needs of people with cancer.

Macmillan is pleased to share the results of this census, which provides further insight into the adult specialist cancer workforce to complement wider data sets available.

Encouragingly, the census shows growth in the specialist adult cancer workforce. However, this growth should be understood in the context of increasing complexity and demand, as well as changes in the scope of the census since 2014. For example, a larger number of roles were in scope of the 2019 census, which included for the first time Chemotherapy Nurses, Support Workers, NHS-employed Palliative Care Nurses and cancer specific Link Workers in the community. In addition, there were a wider sub-set of role definitions, which may have influenced how some roles were categorised. Of particular note is the exclusion of some senior leadership roles which did not meet the inclusion criteria for this census, yet they play a significant role in cancer care. Of additional note is the categorisation of Band 5 specialist roles, which met the inclusion criteria for this census, but which would not be categorised as ‘specialist’ roles in the context of the Transforming Roles programme of work. Caution must therefore be exercised in drawing any comparisons with previous or future census’ of the cancer workforce.

A key finding of the Scotland 2019 census was age of the workforce and the implications for expected retirements. Overall, 45% of specialist cancer nurses were aged over 50 years old (whilst 81% were aged over 40 years old). Whilst an older age profile might be expected for more senior roles and reflects experience, the age profile of some specialist nurses indicates higher than average expected retirements, for instance, almost 57% of breast specialist cancer nurses were aged over 50 years old, which is significantly higher than the expected retirements of 19.2% across the whole NHS workforce across the next 10 years.¹⁰

Another key finding was that whilst breast (18%) and colorectal (12%) nurse roles accounted for almost one third of WTE for specialist cancer nurses, a large proportion of roles spanned more than one speciality (22%). Roles that span more than one speciality tended to be:

- Working at Agenda for Change band 7 (63%) or band 6 (32%)
- Slightly more likely to have ‘Macmillan’ in their job title (51%) than not (49%)
- Slightly younger than the rest of the specialist cancer nurse workforce
- More common in North Scotland (33%) than West Scotland (20%) or South & East Scotland (12%)
- Clinical Nurse Specialist (28%) or Advanced Clinical Nurse Specialist (23%)

The profile of these non-specific roles suggests they are a highly qualified segment of the cancer workforce who may be working in rural communities where a broader remit is required to cater for the health needs of the population.

¹⁰ COSLA, 2019, An Integrated Health and Social Care Workforce Plan for Scotland.

Macmillan has also conducted a census of the cancer workforce in England (2017) and Wales (2017). Whilst accepting differences in the methodology and scope of the census, it is possible to draw some broad comparisons between Scotland, England and Wales:

- The majority (81%) of the cancer workforce in Scotland were aged 40 years old+ which was similar to the age profile of the workforce in England and Wales, with 75% aged 40 years old+ in England and 77% aged 40 years old+ in Wales.
- As highlighted above, in Scotland, 22% of specialist cancer nurses spanned more than one specialty. The comparable figure in England in 2017 was lower at 14% and also lower in Wales at 16%.
- Across different types of posts, the vacancy rates recorded in the 2019 Scotland census were lower than those highlighted during the England census and Wales census in 2017. For instance, the vacancy rate in Scotland for specialist cancer nurses was 3.1% compared to 4.3% in England and 4.4% in Wales.
- In Scotland in 2019 the rate of vacancies amongst specialist cancer nurses (3.1%) was higher than for other types of post: 2.4% for adult Chemotherapy Nurses, 0.7% for specialist palliative care nurses, and 2.1% for cancer support workers.
- In Scotland the ratio of specialist cancer nurses WTE to cancer incidence is lower than in England for most tumour types. For example, for lung cancer there are 108 diagnosis per nurse in England compared to 157 in Scotland. Differences in the ratio of specialist cancer nurses (calculated as the ratio of specialist cancer nurses to cancer incidence and 2-year prevalence) can be caused by several factors such as the level of support required for specific tumour types, the size of the workforce, patient pathways and configuration of services. Further detailed investigation or workforce planning is needed to understand if the workforce can efficiently provide the support needed.

The findings of this census should form a major part of any future cancer plans. Further work will be needed alongside robust succession planning to better understand what the future cancer workforce should look like across all specialties and care sectors in the context of changing needs and growing demand, as well as the Chief Nursing Officer Directorate's (CNOD) Transforming Roles papers on Specialist Nursing and Advanced Practice. In addition, a fully costed implementation plan is required to support the new Integrated Health & Social Care Workforce Plan.

We look forward to working with the Scottish Government and other stakeholders to support this work and to help shape the future cancer workforce.

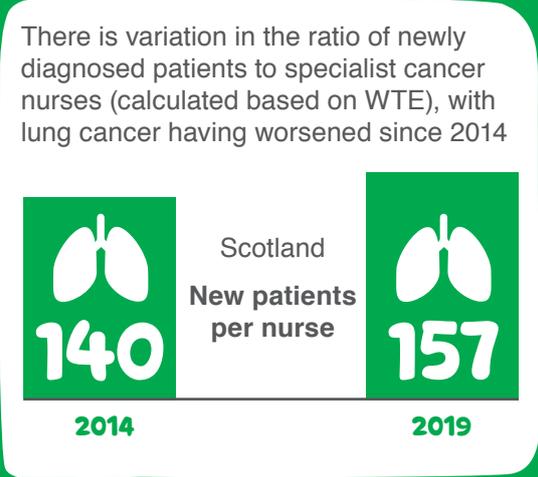
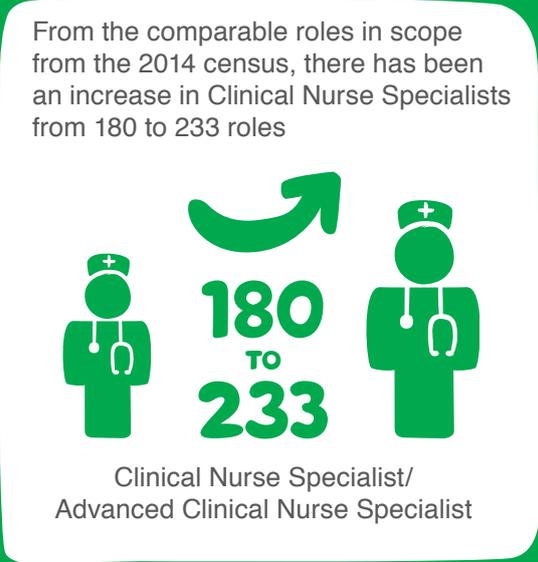
With huge thanks to all professionals and staff who have dedicated time and resource to help complete this census, and to help shape the key recommendations.



Executive summary

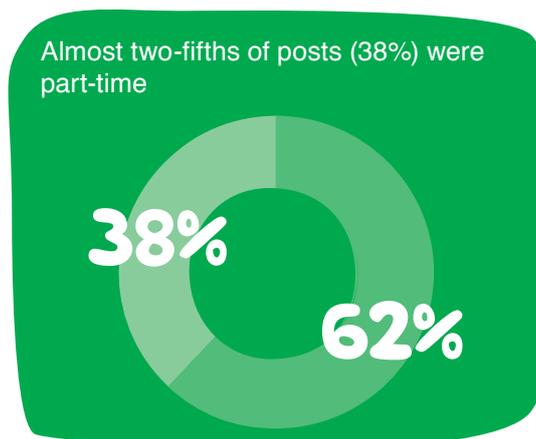
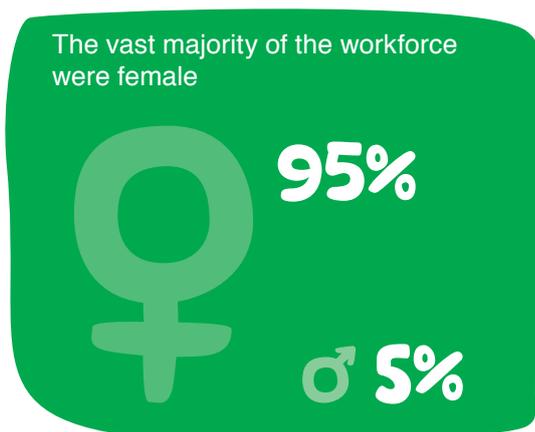
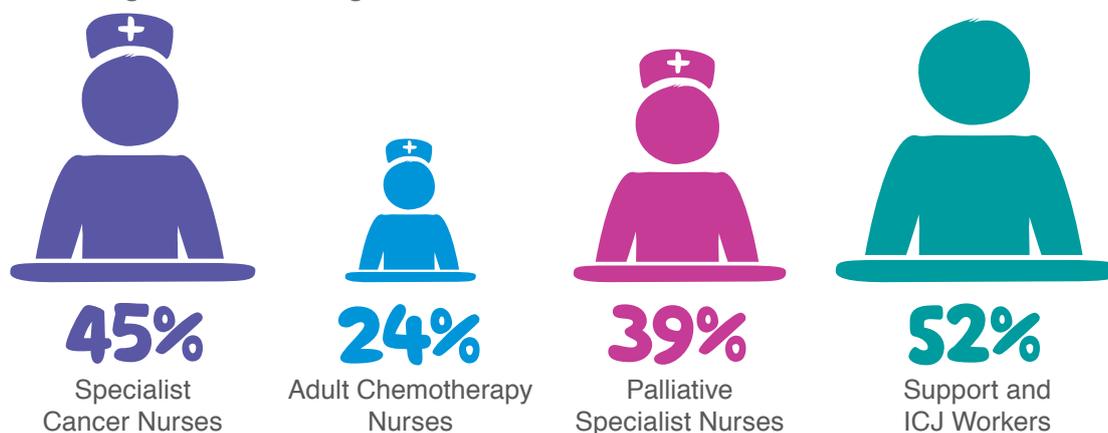
Macmillan Cancer Support commissioned a census of the Scottish specialist adult cancer nursing workforce in 2019. The purpose of the census was to map the specialist adult cancer nursing population in Scotland by cancer type and locality.

This report provides information about four different types of posts employed within NHS Scotland. There were 1,160 cancer nurse posts in Scotland in 2019 and a total of 1,022 whole time equivalent posts (WTE). In addition, there were 101 Support Workers and 17 ICJ Link Worker posts in Scotland totalling 104 WTE.



Across most roles there were large numbers of staff aged over 50.

Percentage of workforce aged 50 or over



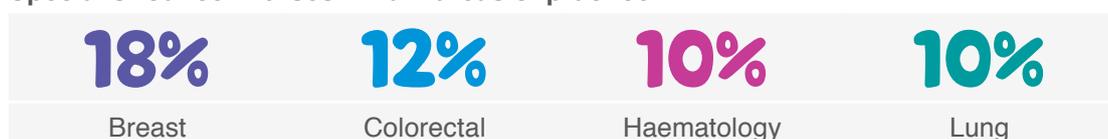
At the time of the census, vacancy rates for the four main roles were lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census¹¹.

Vacancy rate



Over a fifth of Specialist Cancer Nurses span more than one speciality area of practice (22%), whilst breast, colorectal, haematology and lung account for half of all areas of practice.

Specialist Cancer Nurses – Main areas of practice



¹¹ ISD, 2019, NHS Scotland Workforce, Quarter ending 30 June 2019.

Background and methodology

Background

Macmillan Cancer Support commissioned Rocket Science to conduct the 2019 Specialist Adult Cancer Nursing census. The purpose of the census was to map the specialist adult cancer nursing population in Scotland by cancer type and locality. This research follows a number of similar pieces of work across the UK including the Macmillan 2014 study of the whole UK (including Scotland) and 2017 studies of England and Wales^{12,13,14}.

This census builds on the 2014 Macmillan census for Scotland, but aims for a comprehensive census of the workforce, similar to that conducted in England and Wales in 2017. While the 2014 Scottish data included Adult Specialist Cancer Nurses only, the current study includes Adult Specialist Cancer Nurses, Specialist Palliative Care Nurses, Chemotherapy Nurses and Support Workers (see [Appendix A](#) for an overview of the 2014 and 2019 census approaches).

The 2019 Scotland census will assist in understanding:

- variation of care across the country
- where and what succession planning is needed
- the skill mix of the workforce.

Methodology

The approach for the 2019 Scotland census followed a similar methodology to that of the England and Wales 2017 census^{15,16}. In comparison to the Scotland 2014 study, this research was extended to include Chemotherapy Nurses, Specialist Palliative Care Nurses, and Cancer Support Workers. Additionally, the 2019 Scotland census also includes Improving the Cancer Journey (ICJ) Link Workers, who work with cancer patients to create a personalised care plan (using a Holistic Needs Assessment tool) outlining

the type of support the patient needs and how they will get it.

Rocket Science designed a bespoke Excel tool to be completed by each of the 14 NHS Health Boards in Scotland, to gather a snapshot of the workforce on the 21 June 2019. The census tool was circulated on 18 June 2019 and NHS Health Boards were given until 22 July 2019 to return their data.

The census received a 100% response rate, data was collected from all 14 NHS Health Boards in Scotland and data for the ICJ workforce was collected from the four NHS Health Boards employing these workers. It should be noted that despite the 100% response rate from Health Boards, there may be posts that have not been included in the responses and therefore it cannot be guaranteed that 100% of all eligible posts have been included in the study.

When reading the census, it is important to note that the WTE displayed is rounded to the closest whole number. For this reason, the total number of WTE in the tables may not reflect the addition of the individual WTEs for each of the indicators included but is nonetheless correct. (For example 6.4 WTE rounds to 6 WTE and 7.3 WTE rounds to 7 WTE, but their addition 13.7 WTE rounds to 14 WTE).

Full details of the process are provided in [Appendix B–D](#) and include:

- Full methodology
- Inclusion/exclusion criteria
- Analysis notes
- The data collected
- Limitations

In addition, for comparison purposes, [Appendix E](#) sets out the areas included in the 2019 Census and ISD Scotland data on Clinical Nurse Specialists.

12 [Macmillan, 2014, Specialist adult cancer nurses in Scotland.](#)

13 [Macmillan, 2017, Cancer workforce in England.](#)

14 [Macmillan, 2017, Cancer workforce in Wales.](#)

15 [Macmillan, 2017, Cancer workforce in England.](#)

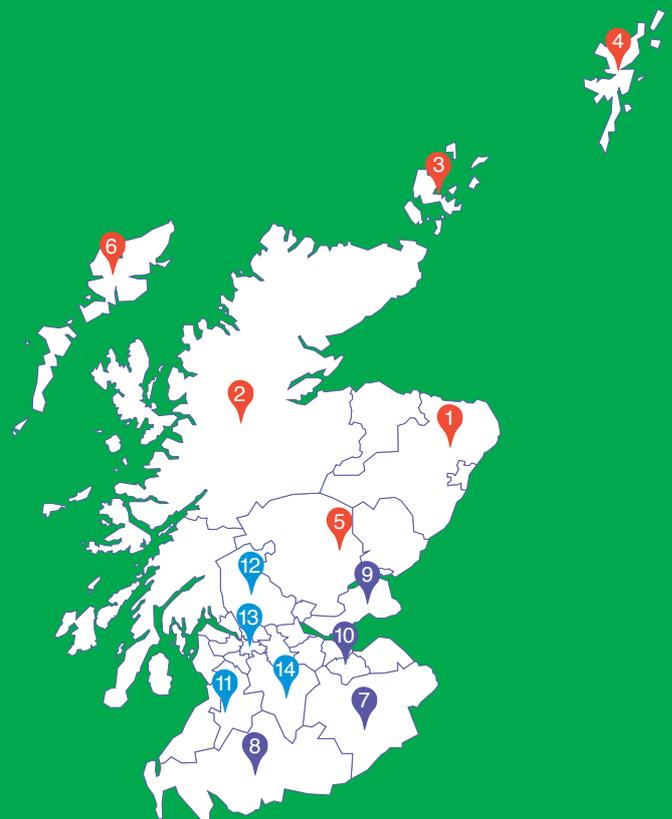
16 [Macmillan, 2017, Cancer workforce in Wales.](#)

Cancer Networks

A range of sections in the analysis include data disaggregated by geography. Geography is indicated using the Cancer Networks for Scotland, which are collaboratives of NHS Health Boards. There are three Cancer Networks in Scotland with NHS Health Boards grouping as follows:

Breakdown of NHS Health Boards by cancer Network

- 1** NHS Grampian
- 2** NHS Highland
- 3** NHS Orkney
- 4** NHS Shetland
- 5** NHS Tayside
- 6** NHS Western Isles
- 7** NHS Borders
- 8** NHS Dumfries & Galloway
- 9** NHS Fife
- 10** NHS Lothian
- 11** NHS Ayrshire and Arran
- 12** NHS Forth Valley
- 13** NHS Greater Glasgow and Clyde
- 14** NHS Lanarkshire



North Scotland

South and East Scotland

West Scotland

Headline findings

Specialist Cancer Nurses

There were 425 Specialist Cancer Nurse posts in Scotland in 2019 (375 whole time equivalent (WTE) posts).

39% of Specialist Cancer Nurses have 'Macmillan' in their job title (144 WTE). 22% of Specialist Cancer Nurses span more than one specialty role (81 WTE). The remaining 293 WTE specialise in specific areas of practice¹⁷, with the main ones being breast (18%), colorectal (12%), haematology (10%) and lung (10%). The majority (56%, 210 WTE) of Specialist Cancer Nurse posts were at Agenda for Change Band 7. Over one third (39%, 144 WTE) were at Agenda for Change Band 6.

The areas of practice with the highest WTE proportions of Specialist Cancer Nurse roles at or above Band 7 were head and neck (81% of total WTE), Hepatopancreaticobiliary (HPB) (79% based on 5 WTE) and brain and central nervous system (75% based on 7 WTE). The areas of practice with the lowest proportions of roles at or above Band 7 were colorectal (39%) breast (49%) and upper gastrointestinal (51%).

Adult Chemotherapy Nurses

There were 585 Adult Chemotherapy Nurse posts in Scotland (516 WTE posts). 4% (21 WTE) of Adult Chemotherapy Nurses have 'Macmillan' in their job title. Most Adult Chemotherapy Nurses span more than one specialty (88%, 455 WTE). The remaining part of the workforce specialises in haematology (12%, 62 WTE). 72% (370 WTE) of Adult Chemotherapy Nurse posts were at Agenda for Change Band 5.

Specialist Palliative Care Nurses

There were 150 Specialist Palliative Care Nurse posts in Scotland (130 WTE posts). Over half of the Specialist Palliative Care Nurse posts have 'Macmillan' in their job title (57%, 74 WTE). Specialist Palliative Care Nurses were most likely to work at Agenda for Change Band 6 (41%, 53 WTE) or Band 7 (35%, 45 WTE).

Cancer Support Workers

There were 101 Cancer Support Worker posts in Scotland (85 WTE posts). 7% (6 WTE) of Cancer Support Workers have 'Macmillan' in their job title. 86% (74 WTE) of Cancer Support Workers span more than one specialty. 91% (77 WTE) of Cancer Support Workers were Agenda for Change Band 3.

Improving the Cancer Journey Link Workers

There were 17 Improving the Cancer Journey (ICJ) Link Worker posts in Scotland and a total of 16 WTE posts. 94% (15 WTE) of adult ICJ Link Workers have 'Macmillan' in their job title.

Age

There are more specialist cancer nurses aged 50 or over in 2019 compared to the 2014 census¹⁸. In 2019, 45% of Specialist Cancer Nurses, 24% of Adult Chemotherapy Nurses, 39% of Specialist Palliative Care Nurses, 57% of Cancer Support Workers, and 24% of ICJ Link Workers were aged 50 or over.

¹⁷ In addition, one post has unknown area of practice.

¹⁸ [Macmillan, 2014, Cancer Workforce in Scotland.](#)

Gender

95% of the workforce were female.

Part-time roles

It was common for the cancer workforce to work on a part-time basis. Over one third of posts across all roles, except ICJ Link Workers (29%), were filled on a part-time basis.

Vacancies

Vacancy rates for all five roles were lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census¹⁹. Overall the vacancy rate for the whole workforce was 2.4%. The vacancy rates were: 3.1% for Specialist Cancer Nurses, 2.4% for Adult Chemotherapy Nurses, 0.7% for Specialist Palliative Care Nurses, 2.0% for Cancer Support Workers, and 0% for ICJ Link Workers.

Area of practice

The main areas of practice for Specialist Cancer were: breast (18%, 67 WTE), colorectal (12%, 46 WTE), haematology (10%, 37 WTE), and lung (10%, 36 WTE) and 22% (81 WTE) spanned more than one speciality.

The ratio of cancer incidence and cancer prevalence to Specialist Cancer Nurse WTE in Scotland differs across areas of practice and Cancer Network. This variation could be related to the varying levels of need and design of cancer care services across NHS Health Boards.

Banding

As highlighted previously, the four types of post displayed differences in Agenda for Change banding.

The census also highlighted variation in banding by area of practice and geography:

- Colorectal and breast Specialist Cancer Nurse roles typically had lower banding than other key areas of practice such as head and neck, lung and haematology
- The North of Scotland had the highest number and highest proportion of Band 8a and 8b Specialist Cancer Nurses
- It was notable that the South and East of Scotland had a high proportion of band 5 Specialist Palliative Care Nurses, whereas the other two regions had no specialist palliative care nursing roles at band 5
- Cancer Support Workers in the South and East were band 4, whereas they were band 3 in the other two regions.

¹⁹ [ISD, 2019, NHS Scotland Workforce, Quarter ending 30 June 2019.](#)

SPECIALIST CANCER NURSES



This section describes the Specialist Cancer Nurse workforce in Scotland. These nurses were on Agenda for Change Bands 5 to 9 and spend over 50% of their time directly supporting adults living with cancer.

To be included in the census, each nurse must have been a registered specialist in cancer care and must have been spending at least 50% of their time in direct person to person adult cancer care. This means that nurses who spend a lot of time with cancer patients but were not 'specialist' in cancer were not included in these numbers. It also means that specialist nurses spending less than 50% of their time in direct contact with adult cancer patients were not included in these numbers. Full details on inclusion and exclusion criteria can be found in Appendix B.

Summary of data on individuals

Based on the data returned by the 14 NHS Health Boards included in the census, there were 425 Specialist Cancer Nurse posts in Scotland at the time of the census (375 WTE). This number includes both filled and vacant posts, as well as posts for which data was not known. 277 of these posts were full-time posts and 140 were part-time.

Table 1: Specialist Cancer Nurse workforce, number of posts, Scotland 2019

Full-time/ part-time	Number of posts	Percentage
Full-Time (37.5 hours per week)	277	66%
Part-Time (less than 37.5 hours per week)	140	34%
Total	417	100%
Not known	8	

Age

The census showed that 81% (328 filled posts) of Specialist Cancer Nurses were aged 40 or over, and that 45% of the workforce was aged 50 or over (182 filled posts).

Table 2: Specialist Cancer Nurse workforce by age, number of filled posts, Scotland 2019

Age range	Number of posts	Percentage
<30	1	0%
30–39	73	18%
40–49	146	36%
50–59	167	41%
60+	15	4%
Declined	1	0%
Total	403	100%
Vacant posts	13	
Not known	9	

The age profile varies across Cancer Networks. In particular, North Scotland shows a higher than average amount of nurses aged 30–39 compared to the other networks and South and East Scotland displays a higher number of nurses aged 60 and over.

Table 3: Specialist Cancer Nurse workforce by age, Cancer network, number of filled posts Scotland 2019

Cancer network	<30	30–39	40–49	50–59	60+	Declined	Total
North Scotland	0 (0%)	23 (22%)	36 (35%)	41 (40%)	3 (3%)	0 (0%)	103 (100%)
South and East Scotland	0 (0%)	14 (13%)	34 (33%)	46 (44%)	9 (9%)	1 (1%)	104 (100%)
West Scotland	1 (1%)	36 (18%)	76 (39%)	80 (41%)	3 (2%)	0 (0%)	196 (100%)
Total	1 (0%)	73 (18%)	146 (36%)	167 (41%)	15 (4%)	1 (0%)	403 (100%)
Not known							7

Gender

Where gender has been reported, 94% (385 filled posts) of Specialist Cancer Nurse post holders were female.

Table 4: Specialist Cancer Nurse workforce by gender, number of filled posts, Scotland 2019

Gender	Number of posts	Percentage
Female	385	94%
Male	24	6%
Total	409	100%
Vacant posts	13	
Not known	3	

Nationality

Where nationality has been reported, 98% (311 filled posts) of Specialist Cancer Nurse post holders were from the UK²⁰.

Table 5: Specialist Cancer Nurse workforce by nationality, number of posts, Scotland 2019

Nationality	Number of posts	Percentage
UK	311	98%
EU excluding the UK	5	2%
Rest of the world	0	0%
Total	316	100%
Vacant posts	13	
Not known	96	

Summary of data on posts

Part-time roles

Part-time roles were common among Specialist Cancer Nurses, in particular in South and East Scotland. However, the majority of posts were full-time across all Cancer Networks.

Table 6: Specialist Cancer Nurse workforce, full-time/part-time by Cancer network, number of posts, Scotland 2019

Cancer network	Full-Time (37.5 hours per week)	Part-Time (less than 37.5 hours per week)	Total
North Scotland	70 (67%)	37 (33%)	107 (100%)
South and East Scotland	61 (55%)	50 (45%)	111 (100%)
West Scotland	146 (73%)	53 (27%)	199 (100%)
Total	277 (67%)	140 (33%)	417 (100%)
Not known			8

²⁰ Data on nationality was missing for 23% of posts, with several Health Boards reporting that they do not collect this type of data.

Vacancies

The majority of Specialist Cancer Nurse posts were filled, with only 13 posts reported as vacant. The vacancy rate for Specialist Cancer Nurses was 3.1%, which was lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census²¹.

Table 7: Specialist Cancer Nurse workforce by area of practice, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Total	Vacancy rate
Head and Neck	16	1	17	5.9%
Gynaecology	18	1	19	5.3%
Breast	73	3	76	3.9%
Colorectal	52	2	54	3.7%
Urology	35	1	36	2.8%
Haematology	39	1	40	2.5%
Brain/Central Nervous System	8	0	8	0%
HPB	5	0	5	0%
Lung	40	0	40	0%
Malignant Dermatology	8	0	8	0%
Sarcoma	4	0	4	0%
Upper Gastrointestinal	22	0	22	0%
Spans more than one specialty	90	3	93	3.2%
Total	410	12	422	3.1%
Not known	0	1	3	

Vacancy rates vary between Cancer Networks, with the highest rate in South and East Scotland (7%) and the lowest in West Scotland (0.5%).

Table 8: Specialist Cancer Nurse workforce by Cancer network, vacancy rate, number of posts, Scotland 2019

Cancer network	Filled posts	Vacant posts	Total	Vacancy rate
South and East Scotland	106	8	114	7.0%
North Scotland	106	4	110	3.6%
West Scotland	198	1	199	0.5%
Total	410	13	423	3.1%
Not known			2	

21 [ISD, 2019, NHS Scotland Workforce, Quarter ending 30 June 2019.](#)

Area of practice

22% (81 WTE) of Specialist Cancer Nurses were in roles that span more than one speciality, the remaining specialise in specific areas of practice including: breast (18%, 67 WTE), colorectal (12%, 46 WTE), haematology (10%, 37 WTE) and lung (10%, 36 WTE).

Table 9: Specialist Cancer Nurse workforce, area of practice, WTE, Scotland 2019

Area of practice	WTE	Percentage
Breast	67	18%
Colorectal	46	12%
Haematology	37	10%
Lung	36	10%
Urology	35	9%
Upper Gastrointestinal	19	5%
Gynaecology	17	5%
Head and Neck	15	4%
Malignant Dermatology	8	2%
Brain/Central Nervous System	7	2%
HPB	5	1%
Sarcoma	2	1%
Spans more than on speciality	81	22%
Total	374	100%
Not known	1	

The profile of area of practice displays variations across Cancer Networks. In particular, 33% of posts (33 WTE) in North Scotland span more than one specialty compared to 12% (12 WTE) in South and East Scotland. Conversely, there was a higher proportion of nurses specialising in breast as an area of practice in South and East Scotland (24%, 23 WTE) compared to other cancer networks and a higher proportion of nurses in 'haematology' (14%, 25 WTE) in West Scotland.

Table 10: Specialist Cancer Nurse workforce by Cancer Network, area of practice, WTE, Scotland 2019

Area of practice	North Scotland (WTE, %)	South and East Scotland (WTE, %)	West Scotland (WTE, %)
Breast	14 (14%)	23 (24%)	30 (17%)
Colorectal	15 (15%)	12 (13%)	19 (10%)
Haematology	6 (7%)	5 (6%)	25 (14%)
Lung	7 (7%)	8 (8%)	21 (11%)
Urology	9 (9%)	14 (15%)	12 (7%)
Upper Gastrointestinal	2 (2%)	3 (3%)	13 (7%)
Gynaecology	3 (3%)	5 (5%)	9 (5%)
Head and Neck	2 (2%)	5 (5%)	8 (5%)
Malignant Dermatology	3 (3%)	2 (2%)	3 (2%)
Brain/Central Nervous System	2 (2%)	2 (3%)	2 (1%)
HPB	2 (2%)	3 (3%)	0 (0%)
Sarcoma	0 (0%)	0 (0%)	2 (1%)
Spans more than one specialty	33 (33%)	12 (12%)	37 (20%)
Total	98 (100%)	95 (100%)	181 (100%)

Job title

Specialist Cancer Nurses have a wide range of job titles. The most common was Clinical Nurse Specialists (50%, 186 WTE). The next most common job titles were Advanced Clinical Nurse Specialist (14%, 53 WTE) and Cancer Nurse Specialist (11%, 41 WTE). It should be noted that senior leadership roles who spent less than 50% of time in direct contact with patients were excluded from the census and this may have implications for the WTE figures reported in Table 11.

Table 11: Specialist Cancer Nurse workforce, job title, WTE, Scotland 2019

Job title	WTE	Percentage
Clinical Nurse Specialist	186	50%
Advanced Clinical Nurse Specialist	53	14%
Cancer Nurse Specialist	41	11%
Advanced Nurse Practitioner	35	9%
Nurse Specialist	32	8%
Nurse Practitioner	15	4%
Lead Nurse	4	1%
Senior Cancer Nurse Specialist	4	1%
Nurse Consultant	2	0%
Senior Staff Nurse	1	0%
Other	3	1%
Total	375	100%

Agenda for Change Banding

56% (210 WTE) of Specialist Cancer Nurse posts were at Agenda for Change Band 7. It is important to note that the census only includes posts with a document training record which declares them a specialist in cancer care and which spend over 50% of time in direct patient contact. This should be considered when looking at Table 12 below.

Table 12: Specialist Cancer Nurse workforce, Agenda for Change Banding, WTE, Scotland 2019

Agenda for Change Banding	WTE	Percentage
5	7	2%
6	144	39%
7	210	56%
8A	10	3%
8B	3	1%
Total	373	100%
Not known	2	

The Banding profile between Cancer Networks was mostly similar, displaying only slight variations.

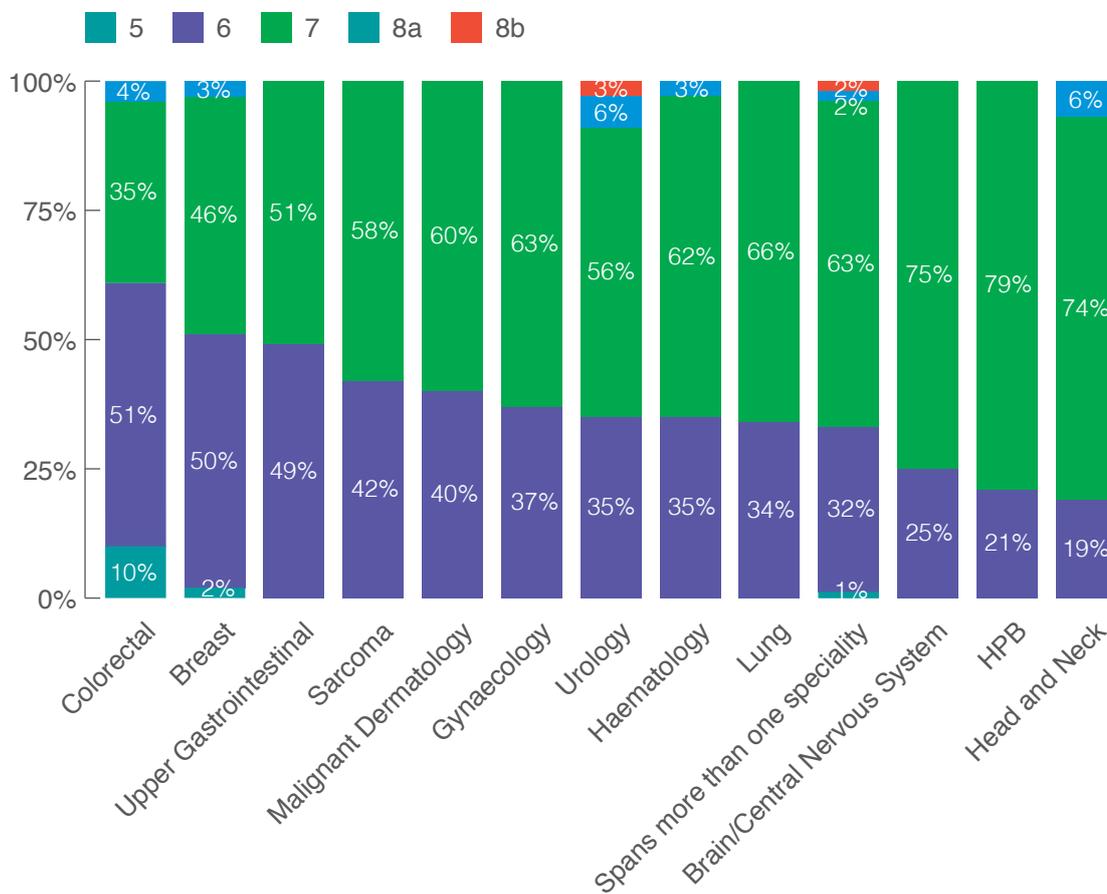
Table 13: Specialist Cancer Nurse workforce by Cancer network, Agenda for Change Banding, WTE, Scotland 2019

Cancer Network	5 (WTE, %)	6 (WTE, %)	7 (WTE, %)	8A (WTE, %)	8B (WTE, %)	Total
North Scotland	1 (1%)	39 (40%)	51 (52%)	6 (6%)	1 (1%)	97 (100%)
South and East Scotland	5 (5%)	39 (41%)	49 (52%)	1 (1%)	0 (0%)	94 (100%)
West Scotland	1 (1%)	67 (37%)	110 (61%)	3 (2%)	1 (1%)	181 (100%)
Total	7 (2%)	145 (39%)	210 (56%)	10 (3%)	2 (1%)	373 (100%)
Not known						2

Area of practice and Agenda for Change Banding

There was variation in the distribution of posts across Agenda for Change Bands according to areas of practice. The areas of practice with the highest proportions of Specialist Cancer Nurse roles at or above Band 7 were head and neck (81% of WTE), HPB (79% of WTE), and brain/central nervous system (75% of WTE). The areas of practice with the lowest proportions of roles at or above Band 7 were colorectal (39% of WTE) and breast (49% of WTE).

Figure 1: Specialist Cancer Nurse workforce, Agenda for Change Banding, area of practice, WTE, Scotland 2019



Macmillan posts

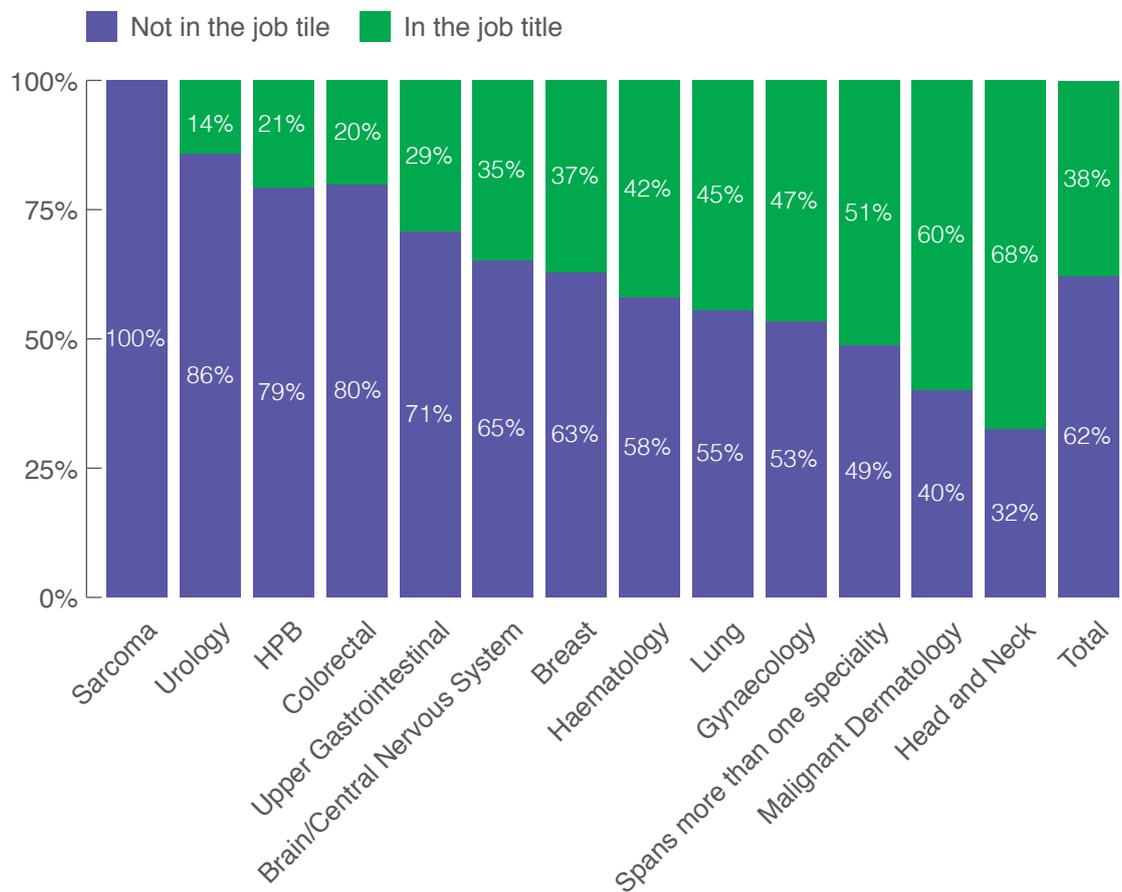
39% of Specialist Cancer Nurses have 'Macmillan' in their job title (144 WTE).

Table 14: Specialist Cancer Nurse workforce, 'Macmillan' posts, WTE, Scotland 2019

Macmillan posts	Filled (WTE, %)	Vacant (WTE, %)	Total
Macmillan in the job title	141 (98%)	3 (2%)	144 (100%)
Macmillan not in the job title	221 (97%)	7 (3%)	228 (100%)
Total	362 (98%)	10 (2%)	372 (100%)
Not known			3

The highest proportion of nurses with 'Macmillan' in the job title were in head and neck (68% of WTE) and malignant dermatology (60% of WTE).

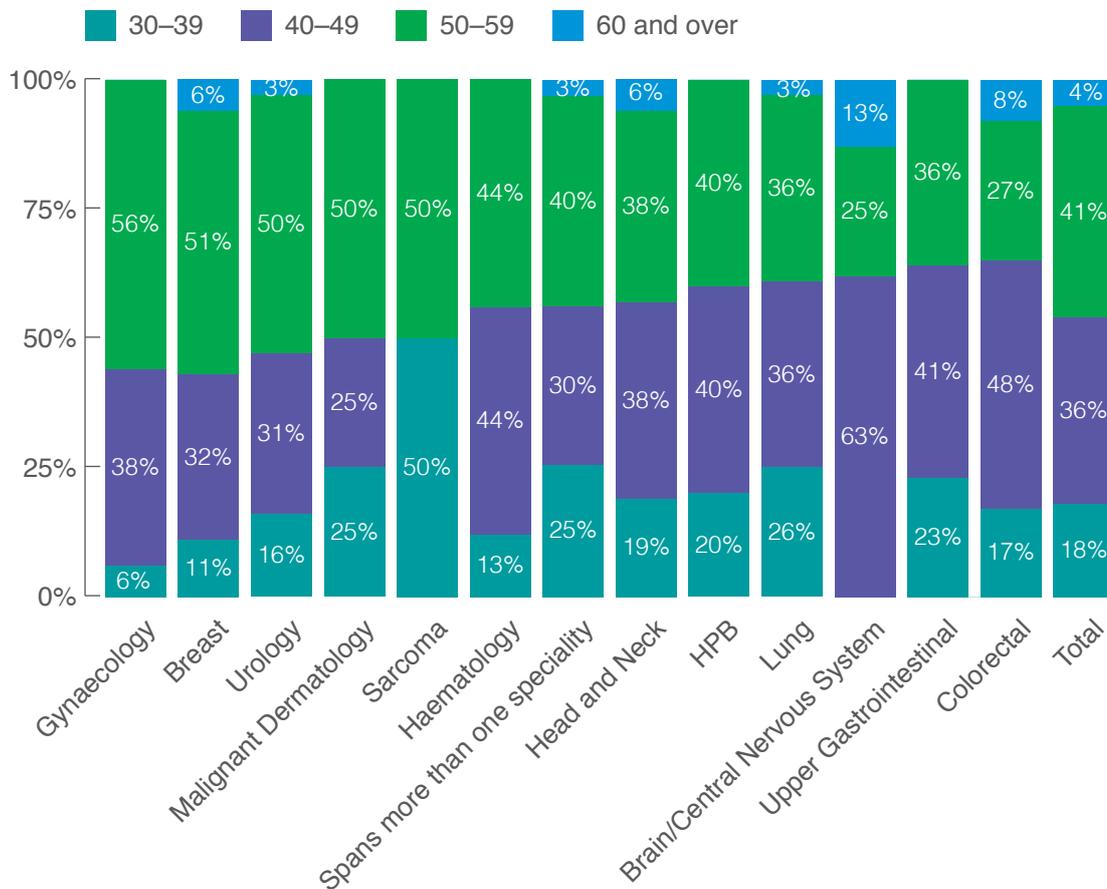
Figure 2: Specialist Cancer Nurse workforce, 'Macmillan' posts, area of practice, WTE, Scotland 2019



Age and area of practice

The age of the Specialist Cancer Nurse workforce varies across the areas of practice. Over half of post-holders were aged over 50 for gynaecology (56%), breast (57%), urology (53%), malignant dermatology (50%), and sarcoma (50%). Areas of practice where the majority of the workforce was aged under 50 include colorectal (65%), upper gastrointestinal (64%), brain/central nervous system (63%), and lung (62%).

Figure 3: Specialist Cancer Nurse workforce by area of practice, age, number of filled posts, Scotland 2019



NB: 6% of posts in 'gynaecology' declined to provide age

Setting and place of care

35% (128 WTE) of the Specialist Cancer Nurse roles were based in cancer units and 17% (62 WTE) were in cancer centres. The remaining part of the workforce is in 'non cancer specific setting' (49%, 180 WTE). Most care was delivered in hospital settings, with 64% (234 WTE) of the workforce operating in outpatient departments, 27% (98 WTE) in inpatient departments, and 5% (19 WTE) in day units.

Table 15: Specialist Cancer Nurse workforce, place and setting of care, WTE, Scotland 2019

Place where the post holder delivers care	Cancer unit	Cancer centre	Non cancer specific setting	Total
DayCare or DayUnit	9 (49%)	6 (31%)	4 (20%)	19 (100%)
Health clinic or centre	0 (0%)	0 (0%)	7 (100%)	7 (100%)
Hospital outpatient	72 (31%)	46 (19%)	116 (50%)	234 (100%)
Inpatient	44 (45%)	11 (11%)	43 (44%)	98 (100%)
Patient home	2 (18%)	0 (0%)	10 (82%)	12 (100%)
Total	128 (35%)	62 (17%)	180 (49%)	370 (100%)
Not known				5

Ratio of cancer incidence and cancer prevalence to Specialist Cancer Nurse posts, and by Cancer Network

It should be noted that the following mapping of WTE onto new cancer cases (incidence in 2017) and onto the number of people living up to two years post a cancer diagnosis (two-year prevalence in 2017), is a crude measure and does not highlight guidance on caseloads, but merely demonstrates variation.

Table 16: Ratio of cancer incidence and cancer two-year prevalence to posts by area of practice, WTE, Scotland 2019

Area of practice ²²	WTE in 2019	Cancer incidence 2017 ²³	Cancer diagnosis per WTE	Two-year prevalence 2017 ²⁴	Two-year prevalence per WTE
Urology	35	6,753	193	8,846	253
Upper Gastrointestinal	19	3,245	173	2,321	123
Malignant Dermatology	8	1,229	164	2,087	278
Lung	36	5,618	157	3,848	107
Gynaecology	17	1,978	115	2,873	168
Head and Neck	15	1,579	103	2,101	136
Sarcoma	2	243	101	326	136
Colorectal	46	3,942	86	5,006	109
Breast	67	5,222	78	7,706	115
Brain/Central Nervous System	7	477	72	439	67
Haematology	37	2,397	65	3,264	89

The highest ratio of cancer incidence to WTE post was highest for Upper Gastrointestinal in North of Scotland (393) and it was lowest for haematology in West Scotland (43). The only cases in Sarcoma were registered in West Scotland, where the incidence was 41 to each WTE post.

22 The areas of practice included in the census have been mapped onto cancer types that are believed to be treated by each type of nurse. For incidence the cancers are defined as breast (with in-situ C50,D05), brain/centralnervous system (C47,C70–C72,C75), gynaecology (C51–C58), urology (including prostate and testicular (C60–C68) and in situ of other and unspecified sites (D09)), colorectal (including anus C18–21), lung (all respiratory C33–C34, C37–C39, C45), head and neck (including thyroid C00–C14, C30–C32,C73), haematology (C81–C85,C88,C90–C96), sarcoma (C40–C41,C46,C48–C49), malignant melanoma (C43) and upper gastrointestinal (C15–C16, C22–C25). Cancer prevalence data is grouped similarly, except that breast does not include in-situ (D05) and urology does not include in situ of other and unspecified sites (D09).

23 Scottish Cancer Registry, ISD. Incidence of cancer in residents of Scotland and NHS Regions. Extracted August 2019.

24 Scottish Cancer Registry, ISD. Number of people diagnosed in 2016 to 2017 who were alive on the 31 December 2017 (prevalence), Scotland and NHS Regions. Extracted August 2019.

Table 17: Ratio of cancer incidence (2017) by area of practice and Cancer Network to WTE posts, Scotland 2019

Area of practice	North Scotland (Cases/WTE)	South and East Scotland (Cases/WTE)	West Scotland (Cases/WTE)
Upper Gastrointestinal	393	262	113
Urology	210	138	244
Lung	171	184	141
Malignant Dermatology	132	161	192
Gynaecology	163	106	103
Head and Neck	175	86	95
Haematology	100	132	43
Colorectal	73	84	97
Breast	102	62	79
Brain/Central Nervous System	63	53	106
Sarcoma			41

ADULT CHEMOTHERAPY NURSES



This section describes the Chemotherapy Nurse workforce in Scotland and 516 WTE. These nurses were on Agenda for Change Bands 5 to 9 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. It also includes post-holders who were in ambulatory/outpatient chemotherapy units. Full details on inclusion and exclusion criteria can be found in Appendix B.

Summary of data on individuals

There were 585 Adult Chemotherapy Nurse posts in Scotland. This number includes both filled and vacant posts, as well as posts where data is not known. 59% (342 posts) of posts were full-time and 41% (238 posts) were part-time.

Table 18: Chemotherapy Nurse workforce, number of posts, Scotland 2019

Full-time/ part-time	Number of posts	Percentage
Full-Time (37.5 hours per week)	342	59%
Part-Time (less than 37.5 hours per week)	238	41%
Total	580	100%
Not known	5	

Age

The census showed that the half of Adult Chemotherapy Nurses were aged under 40 (51%, 288 filled posts).

Table 19: Chemotherapy Nurse workforce by age, number of filled posts, Scotland 2019

Age range	Number of posts	Percentage
<30	101	18%
30–39	187	33%
40–49	142	25%
50–59	120	21%
60+	16	3%
Declined	3	1%
Total	569	100%
Vacant posts	14	
Not known	2	

The age profile varies across Cancer Networks. In particular, there was a higher than average proportion of nurses aged 40–49 in North Scotland compared to the other Networks.

Table 20: Chemotherapy Nurse workforce by age, Cancer network, number of filled posts Scotland 2019

Cancer network	<30	30–39	40–49	50–59	60+	Declined	Total
North Scotland	11 (17%)	18 (28%)	23 (36%)	12 (19%)	0 (0%)	0 (0%)	64 (100%)
South and East Scotland	28 (14%)	74 (38%)	47 (24%)	40 (20%)	4 (2%)	3 (2%)	196 (100%)
West Scotland	62 (20%)	95 (31%)	72 (23%)	68 (22%)	12 (4%)	0 (0%)	309 (100%)
Total	101 (18%)	187 (33%)	142 (25%)	120 (21%)	16 (3%)	3 (1%)	569 (100%)
Not known							2

Gender

96% (545 filled posts) of Adult Chemotherapy Nurse post holders were female.

Table 21: Chemotherapy Nurse workforce by gender, number of filled posts, Scotland 2019

Gender	Number of posts	Percentage
Female	545	96%
Male	25	4%
Total	570	100%
Vacant posts	14	
Not known	1	

Nationality

Where nationality was reported, 100% (404 filled posts) of Adult Chemotherapy Nurse post holders were from the UK. Data on nationality was missing for 34% of posts, with several health boards reporting that they do not collect this type of data.

Table 22: Chemotherapy Nurse workforce by nationality, number of posts, Scotland 2019

Nationality	Number of posts	Percentage
UK	404	100%
EU excluding the UK	1	0%
Rest of the world	1	0%
Total	406	100%
Vacant posts	14	
Not known	165	

Summary of data on posts

Part-time roles

Part-time roles were common among Adult Chemotherapy Nurses, in particular in South and East Scotland where 52% (106 posts) of all posts were part-time roles.

Table 23: Chemotherapy Nurse workforce, full-time/part-time by Cancer network, number of posts, Scotland 2019

Cancer network	Full-Time (37.5 hours per week)	Part-Time (less than 37.5 hours per week)	Total
North Scotland	40 (62%)	25 (38%)	65 (100%)
South and East Scotland	96 (48%)	106 (52%)	202 (100%)
West Scotland	206 (66%)	107 (34%)	313 (100%)
Total	342 (59%)	238 (41%)	580 (100%)
Not known			5

Vacancies

The vast majority of Adult Chemotherapy Nurse posts were filled, with only 14 posts reported as vacant. The vacancy rate for Adult Chemotherapy Nurses was 2.4%, which was lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census²⁵.

Table 24: Chemotherapy Nurse workforce by area of practice, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Total	Vacancy rate
Spans more than one speciality	500	13	513	2.5%
Haematology	70	1	71	1.4%
Total	570	14	584	2.4%
Not known			1	

Vacancy rates varied between Cancer Networks, with the highest rate in South and East Scotland (4.8%) and no vacancies recorded in North Scotland.

Table 25: Chemotherapy Nurse workforce by Cancer network, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Total	Vacancy rate
North Scotland	64	0	64	0%
South and East Scotland	197	10	207	4.8%
West Scotland	309	4	313	1.3%
Total	570	14	584	2.4%
Not known			1	

Area of practice

The vast majority of Adult Chemotherapy Nurses span more than one specialty role (88%, 455 WTE). The remaining part of the workforce specialises in haematology (12%, 62 WTE).

Table 26: Chemotherapy Nurse workforce, area of practice, WTE, Scotland 2019

Area of practice	WTE	Percentage
Spans more than one speciality	455	88%
Haematology	62	12%
Total	516	100%

25 [ISD, 2019, NHS Scotland Workforce, Quarter ending 30 June 2019.](#)

Job title

Adult Chemotherapy Nurses have a wide range of job titles. However, the vast majority of nurses were Staff Nurses (74%, 385 WTE). The next most common job title was Charge Nurse (12%, 63 WTE).

Table 27: Chemotherapy Nurse workforce, job title, WTE, Scotland 2019

Job Title	WTE	Percentage
Staff Nurse	385	74%
Charge Nurse	63	12%
Chemotherapy Nurse	25	5%
Clinical Nurse Specialist	13	3%
Advanced Nurse Practitioner	11	2%
Chemotherapy Sister	9	2%
Nurse Consultant	2	0%
Nurse Specialist	1	0%
Other	8	2%
Total	516	100%

Agenda for Change Banding

72% (370 WTE) of Adult Chemotherapy Nurse posts were at Agenda for Change Band 5.

Table 28: Chemotherapy Nurse workforce, Agenda for Change Banding, WTE, Scotland 2019

Agenda for Change Banding	WTE	Percentage
5	370	72%
6	99	19%
7	45	9%
8A	2	0%
Total	516	100%

Compared to the other Cancer Networks, North Scotland has a lower than average portion of the workforce at Band 5 (53% compared to a 72% average) and a higher than average proportion of the workforce at Band 7 (16% compared to a 9% average).

Table 29: Chemotherapy Nurse workforce by Cancer network, Agenda for Change Banding, WTE, Scotland 2019

Cancer Network	5 (WTE, %)	6 (WTE, %)	7 (WTE, %)	8A (WTE, %)	Total
North Scotland	30 (53%)	17 (30%)	9 (16%)	1 (2%)	56 (100%)
South and East Scotland	120 (68%)	40 (23%)	16 (9%)	1 (1%)	177 (100%)
West Scotland	221 (78%)	42 (15%)	21 (7%)	0 (0%)	283 (100%)
Total	370 (72%)	99 (19%)	45 (9%)	2 (0%)	516 (100%)

Macmillan posts

4% of Adult Chemotherapy Nurses have 'Macmillan' in their job title.

Table 30: Chemotherapy Nurse workforce, 'Macmillan' posts, WTE, Scotland 2019

Macmillan posts	Filled (WTE, %)	Vacant (WTE, %)	Total
Macmillan not in the job title	483 (97%)	13 (3%)	496 (100%)
Macmillan in the job title	20 (100%)	0 (0%)	20 (100%)
Not known			1
Total	503 (97%)	13 (3%)	516 (100%)

SPECIALIST PALLIATIVE CARE NURSES



This section describes the Specialist Palliative Care Nurses working in cancer workforce in Scotland. These nurses were on Agenda for Change Bands 5 to 8 and spend over 50% of their time directly supporting adults living with cancer.

To be included in the census, each nurse must have been a registered specialist in palliative care, be employed by the NHS and spend at least 50% of their time in direct person to person activity with adult cancer patients. This means that nurses who spend a lot of time with cancer patients but were not registered as 'palliative specialist' were not included in these numbers. It also means that Specialist Palliative Care Nurses spending less than 50% of their time in direct contact with patients were not included in these numbers. Full details on inclusion and exclusion criteria can be found in Appendix B.

Summary of data on individuals

Based on the data returned by the 14 NHS Health Boards, there were 150 Specialist Palliative Care Nurse posts in Scotland and 130 WTE at the time of the census. This number includes both filled and vacant posts. 60% of these posts were full-time and 40% were part-time.

Table 31: Specialist Palliative Care Nurse workforce, number of posts, Scotland 2019

Full-time/ part-time	Number of posts	Percentage
Full-Time (37.5 hours per week)	89	60%
Part-Time (less than 37.5 hours per week)	60	40%
Total	149	100%
Not known	1	

Age

Where data was available, the census showed that 74% (110 filled posts) of Specialist Palliative Care Nurses were aged over 40 and out of these 39% (58 filled posts) were aged over 50.

Table 32: Specialist Palliative Care Nurse workforce by age, number of filled posts, Scotland 2019

Age range	Number of posts	Percentage
<30	5	3%
30–39	33	22%
40–49	52	35%
50–59	49	33%
60+	9	6%
Total	148	100%
Vacant posts	1	
Not known	1	

Age profiles for the workforce vary across Cancer Networks, with an older workforce evident in North Scotland (60%, 26 posts over 50) compared to the other Networks.

Table 33: Specialist Palliative Care Nurse workforce by age, Cancer network, number of filled posts Scotland 2019

Cancer network	<30	30–39	40–49	50–59	60+	Declined	Total
North Scotland	0 (0%)	5 (12%)	12 (28%)	23 (53%)	3 (7%)	0 (0%)	43 (100%)
South and East Scotland	5 (7%)	17 (23%)	27 (37%)	18 (25%)	5 (7%)	0 (0%)	72 (100%)
West Scotland	0 (0%)	11 (33%)	13 (39%)	8 (24%)	1 (3%)	0 (0%)	33 (100%)
Total	5 (3%)	33 (22%)	52 (35%)	49 (33%)	9 (6%)	0 (0%)	148 (100%)
Not known/ Vacant							2

Gender

95% (141 filled posts) of Specialist Palliative Care Nurse post holders were female.

Table 34: Specialist Palliative Care Nurse workforce by gender, number of filled posts, Scotland 2019

Gender	Number of posts	Percentage
Female	141	95%
Male	7	5%
Total	148	100%
Vacant posts	1	
Not known	1	

Nationality

Where nationality was reported, 99% (144 filled posts) of Specialist Palliative Care Nurse post holders were from the UK.

Table 35: Specialist Palliative Care Nurse workforce by nationality, number of posts, Scotland 2019

Nationality	Number of posts	Percentage
UK	144	99%
EU excluding the UK	2	1%
Total	146	100%
Vacant posts	1	
Not known	3	

Summary of data on posts

All Specialist Palliative Care Nurses worked across more than one cancer speciality.

Part-time roles

Part-time roles were common among Specialist Palliative Care Nurses, in particular in South and East Scotland (44%, 32 posts). However, over half (60%) of the workers held full-time posts across all Cancer Networks.

Table 36: Specialist Palliative Care Nurse workforce, full-time/part-time by Cancer network, number of posts, Scotland 2019

Cancer network	Full-Time (37.5 hours per week)	Part-Time (less than 37.5 hours per week)	Total
North Scotland	28 (64%)	16 (36%)	44 (100%)
South and East Scotland	40 (56%)	32 (44%)	72 (100%)
West Scotland	21 (64%)	12 (36%)	33 (100%)
Total	89 (60%)	60 (40%)	149 (100%)
Not known			1

Vacancies

The majority of Specialist Palliative Care Nurse posts were filled, with only 1 post reported as vacant. The vacancy rate for Specialist Palliative Care Nurses was 0.7%, which was lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census²⁶.

Table 37: Specialist Palliative Care Nurse workforce by area of practice, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Total	Vacancy rate
Spans more than one speciality	148	1	149	0.7%
Total	148	1	149	0.7%
Not known			1	

The only vacancy registered for Specialist Palliative Care Nurses was in North Scotland.

Table 38: Specialist Palliative Care Nurse workforce by Cancer network, vacancy rate, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Total	Vacancy rate
North Scotland	43	1	44	2.3%
South and East Scotland	72	0	72	0%
West Scotland	33	0	33	0%
Total	148	1	149	0.7%
Not known			1	

26 [ISD, 2019, NHS Scotland Workforce, Quarter ending 30 June 2019.](#)

Job title

Specialist Palliative Care Nurses have a range of job titles; however, the majority of nurses were Clinical Nurse Specialists (53%, 69 WTE). The next most common job title was Senior Staff Nurse (29%, 37 WTE).

Table 39: Specialist Palliative Care Nurse workforce, job title, WTE, Scotland 2019

Job Title	WTE	Percentage
Clinical Nurse Specialist	69	53%
Senior Staff Nurse	37	29%
Nurse Practitioner	7	5%
Nurse Specialist	6	4%
Lead Nurse	2	2%
Other	9	7%
Total	130	100%

Agenda for Change Banding

It was common for Specialist Palliative Care Nurses to be at Agenda for Change Band 6 (41%, 53 WTE) and Band 7 (35%, 45 WTE).

Table 40: Specialist Palliative Care Nurse workforce, Agenda for Change Banding, WTE, Scotland 2019

Agenda for Change Banding	WTE	Percentage
5	29	22%
6	53	41%
7	45	35%
8B	2	2%
Total	129	100%
Not known	1	

The Banding profile varies between Cancer Networks, with South and East Scotland having a prevalence of Band 5 posts (47%, 29 WTE) whereas the other Networks had no posts in this Band.

Table 41: Specialist Palliative Care Nurse workforce by Cancer network, Agenda for Change Banding, WTE, Scotland 2019

Cancer Network	5 (WTE, %)	6 (WTE, %)	7 (WTE, %)	8b (WTE, %)	Total
North Scotland	0 (0%)	17 (42%)	20 (52%)	2 (6%)	39 (100%)
South and East Scotland	29 (47%)	22 (36%)	10 (16%)	0 (0%)	61 (100%)
West Scotland	0 (0%)	14 (49%)	15 (51%)	0 (0%)	29 (100%)
Total	29 (23%)	53 (41%)	45 (35%)	2 (2%)	129 (100%)
Not known					1

Macmillan posts

57% (74 WTE out of 129 Total WTE) Specialist Palliative Care Nurses have 'Macmillan' in their job title.

Table 42: Specialist Palliative Care Nurse workforce, 'Macmillan' posts, WTE, Scotland 2019

Macmillan posts	Filled (WTE, %)	Vacant (WTE, %)	Total
Macmillan in the job title	73 (99%)	1 (1%)	74 (100%)
Macmillan not in the job title	55 (100%)	0 (0%)	55 (100%)
Total	128 (99%)	1 (1%)	129 (100%)
Not known			1



CANCER SUPPORT WORKERS

This section describes the Cancer Support Workers workforce in Scotland.

These nurses were on Agenda for Change Bands 3 and 4 and spend over 50% of their time directly supporting adults living with cancer. Administrative roles, Band 2 Support Workers and Band 2 healthcare assistants have not been included in these numbers. **Improving the Cancer Journey (ICJ) Link Workers were not included in this section and are described in the following section.** Full details on inclusion and exclusion criteria can be found in Appendix B.

Summary of data on individuals

Based on the data returned by the 14 NHS Health Boards, there were 101 Cancer Support Worker posts in Scotland at the time of the census and 88 WTE. This number includes both filled and vacant posts. 59% (59 posts) were full-time and 41% (41 posts) were part-time. Data on WTE was missing for 1 post. This post has not been included in the WTE analysis, resulting in a total of 86 WTE posts in Scotland.

Table 43: Cancer Support Worker workforce, number of posts, Scotland 2019

Full-time/ part-time	Number of posts	Percentage
Full-Time (37.5 hours per week)	59	59%
Part-Time (less than 37.5 hours per week)	41	41%
Total	100	100%
Not known	1	

Age

The census showed that 57% (55 filled posts) of Cancer Support Workers were aged over 50 and the average age across the workforce was 48.

Table 44: Cancer Support Worker workforce by age, number of filled posts, Scotland 2019

Age range	Number of posts	Percentage
<30	8	8%
30–39	11	11%
40–49	22	23%
50–59	37	38%
60+	18	19%
Declined	1	1%
Total	97	100%
Vacant post	2	
Not known	2	

Age profiles for the workforce vary across Cancer Networks, with an older workforce concentrated in West Scotland (61%, 45 posts over 50) compared to the other Networks.

Table 45: Cancer Support Worker workforce by age, Cancer network, number of filled posts Scotland 2019

Cancer network	<30	30–39	40–49	50–59	60+	Declined	Total
North Scotland	1 (8%)	3 (23%)	3 (23%)	6 (46%)	0 (0%)	0 (0%)	13 (100%)
South and East Scotland	1 (10%)	0 (0%)	4 (40%)	3 (30%)	1 (10%)	1 (10%)	10 (100%)
West Scotland	6 (8%)	8 (11%)	15 (20%)	28 (38%)	17 (23%)	0 (0%)	74 (100%)
Total	8 (8%)	11 (11%)	22 (23%)	37 (38%)	18 (19%)	1 (1%)	97 (100%)
Not known							1

Gender

95% (94 filled posts) of Cancer Support Workers were female.

Table 46: Cancer Support Worker workforce by gender, number of filled posts, Scotland 2019

Gender	Number of posts	Percentage
Female	94	95%
Male	5	5%
Total	99	100%
Not known	2	

Nationality

Where nationality was reported, 100% (82 filled posts) of Cancer Support Workers were from the UK.

Table 47: Cancer Support Worker workforce by nationality, number of posts, Scotland 2019

Nationality	Number of posts	Percentage
UK	82	100%
Total	82	100%
Vacant post	2	
Not known	17	

Summary of data on posts

Part-time roles

Part-time posts were common among the Cancer Support Workers workforce. However, the majority of posts were full-time across all Cancer Networks.

Table 48: Cancer Support Worker workforce, full-time/part-time by Cancer network, number of posts, Scotland 2019

Cancer network	Full-Time (37.5 hours per week)	Part-Time (less than 37.5 hours per week)	Total
North Scotland	8 (62%)	5 (38%)	13 (100%)
South and East Scotland	6 (56%)	5 (46%)	11 (100%)
West Scotland	45 (59%)	31 (41%)	76 (100%)
Total	59 (59%)	41 (41%)	100 (100%)
Not known			1

Vacancies

The majority of Cancer Support Worker posts were filled with only 2 posts (1 WTE) reported as vacant. The vacancy rate for Cancer Support Workers was 2.0%, which was lower than the Scotland vacancy rate for nursing and midwifery (6.3%) at the time of the census.

Table 49: Cancer Support Worker workforce by area of practice, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Vacancy rate
Colorectal	1	0	0%
Urology	1	0	0%
Upper Gastrointestinal	1	0	0%
Gynaecology	2	0	0%
Breast	1	0	0%
Head and Neck	1	0	0%
Haematology	8	0	0%
Spans more than one speciality	82	2	2.4%
Total	97	2	2.0%
Not known		2	

The only vacancies registered for Cancer Support Workers were in West Scotland.

Table 50: Cancer Support Worker workforce by Cancer network, vacancy rates, number of posts, Scotland 2019

Area of practice	Filled posts	Vacant posts	Vacancy rate
North Scotland	13	0	0.0%
South and East Scotland	12	0	0.0%
West Scotland	74	2	2.6%
Total	99	2	2.0%
Not known		2	

Area of practice

86% (74 WTE) of Cancer Support Workers span more than one specialty role. The remaining part of the Cancer Support Worker workforce specialises in an area of practice, with the main one being haematology (8%, 7 WTE).

Table 51: Cancer Support Worker workforce, area of practice, WTE, Scotland 2019

Area of practice	WTE	Percentage
Haematology	7	8%
Gynaecology	2	2%
Head and Neck	0	0%
Upper Gastrointestinal	1	1%
Urology	1	1%
Breast	0	0%
Colorectal	1	1%
Spans more than one specialty	74	86%
Total	86	100%
Not known	2	

Job title

Support Workers have a wide range of job titles, with the largest proportion working as Healthcare Assistants (72%, 61 WTE).

Table 52: Cancer Support Worker workforce, job title, WTE, Scotland 2019

Job Title	WTE	Percentage
Healthcare Assistant	61	72%
Healthcare Support Worker	7	7%
Clinical Support Worker	6	7%
Support Worker	5	6%
Senior Healthcare Assistant	3	4%
Assistant Practitioner	2	2%
Other	1	1%
Total	86	100%
Not known	2	

Agenda for Change Banding

91% (77 WTE) of Cancer Support Workers were at Agenda for Change Band 3.

Table 53: Cancer Support Worker workforce, Agenda for Change Banding, WTE, Scotland 2019

Agenda for Change Banding	WTE	Percentage
3	77	91%
4	8	9%
Total	86	100%
Not known	2	

The Agenda for Change Banding profile varies between Cancer Networks, with South and East Scotland having all posts at Band 4, whereas the other Networks had all posts at Band 3.

Table 54: Cancer Support Worker workforce by Cancer network, Agenda for Change Banding, WTE, Scotland 2019

Cancer Network	3 (WTE, %)	4 (WTE, %)	Total
North Scotland	11 (100%)	0 (0%)	11 (100%)
South and East Scotland	0 (0%)	8 (100%)	7 (100%)
West Scotland	66 (100%)	0 (100%)	66 (100%)
Total	77 (92%)	8 (8%)	85 (100%)
Not known			3

Macmillan posts

7% (6 WTE) Cancer Support Workers have 'Macmillan' in their job title.

Table 55: Cancer Support Worker workforce, 'Macmillan' posts, WTE, Scotland

Macmillan posts	Filled (WTE, %)	Vacant (WTE, %)	Total
Macmillan not in the job title	78 (99%)	1 (1%)	79 (100%)
Macmillan in the job title	6 (100%)	0 (0%)	6 (100%)
Total	84 (99%)	1 (1%)	85 (100%)
Not known			3

IMPROVING THE CANCER JOURNEY (ICJ) LINK WORKERS



This section describes the Improving the Cancer Journey (ICJ) workforce in Scotland. These posts were on Agenda for Change Bands 3 and 4 and spend over 50% of their time directly supporting adults living with cancer. Administrative roles, Band 2 Support Workers and Band 2 healthcare assistants have not been included in the census.

Full details on inclusion and exclusion criteria can be found in Appendix B.

Summary of data on individuals

Based on the data returned by the four NHS Health Boards²⁷ employing ICJ Link Workers, there were 17 ICJ Link Worker posts in Scotland. This number includes both filled and vacant posts at the time of the census. 12 (71%) of these posts were full-time and 5 posts (29%) were part-time. This results in a total of 17 WTE ICJ Link Worker posts in Scotland. All ICJ Link Workers included in the census were female, and all posts included in the census were filled.

Table 56: ICJ Link Workers workforce, number of posts, Scotland 2019

Full-time/ part-time	Number of posts	Percentage
Full-Time (37.5 hours per week)	12	71%
Part-Time (less than 37.5 hours per week)	5	29%
Total	17	100%

Age

The census showed that 59% (10 filled posts) of ICJ Link Workers were aged over 40.

Table 57: ICJ Link Workers workforce by age, number of filled posts, Scotland 2019

Age range	Number of posts	Percentage
<30	2	12%
30–39	5	29%
40–49	6	35%
50–59	4	24%
60+	0	0%
Total	17	100%

Age profiles for the workforce were similar across Cancer Networks.

Table 58: Cancer Support Worker workforce by age, Cancer network, number of filled posts Scotland 2019

Cancer network	<30	30–39	40–49	50–59	Total
North Scotland	1 (50%)	0 (0%)	1 (50%)	0 (0%)	2 (100%)
South and East Scotland	0 (0%)	3 (43%)	2 (29%)	2 (29%)	7 (100%)
West Scotland	1 (13%)	2 (25%)	3 (38%)	2 (25%)	8 (100%)
Total	2 (12%)	5 (29%)	6 (35%)	4 (24%)	17 (100%)

27 NHS Tayside, NHS Fife, NHS Greater Glasgow and Clyde, NHS West Dunbartonshire.

Summary of data on posts

Part-time roles

The majority of ICJ Link Worker posts were full-time across all Cancer Networks.

Table 59: Cancer Support Worker workforce, full-time/part-time by Cancer network, number of posts, Scotland 2019

Cancer network	Full-Time (37.5 hours per week)	Part-Time (less than 37.5 hours per week)	Total
North Scotland	2 (100%)	0 (0%)	2 (100%)
South and East Scotland	4 (57%)	3 (43%)	7 (100%)
West Scotland	6 (75%)	2 (25%)	8 (100%)
Total	12 (71%)	5 (29%)	17 (100%)

Job title

ICJ Link Workers have a wide range of job titles, with a large proportion working as Holistic Needs Assessment Officers (48%, 8 WTE), followed by Link Workers (19%, 3 WTE).

Table 60: ICJ Link Worker workforce, job title, WTE, Scotland 2019

Job Title	WTE	Percentage
Holistic Needs Assessment Officer	8	48%
Link Worker	3	19%
Support Facilitator	2	12%
W4U Officer-Macmillan ICJ	2	11%
Local area Co-ordinator	2	10%
Total	16	100%

Macmillan posts

A majority (94%, 15 WTE) of ICJ Link Workers have 'Macmillan' in their job title.

Table 61: ICJ Link Worker workforce, 'Macmillan' posts, filled WTE, Scotland 2019

Macmillan posts	WTE	Percentage
Macmillan in the job title	15	94%
Macmillan not in the job title	1	6%
Total	16	100%



Conclusions and recommendations

Conclusions

This census has provided a snapshot of the adult specialist cancer workforce, with inclusion for the first time of Chemotherapy Nurses, Support Workers, NHS-employed Palliative Care Nurses and cancer specific Link Workers in the community.

The census highlights that there were 1,160 cancer nurse posts in Scotland in 2019, equating to a total of 1,022 WTE. When Support and ICJ Workers are included the total workforce expands to 1,278 (1,126 WTE). The number of Specialist Cancer Nurses counted has grown since our last census in 2014, with an apparent rise from 265 to 375 WTE, however these figures may simply reflect that a higher number of roles were counted within this census rather than demonstrate actual growth in numbers. Of note is that the number of Clinical Nurse Specialists within the 375 WTE figure has risen to 239 from a figure of 180 in 2014. Of these 239 roles, 233 were in scope of the 2014 census. Whilst this is encouraging growth, further work is needed to understand whether any actual growth has matched increased demands on cancer services, or complexity of need.

Whilst the afore-mentioned additional roles were included in this census, other key roles were out of scope of the census. For example, senior nurse leadership roles who spend less than 50% of their time in patient facing activity would not be included but form an important part of the cancer workforce. In addition, there are a growing number of generalist roles across all care settings who support people with cancer, but they would not be within the scope of this census.

Two key findings of the census were the lower than average vacancy rates across specialist cancer nursing roles, and the ageing profile of the specialist cancer nursing workforce. Vacancy rates were at highest 3.1% across the various roles included in the census, compared to a rate of 6.3% for wider nursing and midwifery roles.

Across most roles there were large numbers of staff over 50 years of age, meaning almost half (45%) of the current specialist cancer workforce and two-fifths (39%) of the palliative care workforce could retire over the next 5–10 years. This was particularly true for breast specialist cancer nurses, with almost 57% of nurses aged over 50 years of age. The variation by area in the age profile of the specialist cancer workforce should also be noted. For example, the South & East of Scotland displayed a higher than average rate of Specialist Cancer Nurses aged 60 and over. In addition, the North of Scotland had a higher than average age profile for the Palliative Care workforce, and West Scotland had the highest age profile of Cancer Support Workers.

Whilst it may be expected that senior roles would have an older age profile, robust succession planning will be vital to sustain the current specialist cancer nursing workforce and manage increased demand and complexity. Consideration must also be given to maximising the input of older staff before they leave the profession, ensuring their skills and experience are harnessed and passed on to younger colleagues. The Transforming Roles initiative will go some way towards developing the pipeline of nurses with the right competencies and skills to fill specialist nursing roles as they become vacant, and the Transforming Cancer Care Programme will support the development and integration of skill-mix roles across care settings.

The census also highlighted variation in banding by area of practice and geography. Colorectal and breast Specialist Cancer Nurse roles typically had lower banding than other key areas of practice such as lung and haematology. In addition, the North of Scotland had the highest number of band 8a and 8b Specialist Cancer Nurses. It was notable that the South and East of Scotland had a high proportion of band 5 Specialist Palliative Cancer Nurses, whereas the other two regions had no Specialist Palliative Care nursing roles at band 5. In addition, Cancer Support Workers in the South & East were band 4, whereas they were band 3 in the other two regions. These variances may be explained by the nature of clinical practice or rurality, but may also merit further investigation at a local level.

Another key finding was the variation in ratios of cancer incidence to WTE specialist nursing posts across Scotland and compared to other UK nations. Scotland had consistently higher ratios of cancer incidence to WTE posts than England and Wales for all areas of practice other than breast, with lung cancer ratios having worsened over the past five years. Whilst ratios will vary by tumour type according to clinical need, the variation across geographic areas would merit further investigation.

Macmillan continues to play an important role in developing the cancer workforce and supporting service redesign, integration and the development of new roles. At the time of this census, 39% of Specialist Cancer Nurses and 57% of Specialist Palliative Cancer Nurses had 'Macmillan' in their job title.

On its own the census cannot determine what the ideal cancer workforce should look like in Scotland, however, alongside other evidence it can provide indications as to the action needed to ensure a sustainable workforce is in place for the future.

Recommendations

1. The census will be a useful resource to both Scottish Government and Health Boards alongside other data sources to help inform strategic workforce planning.

At the time of measurement (21st June 2019) the census represents the most comprehensive data set on the specialist cancer nursing workforce in Scotland.

It provides a valuable starting point for those involved in workforce planning to understand and respond to the needs of people with cancer in Scotland. In particular, this data set should be considered at a local level alongside the Chief Nursing Officer's Directorate (CNOD) Transforming Roles Specialist Nursing and Advanced Practice papers, as well as latest Cancer Patient Experience Survey (CPES) data.

2. Further work is needed to support future modelling of the cancer workforce required to meet rising demand as well as more complex needs.

Work is planned as part of the Integrated Health & Social Care Workforce Plan to determine the future shape of the cancer workforce. Future projections should be accompanied by a fully costed implementation plan, and should consider the multi-professional workforce required across the whole pathway and across all care settings, taking into account increased complexity of need as people live longer with cancer, advances in treatments, and whether any actual growth in the workforce has matched increased demand.

This census noted a growing proportion of roles which span more than one cancer specialty and there are roles not in scope of this census which support people with cancer. The Transforming Roles programme of work will go some way to articulating role definitions more clearly. Available evidence should be drawn upon to better understand the impact of multi-professional roles on patient outcomes and experience, including the National Cancer Patient Experience Survey (CPES) which has consistently indicated an improved positive experience for people with cancer who have had access to a CNS role.

3. National approaches are needed to support robust succession planning to ensure there are sufficient nurses with the right competencies and skills to fill vacant specialist roles as they arise.

The census highlights that the cancer workforce is ageing with a significant proportion of staff aged 50 years or over. National approaches will be needed to ensure a sufficient supply of staff throughout the specialist nursing career pathway. This includes ensuring enough staff enter the workforce in the next 3–5 years, supporting the existing workforce to develop their competencies and skills with access to accredited training, and ensuring the experience and knowledge of specialist nurses is retained for those approaching

retirement. National approaches could include supporting more development posts (with academic and clinical supervision in place) in areas where retirements are imminent, and developing a Returners' Initiative for specialist cancer nursing, similar to that set out in the Health & Social Care Workforce Plan. It is also important at a local level to encourage use of Continuing Professional Development (CPD) to support ongoing development of competencies and skills, and to recognise and address barriers to career development, for example financial barriers in moving into higher banded roles.

4. Further work is needed to better understand the variation on ratios of cancer incidence to WTE specialist nursing posts across Scotland and in comparison to other UK nations

Scotland has higher ratios of cancer incidence to WTE post than England and Wales for all areas of practice other than breast. Whilst ratios across all areas of practice except lung have improved significantly since the last census in 2014, particularly in haematology, they remain considerably higher than in England and Wales. Lung cancer is of particular concern, with an already high ratio worsening in the last five years. Whilst ratios will vary by tumour type according to clinical need, there is no national guidance on the ratio of cancer nurse specialist numbers required to respond to the changing landscape of cancer complexity in these roles nationally, but this would be welcomed.

5. Greater emphasis is needed at national level on recruitment and retention, especially in remote and rural areas.

Health Boards in remote & rural areas frequently report challenges in recruiting staff. Longer-term vacancies can have a detrimental impact on the wider team's wellbeing and capacity to provide high quality care. This will be exacerbated in years to come with imminent retirements and gaps in the supply pipeline of candidates with the right competencies and skills to fill specialist roles. A more nationally consistent approach to recruitment will ensure individuals do not experience financial disadvantage when moving to CNS roles and may help to minimise periods of vacancies in remote and rural areas to ensure care for people with cancer remains equitable and accessible.

6. Macmillan and other third sector organisations should consider how they can improve access to free educational resources to support the changing cancer workforce across all care settings.

The census identified 1,160 cancer nurse posts in Scotland in 2019, equating to a total of 1,022 WTE. As the workforce continues to grow and evolve across all care settings, there may be benefits to the wider workforce in accessing the free educational resources available from Macmillan and other third sector organisations.

Appendices

Appendix A

Comparison to Scotland Census 2014

2014	2019
Specialist Cancer Nurses	Cancer, palliative, chemotherapy speciality nurses, Support Workers and Improving the Cancer Journey workers
Cancer Network	Cancer network/health board
Provider organisation	
Area of Practice	Area of practice
Brain/central nervous system	Brain/central nervous system
Breast	Breast
Colorectal	Colorectal
Gynaecology	Gynaecology
Haematology	Haematology
Head and neck	Head and neck
Lung	Lung
Malignant dermatology	Malignant dermatology
Sarcoma	Sarcoma
Upper gastrointestinal	Upper gastrointestinal
Urology– prostate only	Urology
Urology– all uro-oncology	HPB
	Not cancer type specific
WTE or contracted hours	Contracted WTE
	Contracted hours per week

2014	2019
<p>Job title</p> <p>Advanced nurse practitioner</p> <p>Clinical Nurse Specialist</p> <p>Nurse consultant</p> <p>Nurse practitioner</p> <p>Nurse specialist</p> <p>Other</p>	<p>Job titles for Specialist Cancer Nurses</p> <p>Advanced Clinical Nurse specialist</p> <p>Advanced nurse practitioner</p> <p>Cancer nurse specialist</p> <p>Clinical nurse specialist</p> <p>Community nurse</p> <p>Lead cancer nurse</p> <p>Lead nurse</p> <p>Modern matron</p> <p>Nurse clinician</p> <p>Nurse consultant</p> <p>Nurse practitioner</p> <p>Nurse specialist</p> <p>Senior Cancer Nurse specialist</p> <p>Senior staff nurse</p> <p>Specialist nurse practitioner</p> <p>Support nurse</p> <p>Unknown</p> <p>Other</p> <p>Other job titles were used for Adult Chemotherapy Nurses, Palliative Specialist Nurses Support and ICJ Worker</p>
Other job title	Other job title

2014	2019
AfC Band	AfC Band
5	5
6	6
7	7
8a	8a
8b	8b
8c	8c
8d	8d
9	9
Declined	Declined
Not known	Unknown
	Additional collection on if role is a developmental role
Gender	Gender
Vacant/Filled	Vacant/filled
	Length of vacancy
Cover for unknown primary	Cover for unknown primary
	Cover for secondary/metastatic disease
Age range	Age range
Under 30	Under 30
30–39	30–39
40–49	40–49
50–59	50–59
60 and over	60 and over
Not known	Declined
	N/A (vacant post)
Macmillan in job title	Macmillan in job title
	Setting
	Place delivering care
	Nationality
	Proportion of time spent supporting people with cancer diagnosis

Inclusion criteria comparison

2014	2019
Treat, support and manage the health concerns of adult cancer patients and work to promote health and wellbeing with the patients they care for (including post holders who perform a role in education, research and audit in adult cancer care)	Treat and manage health concerns and health and wellbeing of adult cancer patients
Deliver predominantly secondary care (not community Nurse Specialists)	Provide secondary and tertiary care in both hospitals and the community
Funded by any source (e.g. NHS, charity, pharmaceutical)	NHS employees only – including those who see private patients being treated in the NHS
Vacant posts as well as those filled on 24 April 2014	Vacant posts as well as those filled on 21 June 2019
Registered (Agenda for Change Bands 5 to 9 only)	Registered (Agenda for Change Bands 5 to 9 only) for specialist nurses
	Spend 50% of their time in direct person to person activity in adult cancer care

Exclusion criteria comparison

2014	2019
Specialise only in chemotherapy, radiotherapy, palliative care, pain management and non-patient facing roles Also, those who work with paediatrics or teenagers and young adults and research nurses	Registered nurses that do not specialise in cancer, provide palliative care to cancer patients or provide chemotherapy in their rotations. Also transport coordinators and research nurses.
Work “as and when required” e.g. Bank and agency staff	Bank and agency staff
Community nurse specialists	Primary care-based staff Hospice-based staff
	Posts that are not NHS employees

Range of ratios of incidence and two-year prevalence per WTE by area of practice, Scotland, 2014

	New cancer cases (incidence) per WTE	People living up to two years post cancer diagnosis (prevalence) per WTE
Brain/central nervous system	129	184
Breast	100	164
Colorectal	117	176
Gynaecology	182	279
Haematology	153	233
Head and neck	140	194
Lung	140	103
Malignant dermatology	222	394
Sarcoma	84	121
Upper gastrointestinal	349	259
Urology	237	380

It should also be noted that the number of WTE is not directly comparable to the [2014 census](#) as the scope differs slightly, however the ratios are still able to demonstrate worsening or improving trends in terms of variation.

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 Excel tool to be completed by each of the 14 NHS Health Boards in Scotland in order to gather a snapshot of the workforce on 21 June 2019.
2. Cognitive testing was carried out with four NHS Health Boards to test accessibility and usability of the tool. Participants provided feedback via a form and short telephone interview.
3. The census tool was circulated on 18 June 2019 with an instruction manual and FAQs on how to use the tool, inclusion/exclusion criteria, and instructions on secure data transfer. To ensure secure data transfer, all NHS Health Boards were instructed on how to use the encryption software 7-Zip. Additionally an information sharing (ISA) agreement was in place between Macmillan, Rocket Science (data processors) and Health Boards.
4. NHS Boards were given until 22 July 2019 to return their data. Continuous support was provided by Rocket Science to assist the completion and return of the data.
5. The study received a 100% response rate, meaning that data for the cancer nurse workforce was collected from all 14 NHS Health Boards in Scotland and data for the ICJ workforce was collected from the four NHS Health Boards employing these workers.
6. Rocket Science audited the data to ensure accuracy and consistency, which included follow-up contact with each Health Board. Data amendments were recorded accordingly.

Analysis and reporting took place in October and November 2019.

Inclusion criteria

For all posts:

- Posts who treat, support and manage the health concerns and health and wellbeing of adult cancer patients
- Posts who spend more than 50% of their time in direct person to person activity in adult cancer care (includes telephone and clinic time)
- NHS employees only – including those seeing private patients treated in NHS
- Provide secondary and tertiary care in both hospitals and the community
- Any post vacant or filled on the 21st of June 2019

Additional criteria:

- **Specialist Adult Cancer Nurses.** Registered specialist in cancer care (with documented training record which declares them a specialist in cancer care) and Bands 5–9.
- **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 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
- **Specialist Palliative Care Nurses.** Registered in palliative care (with documented training record which declares them a specialist in palliative care) and Bands 5–9
- **Support and ICJ Workers.** Unregistered, more than 50% of time spent in person to person activity in adult cancer care, under supervision by a registered cancer professional, Bands 3–4.

Exclusion criteria

- Registered nurses that do not specialise in cancer, provide palliative care to cancer patients or provide chemotherapy in their rotations
- Bank and agency staff
- Primary care-based staff
- Hospice-based staff
- Transport coordinators
- Research nurses
- Posts that are not employees of the NHS
- Nursing associates or trainee nursing associates

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) 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. 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.
- **Whole Time Equivalent:** WTE was missing for 15 posts, eight for Cancer Nurse Specialists, five for Adult Chemotherapy Nurses, one for Palliative Specialist Nurses and one for Cancer Support Workers. A proxy WTE was used for these posts which was calculated using the average WTE for all other posts with the same job title. For instance, for a Clinical Nurse specialist post where WTE was missing a proxy WTE was included which was the average WTE for all Clinical Nurse Specialist posts. The proxy WTE was adopted in order to provide consistency with the England 2017 report structure and format and to ensure that all relevant information on posts was included in the census.

- **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 (no responses). The following table provides a breakdown of the gaps in data:

Variable	Number of posts missing data
Nationality	281
Full-time/ part-time	15
WTE	15
Length of vacancy	13
Age	13
Type of place	12
Vacancies	8
Gender	6
Banding	5
Secondary/ metastatic disease	5
Area of practice	4
Type of setting	4
Macmillan posts	3
Job title	2
Acute oncology	1

In the case of nationality, several Health Boards reported that they do not collect this type of information, which explains the bigger gap in data.

Appendix C

Information collected

For each post the census asked NHS Health Board to collect data on:

Job title/Other job title	Please ignore any reference to the tumour type in the title and include this in the area of practice instead.
Macmillan posts	Does the post have Macmillan in the job title?
Agenda for Change Banding	Please enter Agenda for Change band
Area of practice	Please select the area of practice which the post holder most frequently delivers care
Acute Oncology service (only Cancer Specialist Nurses)	Is this post based on an Acute Oncology Service?
Secondary/metastatic disease	Does the post cover secondary/metastatic disease?
Proportion of time spent supporting people with a cancer diagnosis	Please enter percentage value of working time between 0 and 100%
Type of setting	Select the type of setting for the post
Type of place where the post-holder delivers care	Main location of care where the post holder delivers care / Other key location of care for the post (more than 25% of patient facing time)
Contracted WTE of the post	Please include all contracted hours of the post not just time patient facing activity or cancer care
Contracted hours per week	Please include all contracted hours of the post not just time patient facing activity or cancer care
Filled/Vacant post	Please select if the post was filled or vacant on Friday 21st June 2019
Length of vacancy	Length of time post has been vacant (Please complete for vacant posts)
Gender	To which gender identity does the post holder most identify (Please complete for filled posts)
Age range	Age range of the post holder (Please complete for filled posts)
Nationality	Nationality of the post holder (Please complete for filled posts)
Country	[Filled automatically]
NHS Health Board	[Filled automatically]

Appendix D

Limitations

Potential limitations in the census methodology include:

- Gaps in the data. Several NHS Health Boards may have submitted partial or incomplete data, as detailed in the main report
- Inconsistencies in the data. Despite support and auditing, it was likely that there were still inconsistencies in the data, where different NHS Health Boards 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 (21 June 2019)
- Leadership roles who spent less than 50% of time in direct contact with patients were excluded from the census.

Appendix E

Scotland Census 2019/ISD data

The table below sets out the areas included in the 2019 Census and ISD's data on Clinical Nurse Specialists. It is important to note that the ISD data only reports on the number of Advanced Nurse Practitioners split by Agenda for Change band and the number of Clinical nurse specialists split by age, gender, contract type and speciality.

Data included	ISD	Census 2019
Area of Practice	Cancer	Brain/Central Nervous System
	Cancer – Breast	Breast
	Cancer – Chemotherapy	Colorectal
	Cancer – Colorectal	Gynaecology
	Cancer – Gynaecology Oncology	Haematology
	Cancer – Haematology	Head and Neck
	Cancer – Head and Neck	Lung
	Cancer – Lung	Malignant Dermatology
	Cancer – Neuro-Oncology	Sarcoma
	Cancer – Oncology	Upper Gastrointestinal
	Cancer – Other	Urology
	Cancer – Radiotherapy and Oncology	Spans more than one speciality
	Cancer – Sarcoma	
	Cancer – Skin	
	Cancer – Upper GI	
Cancer – Urology Oncology		
AfC Band	5–9	5–9
Age	Under 20	Under 30
	20–24	30–39
	25–29	40–49
	30–3	50–59
	35–39	60 and over
	40–44	Declined
	45–49	
	50–54	
	55–59	
	60–64	
	65 +	

Data included	ISD	Census 2019
WTE	0–1	0–1
Gender	Male/Female	Male/Female
Headcount	Number of posts	Number of posts
Geographies	Scotland total NHS Regions	Cancer Network NHS Health Board
If the Post Covers	N/A	Cancer of Unknown Primary Secondary/metastatic disease Acute Oncology
Proportion of time spent supporting people with a cancer diagnosis	N/A	Proportion of time spent supporting people with a cancer diagnosis (Must spend at least 50% of time in direct person to person activity)
Setting	N/A	Cancer Unit/Centre Non-Cancer Specific Setting
Place where the post holder delivers care	N/A	Hospital outpatient Patient home Care is concentrated in a single location DayCare or DayUnit Inpatient Care home Health clinic or centre Telephone
Nationality	N/A	UK EU Rest of the World

We're here to help everyone with cancer live life as fully as they can, providing physical, financial and emotional support. So whatever cancer throws your way, we're right there with you.

For information, support or just someone to talk to, call 0808 808 00 00 or visit [macmillan.org.uk](https://www.macmillan.org.uk).

