

Why you should read this article:

- To learn about the experiences of nursing students and newly registered nurses in oncology settings
- To recognise the factors that can influence nurses' recruitment and retention in cancer services
- To consider how the transition from nursing student to newly registered nurse could be improved

Examining how early experiences in oncology settings influence nurses' career decisions

Geraldine O'Gara, Emma Hainsworth, Helen O'Toole et al

Citation

O'Gara G, Hainsworth E, O'Toole H et al (2024) Examining how early experiences in oncology settings influence nurses' career decisions. *Nursing Standard*. doi: 10.7748/ns.2024.e12322

Peer review

This article has been subject to external double-blind peer review and checked for plagiarism using automated software

Correspondence

Geraldine.O'Gara@rmh.nhs.uk
X@emmahainsworth5

Conflict of interest

None declared

Accepted

21 February 2024

Published online

June 2024

Open access

This is an open access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International (CC BY-NC 4.0) licence (see <https://creativecommons.org/licenses/by-nc/4.0/>), which permits others to copy and redistribute in any medium or format, remix, transform and build on this work non-commercially, provided appropriate credit is given and any changes made indicated

Abstract

The transition from nursing student to newly registered nurse is a complex process, and subsequent recruitment to cancer nursing posts can be challenging. This article details a service evaluation that aimed to describe the experiences of nursing students on placement and newly registered nurses or nursing associates working in a specialist cancer centre, and how these experiences might influence their future career aspirations. To gather data, the authors undertook a focus group with nursing students ($n=8$) and interviewed newly registered nurses or nursing associates ($n=19$). The data revealed four themes: navigating the nursing student experience; motivation to work in oncology; transition to staff nurse; and looking ahead. The service evaluation identified that education providers often lack awareness of cancer-specific content and career pathways. It also found that some aspects of cancer care, such as gaining specialist skills in systemic anticancer therapy, require particular attention since they were often anxiety-provoking for newly registered nurses.

Author details

Geraldine O'Gara, nurse researcher, Applied Health Research, The Royal Marsden NHS Foundation Trust, London, England; Emma Hainsworth, nurse researcher, The Royal Marsden NHS Foundation Trust, London, England; Helen O'Toole, lead nurse career pathways, The Royal Marsden NHS Foundation Trust, London, England; Susanne Cruickshank, strategic lead, Applied Health Research, The Royal Marsden NHS Foundation Trust, London, England

Keywords

cancer, cancer care, career pathways, newly qualified nurses, professional, recruitment and retention, students, workforce, workforce planning

Background

At the time of writing, there were almost 3 million people in the UK living with cancer, estimated to rise to 4 million by 2030 (Macmillan Cancer Support 2024), and they require a skilled and knowledgeable cancer workforce that can provide effective treatment, care and support. Nurses comprise around 25% of NHS employees (National Audit Office 2020), and many will care for people with cancer in specialist oncology settings or other areas such as general surgical, medical and palliative care.

The number of nursing graduates had remained stable for many years, but between 2015 and 2022 there was an overall downward trend in these numbers (Statistica 2024). In

addition, nursing student attrition rates in the UK vary, but it has been estimated that one in four students drop out of their nurse education programme before completion (Jones-Berry 2019). Reasons for nursing student attrition include adverse clinical placement experiences and perceptions of a lack of support; for example, inadequate clinical placement planning means that nursing students with families often cannot plan ahead (Health Education England (HEE) 2018). Furthermore, the transition from nursing student to staff nurse is known to be challenging. The reasons for this are complex, but can include dissatisfaction with management and workload pressures, as well as what is known as 'reality shock' – where there is a mismatch between the nursing student's

expectations of professional practice and the reality (Aldosari et al 2021).

A report by Macmillan Cancer Support (2021) focused on the specific challenges of recruiting to cancer specialist nurse posts, for example the specialist training required. Cancer services need to employ nurses at all levels of the workforce, including nursing associates, staff nurses, charge nurses, chemotherapy specialists, researchers and consultant nurses.

While cancer-specific education frameworks and career competencies have been developed (HEE 2021, Royal College of Nursing 2022), there is still a lack of in-depth research into the experiences and perceptions of nursing students and newly registered nurses. Such research might identify factors that could motivate them to join cancer services, or conversely act as barriers to recruitment and retention. Similarly, much of the data concerning nurses' decisions to leave their careers has been quantitative and focused on the measurable outcomes of transition courses such as the preceptorship programme (a period of structured support and transition to assist the newly registered nurse in adapting to their new role and responsibilities) (Aldosari et al 2021). Therefore, the authors undertook a service evaluation to explore this subject area further.

Aim

To describe the experiences of nursing students on placement and newly registered nurses or nursing associates working in a specialist cancer centre, and how these experiences might influence their future career aspirations.

Method

Design, sample and setting

This was a qualitative descriptive evaluation using a focus group and interviews. The project began in April 2022 and was concluded in March 2023. All nursing students, nursing associates and newly registered nurses working in clinical settings at a specialist cancer centre were eligible to take part ($n=32$). Purposive sampling via email was used to approach and recruit the

sample. The project team (the authors of this article) defined a newly registered nurse or nursing associate as having been registered for two years or less.

The specialist cancer centre referred to in this evaluation is located across two sites in south east England and provides cancer services including diagnostics, surgery, chemotherapy, radiotherapy, outpatient services, critical and acute care, and symptom management and support.

Data collection and analysis

Data collection took place between May and August 2022.

Eight nursing students took part in a semi-structured focus group with a schedule of questions including 'What motivated you to work in a cancer placement?' and 'Tell me about your experiences on a cancer placement so far?' The focus group was led by one of the authors (EH) and supported by another author (GO). A total of 19 newly registered nurses or nursing associates took part in semi-structured individual interviews via their choice of means – either telephone, a digital platform or face-to-face. The interview schedule included questions about the participants' perceptions of cancer care such as 'What motivated you to apply for a job in cancer care?' and 'What has been good about your experience as a newly registered nurse in oncology so far?' The interviews were conducted by two of the authors (either EH or GO) and lasted between 20 minutes and 46 minutes (average 29 minutes). There was no established relationship between the members of the project team and the participants before the focus group and interviews.

Data from the focus group and interviews were digitally recorded and transcribed verbatim. The transcripts were thematically analysed manually, which was aided by reflexive notes (Braun and Clarke 2012, 2022). This approach involved two members of the project team (EH and GO) generating initial codes from the transcripts, then reaching coding consensus, agreeing categories and inductively developing broader

themes. To ensure the reliability of the final themes, these were checked against the participants' initial responses and the data were peer reviewed by other members of the project team (Lincoln and Guba 1985).

Ethical considerations

Ethical approval was sought for the project from the local clinical committee for research and it was approved as a service evaluation. The project team also presented the service evaluation to the local specialist cancer centre patient experience group. Written information was sent to the eligible participants and written consent was obtained before any interviews then later confirmed verbally. Participant confidentiality and anonymity were assured and maintained throughout the project, and all the data were securely stored.

Findings

Reporting of the findings was guided by the 32-item checklist of the consolidated criteria for reporting qualitative research (COREQ) (Tong et al 2007). Table 1 provides information about the participants.

Due to the timing of the project, only one nursing associate was available to participate. Therefore, their responses are reported as part of the newly registered nurse findings.

Table 2 shows the themes and sub-themes identified from the data.

Navigating the nursing student experience

Nursing student perspective

The nursing student perspective was provided by current students in the focus group discussion and by newly registered nurses reflecting on their student experiences in the individual interviews. Both of these groups of participants emphasised the lack of specific cancer training in university programmes and challenges with securing an oncology placement, with one participant stating:

'I don't think they do anything at my uni about cancer... everything you learn is on placement. We get to put two requests for our final two

Permission

To reuse this article or for information about reprints and permissions, contact permissions@rcni.com

placements. And it's not guaranteed, but they do the best they can.' (Nursing student 1, focus group)

Nevertheless, most of the participants held the view that a placement at a specialist cancer centre offered the chance to gain skills in caring for people with cancer, as well as opportunities for career progression:

'At the beginning of my training there were references to oncology and the [specialist cancer centre], and the use of up-to-date medicines and the trials that they ran.' (Newly registered nurse 5)

'In terms of career progression, I saw a clearer path than I did in other hospitals, and I liked the complexity of cancer care and I wanted to focus more on that.' (Newly registered nurse 10)

Some participants described a welcoming environment on clinical placements in specialist cancer settings, with support available so that they could provide high levels of care. One participant described their preconceptions about oncology being 'sad', but they found that this was not the reality:

'It's not as sad as I thought, it's quite positive actually... all the nurses are really uplifting with the patients, it's not as negative as I thought it would be.' (Nursing student 1, focus group)

Some of the nursing students had considered their future career direction, and a few had decided on oncology as a specialty. Even those who had not yet decided felt that oncology placements offered beneficial experiences and transferrable skills for their future career, with one commenting:

'You take the training that you got at [the cancer centre], that good standard, and a higher

degree of supervision, and you take that across to other places, and it's just easier.' (Nursing student 3, focus group)

Newly registered nurse perspective and effects of the coronavirus disease 2019 pandemic

The newly registered nurses discussed the lasting effects of the coronavirus disease 2019 (COVID-19) pandemic on their previous learning as nursing students, with each having experienced different opportunities during this time. Those who worked in paid healthcare assistant roles during the pandemic recounted traumatic experiences, with one participant commenting:

'It was very much like the senior consultant on a shift would choose whether the patient would live or die, and it sounds as brutal as it was. You have got no more staff, no more ventilators, and you have got sick patients in beds that cannot maintain saturation. It was really not nice.' (Newly registered nurse 5)

Those participants working in other areas such as units or wards that were not specifically managing patients with COVID-19 described limited opportunities for learning and skills acquisition and a lack of clinical support during the pandemic. For example, one participant commented:

'I was on burns so all we did was dressings. Only now that I am a graduate, I find it difficult to work in surgical [settings] because I don't know how to take out a drain.' (Newly registered nurse 17)

Other participants had their clinical placements stopped altogether during the pandemic and were not offered healthcare assistant roles, with one of them stating:

Key points

- There is a lack of in-depth research into the experiences of nursing students and newly registered nurses which might identify factors that motivate them to join cancer services or act as barriers to recruitment and retention
- A service evaluation was undertaken to describe the experiences of nursing students on placement and newly registered nurses working in a specialist cancer centre, and how these might influence their career aspirations
- Positive placement experiences can influence nursing students' decisions to return to a unit or ward once they have graduated, and having previous clinical experience may positively influence the transition to newly registered nurse
- Newly registered nurses entering their first oncology role may require particular support with delivering systemic anticancer therapy and when being moved to other clinical areas to cover staff shortages

'They pulled us from placement after that couple of weeks, and then it was just kind of home learning.' (Newly registered nurse 4)

Table 2. Themes and sub-themes identified from the data

Themes	Sub-themes
1a. Navigating the nursing student experience: nursing student perspective	<ul style="list-style-type: none"> » Motivation to attend a clinical placement in oncology » Nursing students' experiences of clinical placements » Future nursing career direction
1b. Navigating the nursing student experience: newly registered nurse perspective and effects of the coronavirus disease 2019 (COVID-19) pandemic	<ul style="list-style-type: none"> » Different opportunities » Academic impact
2. Motivation to work in oncology	<ul style="list-style-type: none"> » Personal factors » Experience-based factors » Specialist-centre-specific factors
3. Transition to staff nurse	<ul style="list-style-type: none"> » Developing clinical competence » Preceptorship programme » Personal responses to transition » Impact of the organisation » Professional competence and accountability
4. Looking ahead	<ul style="list-style-type: none"> » Long-term career aspirations » Short-term career aspirations

Table 1. Information about the participants

Role	How many approached	How many participated	Mode of data collection	Gender
Nursing student	11	8	Focus group	<ul style="list-style-type: none"> » Male = 1 » Female = 7
Newly registered nurse	20	18	Individual interview	<ul style="list-style-type: none"> » Male = 0 » Female = 18
Nursing associate	1	1	Individual interview	<ul style="list-style-type: none"> » Male = 0 » Female = 1

This disruption of some participants' clinical placements during the COVID-19 pandemic led to a loss of learning opportunities, alongside isolation, frustration and subsequent delays in completing university programmes. Overall, the pandemic meant that many newly registered nurse participants felt that they started their first nursing roles on an unequal footing:

'Obviously, you have this expectation when you're starting university that you want to finish it with the people that you started, and it didn't happen that way, unfortunately.' (Newly registered nurse 15)

'Is it called imposter syndrome? I felt like I didn't know anything, because we had been away from the environment for a long time, and we just went back straight into placement and the placement was completely different... I just felt out of place, initially.' (Newly registered nurse 19)

Motivation to work in oncology

Nursing student and newly registered nurse participants described various factors that influenced their decision to work in cancer care. Personal factors – such as the experience of observing their own family members living with cancer or also having worked in the specialty – were a significant influence for participants, with one stating:

'I always wanted to work in cancer. Mum was a cancer nurse. She's one of those nurses who just loves being patient-facing and just absolutely adores her job.' (Newly registered nurse 1)

Participants also expressed how positive experiences on a clinical placement in cancer care could be motivating. For example, observing high clinical standards and professional role models offered a template for the participants to emulate. One of them commented:

'I did my very first placement at the [specialist cancer centre], on ward X and I knew that I was going back there. That was my first placement... I was just amazed with everything really. I saw nurses doing PICC [peripherally inserted central catheter] line insertion and I thought "Wow, I didn't know

nurses could do this".' (Newly registered nurse 19)

The specialist cancer centre was seen as a desirable place to work by participants, particularly with its reputation for leading research and education and for offering a supportive environment for learning:

'I think just the general organisation of the hospital, the support that's available to the patients and to staff, was a lot more of a supportive environment than maybe some of the other placements I've had.' (Newly registered nurse 4)

'There were a lot of people that were really keen to do their training [at the specialist cancer centre], so to have that opportunity... it was special, almost. Not many people can say they've done their training there.' (Newly registered nurse 13)

Transition to staff nurse

Once newly registered nurses were appointed to their first nursing post, they underwent the transition from nursing student to registered nurse. In this service evaluation, most of the participants described being given clear directions in their first staff nurse role and a timetable for learning clinical skills. The role of the practice educator was considered important in providing one-to-one support with a non-judgemental attitude, as was the support and encouragement of colleagues on the ward. For example, one participant commented:

'I felt supported by [the practice educator] a lot, in the way that I wanted to feel supported. She wasn't patronising, she didn't make me feel stupid, and, yeah, she helped me.' (Newly registered nurse 9)

Some participants experienced a feeling of being overwhelmed in their first staff nurse role, particularly if they had missed out on clinical opportunities as part of their nurse training due to the COVID-19 pandemic. In addition, where participants had been on clinical placement at the specialist cancer centre as a nursing student, this was viewed as an advantage over being completely new to the centre:

'I was a student at the [specialist cancer centre] for quite a few of

my placements, so this is where I did most of my training and I felt more comfortable, as a newly qualified nurse, starting in an area that I'm familiar with.' (Newly registered nurse 10)

'There is a massive gap from qualifying and starting your first role. The gap is huge because you are not accountable as a student, and you can just "pull the student card" as and when... I am seeing a lot of students who have trained here, they know the lay of the land. I have to learn it.' (Newly registered nurse 5)

Some participants expressed particular anxiety around being asked to undertake specialist tasks such as systemic anticancer therapy (SACT) delivery and felt that this responsibility had been given to them too soon. One of them stated:

'I thought, I've not been in here a year and have only been doing [intravenous infusions] for six months. I'm still figuring out. I obviously know what I'm doing, but there's loads of things I need to learn that are the basics. Should I really be giving chemotherapy to a patient just yet? I'm not really sure.' (Newly registered nurse 2)

The preceptorship programme provided an opportunity for participants to access peer support. However, attendance at preceptorship sessions could be affected by short staffing, and many of the participants did not have positive views about self-directed learning. For example, one participant stated:

'We're being made to make a poster to advertise for a preceptorship champion thing and we have to reference and then present it and I'm just like, "I don't want to be doing that in my own time".' (Newly registered nurse 6)

Regarding the personal qualities required when transitioning from a student to registered nurse role, many participants acknowledged their lack of confidence when they first started in post, but reflected on how their confidence had grown and how they were motivated by pride that their role had real value. Some participants who described themselves as 'shy', 'nervous' or 'sensitive' had questioned their suitability for nursing and could

become particularly stressed when confronted with the unexpected, such as a move to another clinical area to cover staff shortages. One participant commented:

'It's just losing the familiarity of the ward, it just throws you off a bit when you're put into a different ward.' (Newly registered nurse 10)

An organisational culture that featured positive feedback on performance, alongside support through listening and receiving empathy from other staff members, was important in developing participants' confidence, as was a culture of framing mistakes as opportunities for reflection. As one participant observed:

'There have been [errors which needed to be recorded on the risk management system] Datix. Even when scenarios like that have occurred, I know that I'm not being told off or penalised. It is a learning thing and a safety thing, and so even when I've made errors, I never felt I was receiving a telling-off.' (Newly registered nurse 13)

Looking ahead

Most of the newly registered nurses had considered their future career roles. Most of these roles were in oncology, with the most popular being clinical nurse specialist; however, participants were aware of other roles, including in airway management, tissue viability, haematology, transplant and palliative care. Other roles mentioned as potential career options were in education or as advanced nurse practitioners, although few participants aspired to be senior ward managers. Several participants intended to continue working at the specialist cancer centre because they felt there were more opportunities available than in other areas, and that the centre focused on innovation and research. One of them stated:

'I just like the feel of the [specialist cancer centre] actually and, if I'm honest it's somewhere there is money, if that makes sense. There's always research going on, you know?' (Newly registered nurse 7)

Some participants discussed being given the opportunity to practice management roles by taking

charge of a clinical area at the weekend, with senior support. In the short term, several participants were looking to the next stage of their career by furthering their oncology knowledge and applying for band 6 positions, with one of them commenting:

'Yes with the staffing on the ward at the moment there's definitely a lot of vacancies, so I think as soon as I can, I'd love to do my module and get my band 6. In the next year I'll look into starting it.' (Newly registered nurse 6)

Discussion

This service evaluation aimed to describe the experiences of nursing students on placement and newly registered nurses or nursing associates working in a specialist cancer centre. To date, there have been few qualitative studies undertaken in this subject area, and the participants in this service evaluation represented a unique sample because they were specialising in cancer and undergoing their nurse education programmes and registering during the COVID-19 pandemic. The findings were in line with the available evidence base, with personal factors such as having a family member working in a similar profession being known to influence people's career decisions (Gore et al 2017), positive clinical placement experiences influencing nursing students' decisions to return to a unit or ward once they had graduated, and previous clinical experience positively influencing the transition from nursing student to newly registered nurse (Ho et al 2021).

The findings of this evaluation also indicate a lack of focus on oncology-specific education, as well as insufficient clinical placement opportunities in oncology. This has been experienced by nurses in other specialties such as critical care (Elias and Day 2020) and emphasises the benefits of supporting nursing students to undertake their final placement as a nursing student on the unit or ward where they will be working as a staff nurse (Whitehead et al 2016, HEE 2018). It also emphasises the need for a joined-up approach between preregistration

nurse education, clinical staff and post-registration recruitment teams (HEE 2018).

Among the participants in this evaluation, there were two distinct groups of newly registered nurses – those who undertook a clinical placement in oncology at the specialist cancer centre, and those who did not. These two groups reported different needs when transitioning from nursing student to newly registered nurse, with those who had not previously undergone a clinical placement in the specialist cancer centre requiring increased support and orientation to the centre's environment and procedures. This indicates that a 'one-size-fits-all' approach to supporting nurses to transition from education to professional life is not effective; instead, tailored mentoring and preceptorship programmes can attract nurses to oncology as a career pathway (Gruber-Page 2016, HEE 2018).

When newly registered nurses enter their first oncology role, particular attention should be given to supporting them with responsibilities such as SACT and being moved to other clinical areas to cover staff shortages, because these were reported by many participants as being anxiety-provoking. The authors suggest that a potential approach to achieving an effective transition from nursing student to newly registered nurse is one-to-one coaching to support those who may be less confident than others. Another approach could be for senior staff to teach new recruits specific skills, enabling them to achieve proficiency in the required day-to-day nursing tasks (Whitehead et al 2016), while also giving them time to develop their confidence (Ho et al 2021).

The participants in this service evaluation were all nursing students, nursing associates or had transitioned to become newly registered nurses during the COVID-19 pandemic, and therefore had unique experiences of nurse education and taking up their first nursing post. These experiences should be viewed positively due to the nursing skills acquired

through the pandemic; for example, effective time management and working with limited resources, as well as resilience and a heightened awareness of the importance of mental health for healthcare professionals (Boyle 2021).

Limitations

One potential limitation of this evaluation is that 26 of the 27 participants identified as female – although this is representative

of the nursing profession, where around 90% are women (Buchan and Catton 2020). Additionally, this was a unique sample since the participants' experiences were directly affected by the COVID-19 pandemic, and therefore may not have been representative of the experiences of other nurses. Only one nursing associate was recruited to this service evaluation, so further work is necessary to explore these professionals' experiences and perceptions.

Conclusion

This service evaluation found that there is a lack of focus on cancer-specific education and insufficient clinical placement opportunities in oncology for nursing students. Newly registered nurses require tailored support if they are to be recruited to, and retained within, the cancer nursing workforce. In addition, newly registered nurses require support to gain confidence in undertaking cancer-specific skills such as delivering SACT.

References

- Aldosari N, Pryjmachuk S, Cooke H (2021) Newly qualified nurses' transition from learning to doing: a scoping review. *International Journal of Nursing Studies*. 113, 103792. doi: 10.1016/j.ijnurstu.2020.103792
- Boyle DA (2021) The COVID-19–cancer connection. *Clinical Journal of Oncology Nursing*. 25, 3, 235–236. doi: 10.1188/21.CJON.235-236
- Braun V, Clarke V (2012) Thematic analysis. In Cooper H, Camic PM, Long DL et al (Eds) *APA Handbook of Research Methods in Psychology*. Volume 2. Research Designs: Quantitative, Qualitative, Neuropsychological, and Biological. American Psychological Association, Washington DC, 57–71.
- Braun V, Clarke V (2022) Conceptual and design thinking for thematic analysis. *Qualitative Psychology*. 9, 1, 3–26. doi: 10.1037/qp0000196
- Buchan J, Catton H (2020) COVID-19 and the International Supply of Nurses: Report for the International Council of Nurses. www.icn.ch/system/files/documents/2020-07/COVID19_internationalsupplyofnurses_Report_FINAL.pdf (Last accessed: 7 May 2024.)
- Elias CE, Day T (2020) Experiences of newly qualified nurses in critical care: a qualitative systematic review. *Journal of the Intensive Care Society*. 21, 4, 334–343. doi: 10.1177/1751143720926794
- Gore J, Holmes K, Smith M et al (2017) Unpacking the career aspirations of Australian school students: towards an evidence base for university equity initiatives in schools. *Higher Education Research and Development*. 36, 7, 1383–1400. doi: 10.1080/07294360.2017.1325847
- Gruber-Page M (2016) The value of mentoring in nursing: an honor and a gift. *Oncology Nursing Forum*. 43, 4, 420–422. doi: 10.1188/16.ONF.420-422
- Health Education England (2018) RePAIR: Reducing Pre-Registration Attrition and Improving Retention Report. www.hee.nhs.uk/sites/default/files/documents/RePAIR%20Report%202018_FINAL_0.pdf (Last accessed: 8 May 2024.)
- Health Education England (2021) ACCeND Programme Briefing Paper. www.hee.nhs.uk/sites/default/files/documents/ACCeND%20Programme%20Briefing%20Paper_071221_1.pdf (Last accessed: 8 May 2024.)
- Ho SS, Stenhouse R, Snowden A (2021) 'It was quite a shock': a qualitative study of the impact of organisational and personal factors on newly qualified nurses' experiences. *Journal of Clinical Nursing*. 30, 15–16, 2373–2385. doi: 10.1111/jocn.15777
- Jones-Berry S (2019) Nursing Student Attrition: Are we Losing the Battle? *Nursing Standard*. rcni.com/nursing-standard/newsroom/analysis/nursing-student-attrition-are-we-losing-battle-152466 (Last accessed: 8 May 2024.)
- Lincoln YS, Guba EG (1985) *Naturalistic Inquiry*. SAGE Publications, London.
- Macmillan Cancer Support (2021) *Cancer Nursing on the Line: Why we Need Urgent Investment Across the UK*. www.macmillan.org.uk/_images/Forgotten-C-Nursing-Report_tcm9-360416.pdf (Last accessed: 8 May 2024.)
- Macmillan Cancer Support (2024) *Cancer Prevalence*. www.macmillan.org.uk/about-us/what-we-do/research/cancer-prevalence (Last accessed: 8 May 2024.)
- National Audit Office (2020) *The NHS Nursing Workforce*. www.nao.org.uk/wp-content/uploads/2020/03/The-NHS-nursing-workforce-Summary.pdf (Last accessed: 8 May 2024.)
- Royal College of Nursing (2022) *Career Pathway and Education Framework for Cancer Nursing*. www.rcn.org.uk/professional-development/publications/career-pathway-and-education-framework-for-cancer-nursing-uk-pub-010-076 (Last accessed: 8 May 2024.)
- Statista (2024) *Number of Nursing Graduates* in the United Kingdom (UK) from 2006–2022*. www.statista.com/statistics/473225/nursing-graduates-in-the-united-kingdom-uk (Last accessed: 8 May 2024.)
- Tong A, Sainsbury P, Craig J (2007) Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 19, 6, 349–357. doi: 10.1093/intqhc/mzm042
- Whitehead B, Owen P, Henshaw L et al (2016) Supporting newly qualified nurse transition: a case study in a UK hospital. *Nurse Education Today*. 36, 58–63. doi: 10.1016/j.nedt.2015.07.008