# Evaluation of the current landscape of respiratory nurse specialists in the UK: planning for the future needs of patients

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## ABSTRACT

**Introduction** The National Health Service currently faces significant challenges and must optimise effective workforce planning and management. There are increasing concerns regarding poor workforce planning for respiratory medicine; a greater understanding of the role of respiratory nurse specialists will inform better workforce planning and management.

**Methods** This was a survey study. Two surveys were administered: an organisational-level survey and an individual respiratory nurse survey.

**Results** There were 148 and 457 respondents to the organisational and individual nurse survey, respectively. Four main themes are presented: (1) breadth of service provided; (2) patient care; (3) work environment; and (4) succession planning. The majority of work conducted by respiratory nurse specialists relates to patient care outside the secondary care setting including supporting self-management in the home, supporting patients on home oxygen, providing hospital-at-home services and facilitating early discharge from acute care environments. Yet, most respiratory nursing teams are employed by secondary care trusts and located within acute environments. There was evidence of multidisciplinary working, although integrated care was not prominent in the free-text responses. High workload was reported with one-quarter of nursing teams short-staffed. Respiratory nurses reported working unpaid extra hours and a lack of administrative support that often took them away from providing direct patient care. Nearly half of the present sample either plan to retire or are eligible for retirement within 10 years.

**Conclusions** This survey report provides a current snapshot of the respiratory nurse specialist workforce in the UK. This workforce is an ageing population; the results from this survey can be used to inform succession planning and to ensure a viable respiratory nurse specialist workforce in future.

## INTRODUCTION

In recent years, the National Health Service (NHS) has developed a renewed focus on cost-effectiveness as the service faces significant organisational and financial challenges.[1] As a result, effective workforce planning and management have never been more important in the health sector, recognising the value and unique contribution of the specialist nurse. The Department of Health[2] has emphasised the importance of working with specialist teams to understand service needs and to plan future services in order to deliver high-quality care. This includes all clinical nurse specialists (CNSs) who represent senior and highly expert nurses with strong leadership abilities.[3] However, the role that respiratory nurse specialists' play is poorly understood[4] and, because of this, a valuable nursing role is under threat. Thus, a better understanding of the respiratory nurse specialist workforce is needed to inform and optimise workforce and succession planning and to preserve the potential of these nurses to deliver high-quality care.

With ever-increasing NHS financial pressures, CNS roles are often targeted to cut staffing costs, largely because they are perceived to be an expensive and poorly defined resource within the nursing workforce. However, research has shown that the work of specialist nurses leads to savings, greater efficiencies, innovative ways of thinking and better outcomes for patients, bridging the gaps in the system and contributing to a more seamless patient journey and minimising unwarranted variation in care.[4–6] As a result, the role of the CNS has become an integral part of the multidisciplinary team across many clinical fields[7–9] and are highly valued by patients.[10]

Nurses have significantly expanded and advanced their scope of practice in regards to the management of respiratory diseases, particularly outside hospital settings.[11] In the case of chronic obstructive pulmonary disease (COPD), respiratory nurse specialists

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provide vital support to patients to help them manage their chronic condition and have consistently demonstrated positive contributions in delivering hospital-at-home and early discharge schemes for COPD.[12][13] However, while evidence suggests that respiratory nurse specialists provide expert and beneficial support to patients, research into the clinical and cost-effectiveness of nurse-led care and services in respiratory medicine is still in its infancy.[14] Furthermore, there have been increasing concerns regarding poor workforce planning for respiratory medicine. A snapshot of the characteristics, experiences and future work intentions of the current respiratory nurse specialist workforce is needed to inform workforce management and ensure the long-term provision of quality patient care. To address this, the British Thoracic Society (BTS) conducted a survey study with the following aims:

▶ identify the characteristics of the current respiratory nurse workforce specialising in the delivery of respiratory care in acute, integrated and community settings
▶ describe current experience of care provision
▶ describe future work intentions the need for succession planning.

### METHODS

This was a survey study. Data were collected from two online surveys:

1. an organisational-level survey focusing on the structure of adult and paediatric respiratory nursing services in acute, integrated and community services
2. an individual respiratory nurse survey to identify the experience, qualifications, banding and future work intentions of the workforce.

The surveys were conducted by the BTS between April 2016 and July 2016. The BTS harnessed their membership base to conduct the survey. NHS ethical approval was not required as no NHS data was collected.

### Survey methods and data collection

Two survey tools were designed to elicit respiratory nurse views about their role. The survey questions were designed to identify the characteristics of the current respiratory nurse workforce and the services they provide, as well as information about their qualifications, NHS banding, future work intentions and perceived support. The surveys were prepared by the BTS nurse advisory group, in collaboration with other respiratory nursing groups, and based on previous research.[6–8] They employed both free-response and questions with Likert scale responses. The qualitative aspect of the free-response questions was designed to further explore and understand nurse experiences.

For the organisational survey, an email was sent from the BTS head office to respiratory leads in hospital trusts in the UK (n=247), detailing the project and providing an online survey link. One member of each respiratory nurse team was asked to complete the survey on behalf

**Table 1** Organisation and workplace characteristics from the two surveys

| | Organisational survey (n=148) (n (%)) | Respiratory nurse survey (n=457) (n (%)) |
|---|---|---|
| **Location of employment** | | |
| **England** | | |
| North West | 21 (14.2) | 66 (14.4) |
| North East | 4 (2.7) | 22 (4.8) |
| Yorkshire and Humber | 12 (8.1) | 36 (7.9) |
| Eastern | 12 (8.1) | 28 (6.1) |
| East Midlands | 8 (5.4) | 33 (7.2) |
| West Midlands | 13 (8.8) | 36 (7.9) |
| South East | 23 (15.5) | 69 (15.1) |
| London | 15 (10.1) | 27 (5.9) |
| South West | 14 (9.5) | 56 (12.3) |
| **Scotland** | | |
| North | 3 (2) | 6 (1.3) |
| West | 9 (6.1) | 9 (2.0) |
| East | - | 22 (4.8) |
| South East | 2 (1.4) | 6 (1.3) |
| **Wales** | | |
| North | 0 | 3 (0.7) |
| South | 5 (3.4) | 19 (4.2) |
| Northern Ireland | 7 (4.7) | 19 (4.2) |
| **Organisation type** | | |
| NHS secondary care trust | 107 (73.8) | 311 (68.2) |
| NHS community trust | 23 (15.9) | 95 (20.8) |
| Community interest company | 1 (0.7) | 10 (2.2) |
| NHS secondary care and community integrated trust | 6 (4.1) | 6 (1.3) |
| NHS tertiary service | 2 (1.4) | 2 (0.4) |
| GP practice (GP) | 2 (1.4) | 19 (4.2) |
| Local health board | 2 (1.4) | - |
| Government health and social care | 1 (0.7) | - |
| N/A (self-employed) | 1 (0.7) | - |
| Health and social care partnership | - | 3 (0.7) |
| Clinical commissioning group | - | 3 (0.7) |
| University health board | - | 3 (0.7) |
| Primary care trust | - | 2 (0.4) |
| Respiratory charity | - | 2 (0.4) |

GP, general practitioner.

**Table 2** Demographics of the individual respiratory nurse survey sample

|  | Respiratory nurse survey (n=457) (n (%)) |
|---|---|
| **Age (years)** | |
| Under 35 | 44 (9.6) |
| 35–44 | 103 (22.5) |
| 45–54 | 225 (49.2) |
| 55–64 | 82 (17.9) |
| Over 65 | 3 (0.7) |
| **Years qualified** | |
| 1–4 | 10 (2.2) |
| 5–9 | 34 (7.5) |
| 10–29 | 255 (56.1) |
| 30–39 | 152 (33.48) |
| 40+ | 4 (0.9) |
| **Banding** | |
| Band 5 | 4 (0.9) |
| Band 6 | 158 (34.7) |
| Band 7 | 238 (52.5) |
| Band 8a | 36 (7.9) |
| Band 8b | 14 (3.1) |
| Band 8c | 3 (0.7) |
| Self-employed | 1 (0.2) |
| **Qualifications achieved** | |
| Diploma | 270 (59.1) |
| Degree | 229 (50.1) |
| PG cert/diploma | 23 (5.0) |
| Masters | 79 (17.3) |
| PhD/doctorate | 7 (1.5) |
| **Qualifications being studied** | |
| Diploma | 12 (2.6) |
| Degree | 22 (4.8) |
| PG cert/diploma | 0 |
| Masters | 30 (6.6) |
| PhD/doctorate | 4 (0.9) |

of the whole service. For the individual respiratory nurse survey, an email was sent to BTS nurse members describing the project and providing an online survey link. In addition, the survey was advertised through an Association of Respiratory Nurse Specialists (ARNS) social media channels and newsletter, and leads of other associations (eg, Lung Cancer Nurses Forum, Primary Care Respiratory Society and the Severe Asthma National Network) were asked to raise awareness of the online survey with their nurse members. All responses were anonymous.

## Analysis

Demographic characteristics and frequencies for responses were calculated. Quantitative survey data were entered into SPSS (version 22) and analysed descriptively. Qualitative, free-text survey data were handled using a modified thematic analysis.[15]

## RESULTS

In total, there were 148 respondents (247 approached; 60% response rate) and 457 respondents to the organisational survey and respiratory nurse survey (not able to calculate response rate due to multiple methods of online recruitment), respectively. In the organisational survey, 73.8% respondents reported respiratory nurse services being based in an NHS secondary care trust and 15.9% in an NHS community trust (table 1). In the individual nurse survey, 68.2% respondents reported working in an NHS acute trust and 20.8% in an NHS community trust. The primary funding source for respiratory nursing teams was NHS secondary care Trust (58.7%), combined NHS secondary/community (16.8%) and NHS community trust (15.4%).

In the nurse survey, almost half (49.2%) of respondents were between the age of 45 and 54 years and most were female (94.5%) (table 2). Twenty-nine per cent had been qualified for between 30 and 35 years, representing the most commonly chosen category. Respondents most frequently held a Band 7 post (52.5%) followed by a Band 6 post (34.7%); only 11% was Band 8. Nearly one-third of nurse's services reported having vacant positions with 7% reporting frozen posts. Furthermore, it was stated in the free-text section that nurses are 'very overworked respiratory nursing team with one frozen position and one unadvertised position' and that 'the hospital seems to be reluctant to approve any nurse specialist posts due to financial pressures'.

## Survey responses

A description of the key themes identified from the data collected is presented below. Theme 1 presents findings from the organisational survey relating to the breadth of nursing services provided; theme 2 represents findings common to both surveys. Themes 3, four and five reflect responses to the individual nurse survey. Qualitative data from respondents are presented in table 3 to support the themes.

### Theme 1: breadth of service provided (organisational survey, n=247)

#### Services provided

Respiratory nursing teams typically deliver a wide range of services; the mean number of services provided by each respiratory nursing service was seven with the majority of teams providing combined outpatient (88.2%) and inpatient care (76.4%) (table 4). Additionally, more than half of the services reported providing support to patients in

**Table 3** Qualitative, free-response data from both surveys

| Theme | Respiratory nurse specialist quote |
|---|---|
| 1. Breadth of service provided | 'The service commissioned by our clinical commissioning group is purely community but our managers and respiratory consultants try to get us to provide an acute service on top of this, it makes it very difficult to manage our time and prioritise. The patients referred to our community service are waiting longer and longer to see us.' (Nurse survey) |
| | '…plugging gaps for nurse shortages on the wards'. (Nurse survey) |
| | '…commissioners have varying expectations'. (Nurse survey) |
| | 'Respiratory nurses are expected to cover everything'. (Nurse survey) |
| | 'Please note that our team is made up of respiratory specialist physiotherapists along with respiratory nurses and an occupational therapist. We cover all the same services but do have specialist physio clinics for ambulatory oxygen assessment and chest clearance'. (Organisational survey) |
| 2. Patient care | 'We are extremely stretched'. (Organisational survey) |
| | 'Currently experiencing high demands in workload as community patients become more complex with limited staff, so unable to carry out education due to time constraints'. (Nurse survey) |
| | 'I worry that my role as mainly preventative upstream work will be lost to the firefighting seen in hospital. Consequently denying my patients the opportunity to embrace and develop their self-management skills; this will increase the workload in secondary care. Again that quality care will be lost'. (Nurse survey) |
| | 'Asthma appointments are too short. It is impossible to give all the care required in 20 min'. (Nurse survey) |
| 3. Working environment | 'I have been fully supported over the years. However, the workload is increasing dramatically but we do not have enough respiratory specialist nurses in place to cope with the demand. The hospital seems to be reluctant to approve any nurse specialist posts due to financial pressures'. (Individual nurse) |
| | 'Currently a single-handed respiratory nursing service with no admin support, holiday, unplanned absence cover'. (Organisational survey) |
| | '…currently a full-time member of staff down…struggling to get management to employ someone so quite a difficult time at the moment'. (Nurse survey) |
| | 'There is minimal admin support for the acute and community teams given the number of nurses and the size of the caseloads/activities'. (Organisational survey) |
| | 'We have administrative support for oxygen services. Everything else is completed by the CNS (clinical nurse specialist) team'. (Organisational survey) |
| 4. Succession planning | 'Over the past year the service has changed to a new team due to retirement and so we are in the process of sorting out new leads for the different conditions'. (Organisational survey) |

**Table 4** An overview of the services respiratory nursing teams sampled provide

| Services provided | n=148 (n (%)) |
|---|---|
| Outpatients | 132 (89.2) |
| Inpatient services | 113 (76.4) |
| Home oxygen | 103 (69.6) |
| Hospital at home | 83 (56.1) |
| Early supported discharge | 81 (54.7) |
| Admission avoidance | 75 (51.4) |
| Palliative care | 70 (47.3) |
| Specialist medication administration | 68 (45.9) |
| Pulmonary rehabilitation | 63 (42.6) |
| Smoking cessation | 61 (41.2) |
| Supportive home care | 59 (39.9) |
| Home ventilation | 40 (27.0) |
| Sleep | 39 (26.4) |
| Transitional services | 29 (19.6) |
| Cancer services | 7 (4.7) |

their home for oxygen therapy support, early discharge or hospital admission avoidance (table 4).

### Delivery of services

Respiratory nursing teams most frequently reported providing care for patients with asthma, severe/difficult asthma, COPD, bronchiectasis and interstitial lung disease. On average, respiratory nurse specialists' care for patients across three different respiratory conditions,

most commonly COPD, asthma and bronchiectasis (table 5). However, it was also reported that respiratory nurse specialists were frequently required to cover services and attend to patient care not directly linked to their role (table 3) and a sense that 'respiratory nurses are expected to cover everything'. Despite some services being commissioned by a Clinical Commissioning Group, service expectations were not always unclear and concerns about lack of future planning were expressed (table 3). There was also acknowledgement of multiprofessional working (table 3).

### Theme 2: patient care (individual nurse survey)

The majority of respiratory nurse specialist time is devoted to patient care (64.7%), followed by management (13.7%) and education (13.2%). Although, just over half of the nurses (53.6%, n=245) reported that they were able to spend as much time with their patients as deemed necessary and 25.3% (n=115) either disagreed or strongly disagreed that they were able to have sufficient patient contact. In relation to the nurses' perceived ability to provide quality patient care, respondents were asked to rank on a five-point scale if they had the necessary resources and clinical support. Most respondents reported that they had good clinical support to enable the delivery of high-quality patient care (strongly agree/agree: 164, 36%), although 145 (32%) perceived a lack of resources impeded on the delivery of quality care.

There was acknowledgement that the role of the nurse specialists should also include patient education and

**Table 5** Services provided by the respiratory nursing team and those with a dedicated a specialist respiratory nurse/s

| | Number of responses | Respiratory nursing teams 'Yes' responses (%) | Dedicated specialist nurse/s 'Yes' responses (%) |
|---|---|---|---|
| Asthma | 119 | 81 (68.1) | 38 (31.9) |
| Asthma severe/difficult asthma | 97 | 55 (56.7) | 42 (43.4) |
| Allergy | 42 | 25 (59.5) | 17 (40.5) |
| Allergy and immunology | 19 | 8 (42.1) | 11 (57.9) |
| Bronchiectasis | 97 | 77 (79.4) | 20 (20.6) |
| COPD | 130 | 90 (69.2) | 40 (30.8) |
| Cystic fibrosis | 31 | 11 (35.5) | 20 (64.5) |
| Interstitial lung disease | 108 | 74 (68.5) | 34 (31.5) |
| Lung cancer and mesothelioma | 73 | 11 (15.1) | 62 (84.9) |
| Occupational lung disease | 32 | 25 (78.1) | 7 (21.9) |
| Pulmonary hypertension | 33 | 26 (78.8) | 7 (21.9) |
| Sleep | 41 | 21 (51.2) | 20 (48.8) |
| Tuberculosis | 59 | 17 (28.8) | 42 (71.2) |
| Transitional services | 14 | 12 (85.7) | 2 (14.3) |
| Ventilation support | 54 | 35 (64.8) | 19 (35.2) |

COPD, chronic obstructive pulmonary disease.

supporting patients with self-management; however, teams were feeling 'extremely stretched' and unable to 'carry-out [patient] education due to time constraints' and 'consequently denying [my] patients the opportunity to embrace and develop their self-management skills…' (table 3).

### Theme 3: work environment: perceived support and workload (organisational and individual nurse surveys)

Ninety-one per cent of nurses reported working additional hours per week above what they were contracted to do. The additional unpaid hours worked ranged from 1 to 12+: up to 6 hours per week (n=333, 72%); up to 12 hours per week (n=83, 18%); and more than 12 hours claimed by 5.0% of the sample. Respondents were also asked to consider whether they were concerned that their role was under threat: 8.8% strongly endorsed a perceived threat to their role and a further 14.9% reported feeling concerned about the stability of their position. In the past 3 years, 23 (10%) of nurses received a regrading up of NHS banding, five (2%) had a regrading down and six (3%) respiratory nursing services were decommissioned. This experience was reflected in respondents quotes including '…under threat of losing jobs due to funding' and concern over perceived reluctance of hospitals to approve nurse specialists posts (table 3).

Both surveys revealed that there is a lack of administrative support. Of the 143 (96.6%) respondents to the organisational survey, 74.8% reported that their team have administrative support compared with 25.2% who said they do not. Forty-three (29.1%) respondents identified who carried out the administrative duties for the team. Of these, 72% reported that administrative duties were conducted by the nursing team, 14.0% said respiratory nurse specialists were responsible and 14.0% stated that medical secretaries assisted with administrative duties by typing clinic letters. The above survey responses are supported by statements noted in the free-text section of the organisational and individual nurse surveys (table 3).

Two questions assessed the degree of support the respondents felt they had in their role from their line manager and clinical colleagues. The nurses reported feeling more supported by clinical colleagues in comparison with line managers; 77.6% agreed or strongly agreed that clinical colleagues were supportive, whereas 62.2% felt the same way about line managers. The majority of the nurses (93.1%) reported being able to attend meetings and study days, and 80.5% stated they were supported to attend more than 1 day a year. Seventy-eight per cent of the sample agreed or strongly agreed that training and education opportunities were available to access.

### Theme 4: need for succession planning
Future work intentions
Almost 50% of those sampled were aged between 45 and 54 years. By 2026, 48.1% of the nurses sampled either plan to or are eligible for retirement and a further 1.8% plan to leave nursing in the next 5 years (table 6). As expected, retiring nurses are often working at a senior level and leading services. This creates the need to identify suitably qualified individuals to replace them and an opportunity to makes service changes (table 3).

### DISCUSSION

The aims of the present surveys were to capture the characteristics of the current respiratory nurse workforce and to explore respiratory nurse's experiences and future work intentions in order to plan for the next generation of respiratory nurse specialists. The results highlight key issues in relation to the organisation and location of respiratory nursing workforce, a lack of resources and time to dedicated patient care and a workforce that is ageing with many nurses working extra unpaid hours.

The respiratory nurse workforce in the UK provides a breadth of services largely focused on care activities within the patient's home or expediting the transfer of care from hospital to home. Yet, few respiratory nursing teams are located or funded within integrated NHS secondary care/community trusts or community organisations. Moving patient care from secondary care to the community has been a national priority for over a decade and is reflected in health policy changes.[16 17] However, there is a financial incentive for secondary care trusts to ensure all patients admitted an exacerbation of COPD are reviewed by a respiratory specialist and discharged with a COPD discharge bundle.[18] In addition, the national COPD audit programme is now collecting continuous data on all COPD admissions.[18] Respiratory nurses have historically been involved in ensuring bundle items are delivered (eg, checking inhaler techniques, smoking cessation, referral to pulmonary rehabilitation and issuing action plans) and involved in data collection for previous COPD audits. Equally, recommendations from the National Review of Asthma Deaths[19] for patients admitted with asthma attacks include education, issuing personal action plans and follow-up reviews, which are

**Table 6** Future work intentions

|  | n=457 (n (%)) |
| --- | --- |
| No plans to retire in the next 5 years | 170 (37.3) |
| Plan/eligible to retire in the next 5 years | 112 (24.6) |
| Plan/eligible to retire in the next 10 years | 86 (18.9) |
| Plan/eligible to retire in the next year | 22 (4.8) |
| Plan to leave nursing in the next 5 years | 8 (1.8) |
| Retired and returning part time | 5 (1.1) |
| Leaving current position | 2 (0.4) |

frequently provided by respiratory nurse specialists. Therefore, nurse specialists will be required in secondary care to ensure that patients receive appropriate and timely interventions.

Our surveys found that respiratory nurse teams deliver a wide range of services, but the most commonly provided services involved chronic disease management. This type of care will become increasingly more valuable in future, as the prevalence of long-term conditions is set to increase.[20 21] Respiratory services and their employing organisations need to be prepared for care delivery in primary and community settings, a shift that is advocated by the RCN.[22]

Some respiratory nurses commented that their services were overstretched; there was the perception that staff are overworked due to an unrealistic expectation that the respiratory nursing team had the capacity to cover everything, including patient care on hospital wards. Furthermore, a quarter of respondents disagreed that they were able to have, what they deemed, as necessary and sufficient patient contact. As a quarter of those sampled feel they are unable to spend as much time as they would like with patients, it suggests that the reported time currently spent with patients (just under 65%) is not sufficient to fulfil the obligation respiratory nurses feel they have to their patients. In comparison, 80% of frontline NHS workers reported they are able to do their job to a standard they are pleased with and 90% report that their job makes a difference for patients.[23] Yet, the same survey also shows that almost half of the 423 000 staff surveyed believed there is not enough staff at their organisation for them to do their job properly. Furthermore, 59% reported working unpaid extra hours each week to fill gaps in staffing levels. The later results are comparable with responses to our respiratory nurse specialist surveys.

A substantial majority of the respondents to the individual nurse survey reported working extra hours each week outside of their contracted hours. This suggests that the various duties of a respiratory nurse often cannot be completed in their contracted working hours, and they feel obliged to work longer hours to cover the excess. These results are mirrored in a nurse specialist workforce survey in pancreatic cancer,[24] Parkinson's disease[25] and rheumatology.[6]

In our survey, free-text comments suggest that the main areas of care that respiratory nurses do not feel able to fully provide due to time constraints are patient education and support for enhanced self-management. Patient education, including the use of prompts to remind patients to perform specific self-management tasks, leads to improvement in patient-related outcomes across a number of long-term conditions, including COPD.[26 27] Nurses also play a key role in new care models such as telemedicine[28] and in the delivery of 'hospital-at-home' schemes.[12] However, further robust evidence is needed to clarify and justify further expansion of the respiratory nurse specialist role along the patient pathway and across different respiratory conditions and organisational interfaces. This is particularly pertinent for asthma and COPD care as both represent the largest case loads for respiratory nurse specialists. Detailed examination of the reasons for the gradual increase in unscheduled care for both conditions, and the increasing number of asthma deaths, is required to identify points along respiratory care pathways where specialist nurses is likely to be most beneficial.

Lack of administrative support was identified as limiting respiratory nurses' ability to focus more time with patients. Administration tasks were typically split across different respiratory teams, meaning that many respiratory nurses are left with no other option but to perform their own administration. These findings highlight the need for investment to be made in administrative support to alleviate some of this strain from the nursing team. This would free up time for respiratory nurses to dedicate more resources to patient contact, which would be a more efficient and cost-effective use of their specialist skills.

The present findings suggest that the respiratory nurse workforce is an ageing population. Approximately half of the respondents were aged between 45 and 54 years and a further 18% are aged between 55 and 64 years, meaning that a significant proportion of the respiratory nurse workforce are nearing retirement age. The results showed that, by 2026, almost half of the sample plan to retire or are eligible for retirement. The potential consequence for this sector of the workforce will be a significant staff shortage. This highlights a pressing need for succession planning to ensure a viable respiratory nurse workforce in the future. This is particularly important as the prevalence of chronic respiratory conditions is only set to increase as a result of our ageing population; the financial and staff strain of which will be endured primarily by the NHS.

However, taking retirement out of the equation, few respondents plan to leave nursing in the next 5 years (1.8%); this is a promising finding as it suggests that a large proportion of this sample would remain a nurse until retirement. The finding that most respiratory nurses are usually employed in a Band 7 position suggests that a respiratory nurse position offers good career opportunities. However, further investment in leadership roles at Band 8 above is needed to support and encourage career progression.

The survey's main strength was the inclusion of 148 and 457 respondents from a wide range of regions and organisation types in the UK, generating data that has breadth. All responses were confidential and anonymous, and there was no reason to suspect there was systematic bias in the data; however, the responses were not validated and, thus, some details provided may have been inaccurate. In addition, the majority of respondents worked in secondary care limiting the generalisability of the results to primary and community respiratory services. Some services in Scotland, Wales and Northern Ireland may have been missed. Future surveys should target these countries to capture a clearer picture of the operational respiratory nurse workforces.

This survey report provides an up-to-date snapshot of respiratory nursing services and identifies the breadth of respiratory nursing activity. It should provide an important resource for commissioners seeking to understand and plan the provision of the specialist support and the nursing workforce needs. The survey results will provide BTS and other relevant organisations with information to effectively campaign for enhanced resources and capacity for respiratory nurse specialists to provide patient-centred care in the future.

## REFERENCES

1. National Health Service England. *Five year forward view*. National Health Service England. 2014 https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf
2. Department of Health. *World Class Commissioning. commissioning Assurance Handbook*. London: DH, 2008. http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_085141.pdf
3. *Royal College of Nursing. specialist nurses make a difference*. London, UK: Royal College of Nursing, 2009a. https://www2.rcn.org.uk/__data/assets/pdf_file/0006/588669/14.09_Specialist_Nurses_Make_a_Difference.pdf
4. *Royal College of Nursing. specialist nurses: change lives, saving money*. London, UK: Royal College of Nursing, 2010. https://www2.rcn.org.uk/__data/assets/pdf_file/0008/302489/003581.pdf
5. Parkinson's UK. *Parkinson's nurses - affordable, local, accessible and expert care: A guide for commissioners in England*. London, UK: Parkinson's UK, 2011. https://www.parkinsons.org.uk/sites/default/files/publications/download/english/englandnursereport.pdf
6. *Royal College of Nursing. Rheumatology nursing: results of a survey exploring the performance and activity of rheumatology nurses*. London, UK: Royal College of Nursing, 2009b. https://www2.rcn.org.uk/__data/assets/pdf_file/0004/264937/003524.pdf
7. Epilepsy Action. *Best care: the value of epilepsy specialist nurses*. Leeds, UK: Epilepsy Action, 2010. https://www.epilepsy.org.uk/sites/epilepsy/files/images/campaigns/care-the-value-of-epilepsy-specialist-nurses.pdf
8. Mynors G, Perman S, Morse M, et al. *Defining the value of MS specialist nurses*. Hertfordshire, UK: Multiple Sclerosis Trust, 2012. https://support.mstrust.org.uk/file/defining-the-value-of-ms-specialist-nurses.pdf
9. price A. Secialist nurses improve outcomes in heart failure. *Nurs Times* 2012;108:22–4.
10. Royal College of Nursing and N Voices. Local healthcare commissioning: grassroots involvement? A national survey of health advocacy groups patientView, 2009. Https://www.vision2020uk.org.uk/download/archive_1/pdf/National%20Voices%20Report%20with%20RCN.pdf
11. Fletcher MJ, Dahl BH. Expanding nursing practice in COPD: key to providing high-quality. *effective and safe patient care? Prim Care Respir J* 2013;22:230–3.
12. Jeppesen E, et al. Hospital at home for acute exacerbations of chronic obstructive pulmonary disease. *Cochrane Database Syst Rev* 2012;5.
13. Ram FS, Wedzicha JA, Wright J, et al. Hospital at home for patients with acute exacerbations of chronic obstructive pulmonary disease: systematic review of evidence. *BMJ* 2004;329:315.
14. Candy B , et al. *Evaluating the effectiveness of innovations involving nurses for people in the community with chronic obstructive airways disease*. London: Centre of General Practice and Primary Care, Institute of Community Health Science, Barts and The London, Queen Mary's School of Medicine and Dentistry, 2004.
15. BurnsN, GroveS. The practice of Nursing Research. 2nd ed, Philadelphia: WB Saunders Company, 1993.
16. Department of Health. *Our health, our care, our say: a new direction for community services*. London: TSO, 2006. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/272238/6737.pdf
17. Edwards N. *Community services: how they can transform care*. London: The King's Fund, 2014. https://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/community-services-nigel-edwards-feb14.pdf
18. *Royal College of Physicians. National COPD audit: secondary care workstream*. London: Royal College of Physicians, 2017. https://www.rcplondon.ac.uk/projects/national-copd-audit-programme-secondary-care-workstream
19. *National Review of Asthma Deaths. why asthma still kills*. London: Royal College of Physicians, 2015. https://www.rcplondon.ac.uk/projects/outputs/why-asthma-still-kills
20. World Health Organization (WHO). *Global status report on noncommunicable diseases*. Geneva, Switzerland: WHO Press, 2010. http://www.who.int/nmh/publications/ncd_report_full_en.pdf
21. de Marco R, Pesce G, Marcon A, et al. The coexistence of asthma and chronic obstructive pulmonary disease (COPD): prevalence and risk factors in young, middle-aged and elderly people from the general population. *PLoS One* 2013;8:e62985.
22. *Royal College of Nursing. moving care to the community: an international perspective*. London: Royal College of Nursing, 2014. https://www2.rcn.org.uk/__data/assets/pdf_file/0006/523068/12.13_Moving_care_to_the_community_an_international_perspective.pdf
23. National Health Service England. *2016 NHS Staff Survey* National Health Service England, 2017. http://www.nhsstaffsurveys.com/Page/1056/Home/NHS-Staff-Survey-2016/
24. Pancreatic Cancer UK. *Clinical nurse specialist survey*. London: Pancreatic Cancer UK, 2015. https://www.pancreaticcancer.org.uk/media/405277/pancreatic-cancer-uk-clinical-nurse-survey.pdf
25. Axelrod L, Gage H, Kaye J, et al. Workloads of Parkinson's specialist nurses: implications for implementing national service guidelines in England. *J Clin Nurs* 2010;19:3575–80.
26. Weingarten SR, Henning JM, Badamgarav E, et al. Interventions used in disease management programmes for patients with chronic illness-which ones work? Meta-analysis of published reports. *BMJ* 2002;325:925.
27. Wood-Baker R, Reid D, Robinson A, et al. Clinical trial of community nurse mentoring to improve self-management in patients with chronic obstructive pulmonary disease. *Int J Chron Obstruct Pulmon Dis* 2012;7:407–13.
28. Sorknaes AD, Madsen H, Hallas J, et al. Nurse tele-consultations with discharged COPD patients reduce early readmissions–an interventional study. *Clin Respir J* 2011;5:26–34.

# *Correction: Evaluation of the current landscape of respiratory nurse specialists in the UK: planning for the future needs of patients*

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The order of tables 3, 4, 5 and 6 has been revised and corrected.

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