Diagnostic Radiography UK Workforce Report 2014

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Summary

In September 2014, the College of Radiographers (CoR) carried out a census of the diagnostic radiography workforce in the UK. The objectives were to establish the size, structure and vacancy rate of the workforce in order to inform workforce planning. Nearly 100 employers responded to an online questionnaire representing over 200 workplaces delivering radiography services, employing approximately 25% of the diagnostic radiography workforce in the UK. This document presents an analysis of the census results.

Executive Summary

In September 2014, the College of Radiographers (CoR) carried out a census of the diagnostic radiography workforce in the UK. The objectives were to establish the size, structure and vacancy rate of the workforce in order to inform workforce planning. Nearly 100 employers responded to an online questionnaire representing over 200 workplaces delivering radiography services, employing approximately 25% of the diagnostic radiography workforce in the UK. This document presents an analysis of the census results and the following bullet points highlight the main findings:

- The average number of diagnostic radiography establishment staff by whole time equivalent (WTE) per respondent is 61.7.
- The average current vacancy rate for the diagnostic radiography workforce is 7.8%. Where respondents use agenda for change (AfC) pay bands or equivalent the highest vacancy rate is at band 5 (10.4%). For staff with no equivalent AfC band (largely non-NHS staff) the vacancy rate is 14.2%.
- The average three month vacancy rate across all respondents is 3.3%. The highest three month vacancy rate by AfC band is 5.1% at band 7.
- The average percentage of the establishment headcount on long term absence is 3.8% (comprised of 0.2% on a career break; 1.0% on long term sickness absence and 2.6% on maternity leave).
- On average each respondent has 3.3 qualified diagnostic radiographers (headcount) in post-registration training. Based on this figure it is estimated there are a total of 1,288 qualified diagnostic radiographers in post-registration training in the UK (661 in ultrasound training, 305 in plain film training and 322 in other training).
- On average each respondent has 9.4 diagnostic radiographers, sonographers and/or nuclear medicine technologists (headcount) carrying out advanced practice and 0.2 carrying out consultant-level practice. Extrapolating these figures gives an estimate of a total of 3,662 in advanced practice and 86 in consultant practice in the UK.
1. Introduction

This report presents an analysis of an online census of the diagnostic radiography workforce in the UK run by the CoR in September 2014. The census was targeted at employers of diagnostic radiographers in England, the Channel Islands, the Isle of Man, Northern Ireland, Scotland and Wales, in the NHS and other healthcare sectors. Respondents were asked about the type and scale of radiography services they provide and size and nature of their radiography workforce. The results of this census will inform the work of professional bodies, workforce planners and commissioners/providers of radiography education.

2. Methodology

The 2014 workforce census captures data about the diagnostic radiography workforce in the UK at a census date of 1 September 2014. Radiology services managers (or equivalents) were asked to answer the census on behalf of all diagnostic radiography services in their hospital/workplace. They were asked to include all diagnostic radiographers, sonographers, nuclear medicine technologists, assistant practitioners and trainee assistant practitioners, but not to include radiographic assistants (helpers / healthcare support workers), clerical workers, clinical scientists, radiotherapy staff or third party managed services where the staff are employed by the third party.

Respondents were asked:

- Their contact details and details of the workplaces on behalf of which they were responding
- The areas/modalities in which they provide radiography services
- Workload
- Establishment figures by AfC band - whole time equivalent (WTE) and headcount
- Vacancy figures by AfC band - current and 3 month
- Long term absence figures by AfC band - career break, long term sickness and maternity leave
- Numbers in training
- Numbers in advanced and consultant practice

The full set of questions for the 2014 census is provided in Appendix I.

The census was publicised in a number of ways:

- The Royal College of Radiologists emailed contacts at NHS radiology departments on behalf of the CoR.
- Around 1,000 radiographer workplaces were identified from the Society of Radiographers’ membership database. The CoR emailed contacts at 569 of these workplaces directly.
- Articles were published on www.sor.org, through email magazines, on a radiography managers forum and via social media.

The census was answered by 98 employers covering 209 workplaces delivering radiography services. The respondents employ 6,163 diagnostic radiographers (band 5 and above). We estimate that there are 26,000 diagnostic radiographers registered with the Health and Care Professions Council (HCPC) as of 2 September 2014*. The 6,163 diagnostic radiographers (band 5 and above) captured by this census therefore represents approximately 25% of the UK diagnostic radiography workforce. (This is a rough comparison as not all the band 5 and above health professionals captured by this census will be registered as radiographers with the HCPC.)

*There were 29,232 radiographers registered with the HCPC as of 2 September 2014. We estimate
that around 3,100 of these are therapeutic radiographers, with the remainder (roughly 26,000) being diagnostic radiographers.

3. Profile of respondents

3.1 Size distribution

The majority of respondents have a radiography workforce of less than 100 WTE. Around half of the respondents employing less than 20 are independent/private hospitals.

![Figure 1. Distribution of respondent size](image)

3.2 Responses by geographical area

Employers from all the UK countries responded. Within England, responses were received from all 13 Local Education and Training Boards (LETBs – Health Education England local boards).

![Figure 2. Number of responses by geographical area](image)
3.3 Responses by type of employer

The majority of responses were received from NHS healthcare providers.

3.4 Types of radiography services

Respondents were asked in which areas/modalities their workplace/hospital provided radiography services. Figure 5 illustrates the wide range of radiography services provided.
4. Shape of workforce by agenda for change band

The average number of radiography establishment staff by WTE per respondent is 61.7. Where employers use AfC or equivalent bands they were asked to quantify their workforce by band. The ‘Christmas tree’ diagram in figure 6 illustrates the average number of WTE staff by band for respondents who use AfC pay bands or equivalent.
5. Vacancy rate

5.1 Current vacancy rate

83 of the 98 respondents (85%) reported vacancies. The average current vacancy rate across all respondents is 7.8%. (The current vacancy rate is defined as the total number of WTE vacancies as a percentage of the WTE establishment number of staff.) Where respondents use AfC pay bands or equivalent the highest vacancy rate is at band 5 (10.4%). For staff with no equivalent AfC band (largely non-NHS staff) the vacancy rate is 14.2%.
5.2 Three month vacancy rate

57 of the 98 respondents (58%) reported vacancies which had existed for three months or longer. The average three month vacancy rate across all respondents is 3.3%. The highest three month vacancy rate by AfC band is 5.1% at band 7.

![Figure 8. Three month vacancy rate by AfC band](image)

6. Long term absence rate

The average percentage of the establishment headcount on long term absence is 3.8% (comprised of 0.2% on a career break; 1.0% on long term sickness absence and 2.6% on maternity leave).

![Figure 9. Long term absence by AfC band](image)
7. Workload

Adding the different types of radiography activity together gives a total average annual activity count per respondent of 164,025. Dividing this number by the average WTE establishment figure for the 88 respondents who completed the workload section gives an approximate annual activity count per WTE of 2,563.

8. Qualified diagnostic radiographers in post-registration training

On average each respondent has 3.3 qualified radiographers in post-registration training.

As a rough approximation, we can extrapolate the numbers in training to give an estimate for the total number of qualified diagnostic radiographers in post-registration training in the UK. The average band 5 and above headcount of respondents who answered this section of the census is 66.6. There were approximately 26,000 diagnostic radiographers registered with the Health and Care Professions Council (HCPC) as of 2 September 2014. Extrapolating the average number in training per respondent gives an estimate of a total of 1,288 qualified diagnostic radiographers in post-registration training in the UK (661 in ultrasound training, 305 in plain film training and 322 in other training). (This is a rough estimate as not all the band 5 and above health professionals captured by this census will be registered as radiographers with the HCPC.)
9. Advanced and consultant practice

On average each respondent has 9.4 radiographers, sonographers and/or nuclear medicine technologists (headcount) carrying out advanced practice and 0.2 carrying out consultant-level practice.

As a rough approximation, we can extrapolate the numbers to give an estimate for the total number of radiographers, sonographers and/or nuclear medicine technologists in advanced or consultant practice in the UK. The average band 5 and above headcount of respondents who answered this section of the census is 66.6. There were approximately 26,000 diagnostic radiographers registered with the HCPC as of 2 September 2014. Extrapolating the average number in advanced/consultant practice per respondent, gives an estimate of a total of 3,662 in advanced practice and 86 in consultant practice in the UK. (This is a rough estimate as not all the band 5 and above health professionals captured by this census will be registered as radiographers with the HCPC.)

10. General respondent comments

At the end of the questionnaire, respondents were asked if they had any general comments relating to their submission. Themes mentioned by two or more respondents are given below with the number of respondents in brackets after the theme and an illustrative comment below.

**Theme:** Certain data excluded for a variety of reasons (7)

“Data re workforce & activity for Breast Unit & bone densitometry not included, activity for Nuc med not included”

**Theme:** Recruitment difficulties (4)

“Finding experienced staff is extremely difficult in all modalities”

**Theme:** Mammography activity not captured in Q10 (4)

“Note on Q 10: no field for mammography activity”
Theme: Difficult to separate interventional activity figures into vascular and non-vascular (3)

“It was very difficult to identify vascular and non-vascular IR”

Theme: DXA activity not captured in Q10 (2)

“No box to indicate the number of DXA scans in the time period specified”

Theme: Q10 Activity count question unclear (2)

“Question 10. Wasn't specific as to no. of patients or no. of individual x-rays, I answered no. of patients, ?? Most patients have 7/8 x-rays”

Appendix I – Questionnaire (pdf version only)

2014_08_20_DRW_Census_Questions_v2.pdf

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