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Navigating the Employment Terrain in the Radiography Sectors

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“Navigating the Employment Terrain in the Irish Radiography Sector”

ABSTRACT

Background: In Ireland, radiographers typically work in the public or private sector. This study investigates the determinants influencing radiographers' employment choices between the public and private sectors, offering employers valuable insights into the key factors that shape these decisions.

Methods: An online questionnaire was distributed nationally via social media and email. The survey gathered data on demographics, job acceptance factors, career progression, employee retention, and perceived sector advantages. Descriptive and qualitative analyses were employed.

Results: 141 radiographers completed the survey, representing approximately 4.7% of state-registered (CORU) radiographers in Ireland. Key differences between sectors emerged: public sector radiographers prioritized pension, job security, and paid sick leave. Private sector radiographers valued salary, benefits, working hour flexibility, and specialized training opportunities. Career progression was viewed more favourably in the private sector (58%) compared to the public sector (41%). Both sectors reported similar retention issues, primarily due to heavy workloads and burnout.

Conclusion: Employers can improve radiographer retention by aligning their strategies with the motivations of these professionals. The appeal of the public sector is rooted in stability and comprehensive benefits, whereas the private sector attracts radiographers through flexibility, opportunities for professional development, and higher income potential. By effectively balancing compensation, resources, and incentives, in conjunction with promoting technological innovation, organizations can significantly enhance radiographer retention in Ireland.

Keywords: Radiographers; Radiography Ireland; Public sector; Private sector; Professional differences; Career choices.

Introduction

In Ireland, radiographers registered with CORU (the state regulatory body for health and care professions) may choose to work in the public or private sectors. Public sector hospitals are owned and funded by the State's Health Service Executive (HSE), whereas private hospitals and clinics receive little to no state funding [1, 2].

Within the Irish healthcare sector, radiology is experiencing rapid growth [3]. There is an ongoing demand for new diagnostic imaging departments and expansion of existing ones. All medical imaging modalities have observed an increase in the number of examinations conducted [3]. Additionally, there has been a trend of outsourcing some public sector radiology services to the private sector through the GP Direct Access Scheme for Diagnostics launched by the Irish Health Service Executive (HSE) in January 2021 [3, 4]. This scheme extended public access to private medical imaging services to Ireland's adult patient population. To reduce waiting times, the HSE delegated these services to five private providers [4].

The increased demand for radiology services in Ireland is further evidenced by the increasing number of radiographers registered with CORU [5]. Within a relatively short period from July 2019 to April 2023, the number of radiographers registered with CORU increased from 2,301 to 3,000 [6]. To fully understand the career pathways of radiographers in Ireland, it is imperative to have a clear insight into the characteristics of working in both the private and public sectors and how radiographers perceive them [7].

There exists a significant deficiency in research comparing radiography practices between the public and private sectors in Ireland, particularly concerning the determinants influencing radiographers' decisions to remain in or depart from their positions. This gap has necessitated the examination of studies conducted in other countries. One such study investigated the factors affecting radiographer retention, with a specific focus on migration from public to private hospitals [8]. Respondents indicated that private hospitals offer "lighter workloads, better facilities, and higher financial incentives" compared to their public counterparts. Increased remuneration emerged as a primary motivator for radiographers transitioning to private practice [9]. Nightingale et al. [10] examined factors affecting radiographer retention in the National Health Service (NHS), involving input from managers, former NHS radiographers, and those contemplating departure. While 10% moved to private or agency work, 71% expressed a willingness to consider returning to the NHS. Key issues impacting retention included limited flexible working options, burnout, and a lack of

progression and pay. Although public-sector pay is transparent, information regarding private-sector salaries remains ambiguous [11]. These findings underscore the importance of such variables in influencing career decisions. The results of prior studies highlight the need for a similar investigation to ascertain whether the same factors determine the causes of transition between the private and public sectors in Ireland.

This study aims to investigate the key factors influencing radiographers' employment choices between the public and private sectors in Ireland. Furthermore, it seeks to provide employers with valuable insights into the motivations underlying these decisions, thereby facilitating a deeper understanding of the elements that shape sector preferences among radiographers.

Methods

Ethical approval for this study was obtained from the University's Medical School Social Research Ethics Committee (SREC) on 04-NOV-2022.

Study design.

An online questionnaire with quantitative and qualitative questions was designed in Qualtrics (Qualtrics Inc., Seattle, WA). Participants were provided with a participant information leaflet and asked to agree to the consent terms before completing the questionnaire. The initial four questions were designed to determine whether participants met the eligibility criteria for the study. Furthermore, this questionnaire is included in the supplemental materials.

The primary survey comprised 27 closed-ended questions and four open-ended questions. Depending on the response selected previously, two supplementary open-ended questions were included. The questionnaire features a variety of question formats, including multiple-choice questions, with/without text entry options, drag-and-drop ranking, and Likert scale questions. To maintain clarity and avoid leading questions, the wording of questions was kept unambiguous. Additionally, relevant professional and context-specific language was utilized where appropriate to the study population.

The questionnaire was designed to gather information across five domains: demographics, motivational factors in accepting jobs, modality training and career progression, issues in employee retention, and perceived advantages of working in the public or private sector.

Three members of the research team who were qualified radiographers piloted the questionnaire. This piloting phase aimed to assess the format and layout of the online

questionnaire, evaluate the logic of any question branching, and establish face validity. Feedback gathered during the pilot phase led to minor revisions to the questionnaire, including rephrasing specific questions. The radiographers who piloted the survey was purposefully excluded from the study's sample population. The questionnaire was then officially deployed online for data collection. The survey instrument, in its entirety, is available as supplementary material.

Study population.

Radiographers currently registered with CORU in Ireland with experience working in a clinical setting within the past five years could participate. Inclusion and exclusion criteria were identified in the participant information, and completing the questionnaire was only allowed if the participant met these criteria. The survey sample was drawn from the population of ~3,000 radiographers on the CORU Register as of April 2023 [12].

Questionnaire deployment

The questionnaire was deployed online and distributed nationally via a link to the *Qualtrics* survey platform. Promotion of the survey within the radiographer community in Ireland through email mailing lists of managers, and social networking sites, including Facebook, X (formerly Twitter), and LinkedIn. This convenience sampling technique aimed to encourage participation from the target population, gaining as many responses as possible. The questionnaire was available online from 20th April to 21st May 2023.

Data collection and analysis

Fully anonymized responses were collected via *Qualtrics*. Descriptive statistics were utilized to explain the findings of closed-ended questions. Additionally, qualitative data analysis techniques were applied to gain deeper insights into the collected data and enhance understanding of closed-ended questions with corresponding open-ended ones based on respondent answers.

Results

A total of 141 radiographers completed the questionnaire (**Table 1**). In three cases, the respondents omitted certain questions, resulting in a questionnaire completion rate of 93%. However, the research team deemed the omitted questions noncritical; thus, this data was still

included in the analysis. According to the April 2023 CORU registration statistics, this sample size represents approximately 4.7% (141/3000) of radiographers in Ireland [12].

Of the 141 respondents, 78 (55%) indicated that they worked in the public sector, 49 (35%) in the private sector, and 14 (10%) reported working in both sectors concurrently. Among the 14 (10%) respondents who reported working a mixture of both, 13 responded to their experience in the public sector, and 1 based their answers on their role in the private sector (**Table 1**).

Table 1: Summary of Respondent Demographics.

Variable		***n (%)***	
Sex		***Public Sector***	***Private Sector***
	Male	14 (15%)	6 (12%)
	Female	76 (84%)	44 (88%)
	Non-binary	1 (1%)	0 (0%)
Age (years)	Under 20	0 (0%)	0 (0%)
	21-30	19 (21%)	13 (26%)
	31-40	27 (30%)	19 (38%)
	41-50	30 (33%)	14 (28%)
	51-60	13 (14%)	4 (8%)
	60 and over	2 (2%)	0 (0%)
Current Contract	Full-time, permanent	68 (75%)	40 (80%)
	Part-time, permanent	18 (20%)	9 (18%)
	Fixed term/Temporary	4 (4%)	0 (0%)
	Agency/Locum	1 (1%)	0 (0%)
	Zero hour	0 (0%)	1 (2%)
Position	Basic/Staff Grade	24 (27%)	4 (8%)
	Senior Radiographer	34 (37%)	18 (36%)
	Clinical Specialist (CSR)	23 (25%)	18 (36%)
	Locum/Agency Radiographer	1 (1%)	0 (0%)
	RSM/Clinical Lead	9 (10%)	10 (20%)

Retention issues:

Both the public and private sectors are confronting significant challenges related to employee retention. A considerable workload is identified as the predominant concern, impacting 78% of public sector employees and 76% of those within the private sector. Staff shortages are markedly more pronounced in the public sector, where 76% of employees report experiencing

difficulties, in contrast to 59% in the private sector. Additionally, issues of burnout and mental health are prevalent across both sectors, with 63% of public sector employees and 62% of private sector employees acknowledging these challenges. Moreover, the public sector faces specific concerns related to the physically demanding nature of work and insufficient opportunities for timely career advancement. In parallel, the private sector grapples with challenges such as competitive salary offers from other employers and a deficiency in financial incentives. Ultimately, both sectors are encountering considerable obstacles that negatively impact employee retention (Table 2).

Table 2: Reasons for employee retention issues as reported by employees from both sectors stating this is an existing issue in their workplace

Public sector	**% (n)**	***Private sector***	**% (n)**
Heavy workload	78% (38)	Heavy workload	76% (22)
Staff shortages	76% (37)	Burnout/mental health challenges	62% (18)
Burnout/mental health challenges	63% (31)	Staff shortages	59% (17)
The physically demanding nature of work	51% (25)	Better pay offered elsewhere	52% (15)
Lack of timely career progression	49% (24)	Lack of financial reward/benefit	52% (15)

Further reasons were obtained from respondents through an open-ended text entry option provided in this question. Additional reasons for employee attrition reported by those in the public sector included staff leaving to travel or work abroad (n=5), "predominantly among the newly qualified workforce", and inadequate work/life balance due to working hours (n=1). Additional reasons reported by private sector employees included leaving to prioritize family (n=1), wanting to work closer to home (n=1), and poor morale (n=1).

Perceived advantages of working in either sector:

The results indicate distinct preferences between the public and private sectors. A notable advantage for public sector employees is the state/public sector pension, with an overwhelming 87% identifying it as a key benefit, closely followed by 80% in the private sector. Job security also emerged as a significant factor, reported by 81% of public sector employees compared to 72% in the private sector. Furthermore, 76% of public sector employees valued paid sick leave,

in contrast to only 58% of private sector employees. Conversely, flexibility in work hours was identified as a considerable advantage in the private sector, with 78% appreciating this feature, in stark contrast to 55% in the public sector. Training opportunities in specialized modalities were recognized as beneficial by 54% of public sector employees, whereas only 38% of private sector employees acknowledged this advantage (Table 3).

Table 3: Perceived advantages of working in the public and private sectors according to employees of both sectors

Public re: Public sector	**% (n)**	***Private re: Public sector***	**% (n)**
State/public sector pension	87% (79)	State/public sector pension	80% (40)
Job security	81% (74)	Job security	72% (36)
Paid sick leave	76% (69)	Paid sick leave	58% (29)
Public re: Private sector		***Private re: Private sector***	
Flexibility in hours of work	55% (50)	Flexibility in hours of work	78% (39)
Benefits	53% (48)	Training opportunities in specialized modalities	54% (27)
Training opportunities in specialized modalities	38% (35)	The variety of imaging modalities available	48% (24)

An open-ended aspect of this question was provided through a text entry option, which provided further information from respondents. Additional advantages to working in the public sector reported by public sector employees were greater variety of work (n=2), opportunity to join a union/have a union representative (n=2), paid maternity leave (n=1), location/possibility of moving closer to home (n=2). Private sector employees' additional reported advantages to working in the public sector included less workload per staff member (n=1).

Comments from public sector employees regarding the advantages of private sector work included negotiable/higher salaries (n=6) and locum work (n=2), more aesthetically pleasing environments (n=1), the possibility of longer working days (n=2), with one respondent equating this to meaning less childcare. Private sector employees reported advantages of working in the private sector, such as salaries/higher wages (n=4). Additional comments included, "There is much more value placed on good performance [in the private sector], and under-performers are addressed—unlike the public sector". The speed at which training in

modalities is possible was also reported as an advantage; “no long waits of up to a year or two like in the public sector”.

Reported salaries/annual pay of full-time employees at the various grades/positions from the public (n=68) and private (n=40) sectors were obtained, and averages for each were calculated. Fig. 1 illustrates that the average salaries for radiography positions in the private sector exceed those in the public sector across all grades.

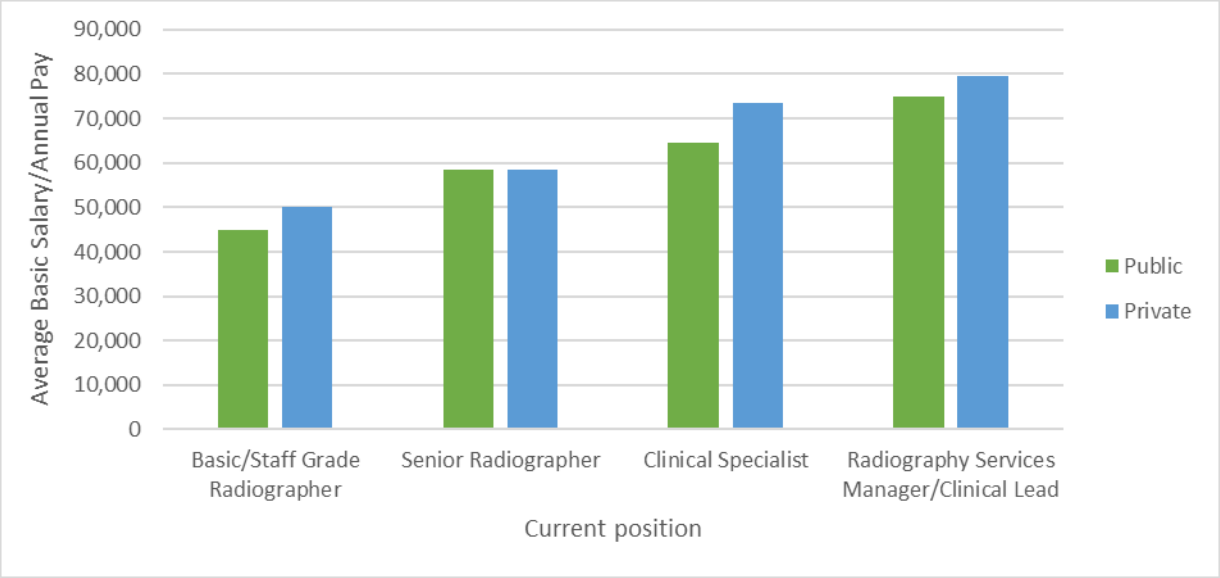


Figure 1: Clustered bar chart illustrating average salary/annual pay (to the nearest €500) for each grade from both sectors

Career progression:

Career progression was reported as a positive factor in sector choice by 41% (n=37) of those in the public sector and 58% (n=29) of those in the private sector (**Fig. 2**).

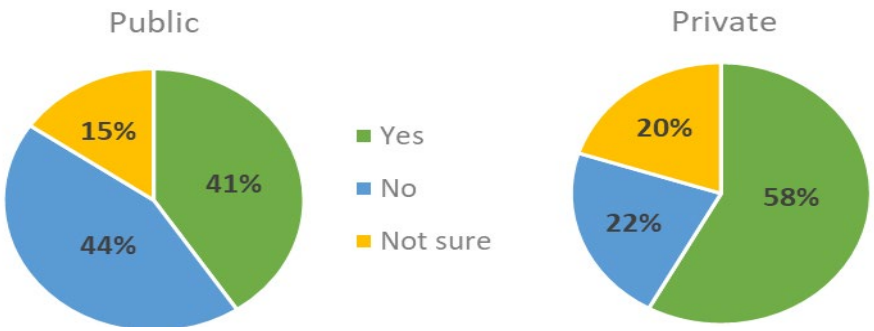


Figure 2: Pie chart illustrating frequencies (%) of answers to the question "Is career progression feasible in your current job?" in both sectors.

Areas in which opportunities for career progression exist were conveyed in open-ended question answers. Responses from public sector radiographers included Senior, Clinical Specialist Radiographer (CSR), Managerial, Radiography Services Manager (RSM), and Practice Tutor roles; modalities training; roles outside of radiology but still within the hospital; further third-level education/postgraduate qualifications in MRI, ultrasound, and nuclear medicine.

Responses from private sector radiographers included senior, RPO (Radiation Protection Officer), CSR, clinical lead, unit manager, RSM, and regional manager roles; postgraduate courses "facilitated and subsidized" and educational support; out of radiology into general hospital management; training in different modalities; and project roles in healthcare IT/informatics.

Of public sector employees, 44% (n=40) felt career progression was not feasible in their current job. That constituted 22% (n=11) of private sector employees (Fig. 2). A follow-up open-ended question regarding the desire for such opportunities allowed further insight. Areas in which public sector respondents wished opportunities for career progression existed included teaching; more defined pathways into roles such as PACS and RPO; more CSR roles in general X-ray, portables, and A&E (Accident & Emergency) radiography; more grades of radiographer/a longer senior scale (n=2); reporting radiographer roles with a pay increase (n=8).

Some respondents (n=3) stated that management opportunities are limited in the public sector. One respondent advocated a longer senior scale, with another stating that there is "Nowhere to go after clinical specialist" roles are obtained. One public sector employee said, "Career progression in this department doesn't give people promoted to CSR any concessions for having worked for years in general/theatre. We all still go to theatres, do mobiles, and spend much time outside our areas of specialty where we are most needed."

Areas in which private sector respondents wished opportunities for career progression existed included reporting radiographer/sonographer roles (n=2), research/lecturing roles (n=1), and radiation protection roles (n=1). **Table 4** presents a summary of the findings.

Table 4 Summary of Findings		
Factor	**PUBLIC SECTOR DR**	**PRIVATE SECTOR DR**
Motivational Factors for Job Acceptance and Future Employment:	Emphasized the importance of pension, job security, and paid sick leave. Future employment considerations remained like their current job motivations.	Initially prioritized salary and benefits but decreased desire towards career progression for future jobs. Valued work hours flexibility and training opportunities in specialized modalities.
Retention Issues:	54% reported low employee retention as an issue. Reasons: heavy workload, staff shortages, and burnout/mental health challenges.	58% reported low employee retention as an issue. Reasons: heavy workload, burnout/mental health challenges, and staff shortages.
Perceived Advantages:	Valued state/public sector pension, job security, and paid sick leave. Recognized the need for more managerial roles and career progression opportunities, especially beyond clinical specialist roles.	Flexibility in work hours, training opportunities in specialized modalities, and various imaging modalities are vital benefits. Higher salaries and wages have a significant advantage over the public sector.
Career Progression:	41% felt career progression was feasible in their current job.	58% felt career progression was feasible in their current job.

	Desired more defined pathways into roles like PACS, RPO, and more CSR roles in general radiography.	Interest in managerial roles suggests more opportunities and attainability in the private sector. The desire for roles like reporting radiographer/sonographer and healthcare IT/informatics opportunities.
Value	Job security and benefits like pension and sick leave.	Flexibility, training opportunities, and potential for higher salaries, along with a more straightforward path to career progression and managerial roles
Both sectors face challenges with workload, burnout, and staff shortages		

Discussion

Transitioning from the public to the private sector presents a contemporary challenge. This research aims to explore and gain a comprehensive understanding of the diverse motivations that influence radiographers in their sector selection. It achieves this by delineating the distinct priorities of radiographers within both public and private domains.

The results of this study highlight significant challenges related to employee retention faced by radiographers in both the public and private sectors in Ireland. A majority of respondents identified heavy workloads as a primary concern, with 78% (38 respondents) in the public sector and 76% (22 respondents) in the private sector recognizing it as a key issue. Staff shortages were notably more acute in the public sector, where 76% (37 respondents) reported difficulties, compared to 59% (17 respondents) in the private sector. Additionally, mental health issues and burnout were prevalent, affecting 63% (31 respondents) and 62% (18 respondents) of employees, respectively. These findings underscore the urgent need for targeted initiatives that address workload management, mental health support, and work-life balance to enhance employee satisfaction and retention.

In terms of job advantages, public sector employees valued job security and pension benefits, while private sector employees appreciated flexibility in work hours and higher salaries. The perceived opportunities for career progression differed markedly between sectors, with 41% (37 respondents) of public sector respondents and 58% (29 respondents) of private sector respondents citing career progression as a motivating factor. Notably, 44% (40 respondents) of public sector employees and 22% (11 respondents) of private sector employees felt limited in their career advancement options, indicating a pressing need for clearer pathways and professional development opportunities. Addressing these gaps through enhanced training programs and structured career progression could significantly improve job satisfaction and retention across both sectors.

Motivational factors for job acceptance and future employment in the public sector radiographers emphasized the importance of pensions, job security, and paid sick leave. This aligns with the Labour Market Segmentation Theory, which distinguishes between the 'primary' public sector, valued for stability and long-term benefits, and the secondary private sector, known for flexibility and higher immediate earnings [12, 13].

Private sector radiographers initially prioritized salary and benefits but showed a decreased desire for career progression in future jobs. They particularly valued work hours flexibility and training opportunities in specialized modalities. This shift aligns with Becker's Human Capital Theory [14], which treats training as an investment in workforce productivity and market value.

Both sectors reported significant retention challenges, with 54% in the public and 58% in the private sectors citing this as an issue. The primary reasons were consistently heavy workloads, staff shortages, and burnout/mental health challenges. This suggests a misalignment with the Principal-Agent Theory [14-16], which asserts that inefficiencies arise when healthcare institutions' goals (principals) do not align with radiographers' (agents).

Public sector radiographers valued state/public sector pensions, job security, and paid sick leave. Private sector radiographers highlighted flexibility in work hours, training opportunities in specialized modalities, and various imaging modalities as vital benefits. Higher salaries and wages were seen as a significant advantage over the public sector. This distinction reflects Milkovich, Newman, & Gerhart's [17] analysis of strategic compensation differences between the public and private sectors.

In consideration of the challenges encountered by radiographers, it is advisable that public sector employers implement more flexible work arrangements and address concerns related to excessive workloads and burnout. Conversely, private sector employers should ensure competitive salaries, facilitate career development opportunities, and provide access to advanced training. Both sectors must prioritize the well-being of their staff and align workplace benefits with the priorities of radiographers. The implementation of these strategies is likely to enhance job satisfaction and decrease turnover within the profession.

Recommendations

The recommendations and strategies focus on key themes that optimize radiographer retention and elevate job satisfaction, employers across the public and private sectors must adopt flexible work arrangements, combat burnout, and enhance career pathways, particularly in specialized fields. Prioritizing job security, benefits, competitive salaries, specialized training access, quick promotion opportunities, and work-hour flexibility is essential. Mental health support and work-life balance should be central to addressing heavy workloads and burnout, aligning workplace benefits with radiographers' motivations to reduce turnover and boost professional satisfaction. Tailoring retention strategies in the Irish radiography sector to align with radiographers' preferences by balancing compensation packages, promoting technological innovation, offering professional development opportunities, transparent salary information, flexible working options, and regular evaluation mechanisms is crucial. By emphasizing stability, benefits, and career growth in the public sector, and flexibility, professional advancement, and higher income potential in the private sector, organizations can create a more engaging work environment, ultimately enhancing retention rates and strengthening the radiography sector in Ireland.

The present study is subject to several limitations that warrant careful consideration, including reliance on self-reported, anonymized data and the potential for sampling bias that may favor the private sector over the public sector. To enhance the rigor of future research, it is advisable to ensure proportional representation from different sectors and to investigate participant awareness. Furthermore, the exclusion of participants registered with CORU who have not worked in the past five years may result in the omission of valuable experiences. Additionally, the questionnaire deployment method, which relies on social media and

LinkedIn, may introduce inherent bias. To gain deeper insights into career dynamics and motivations, longitudinal and qualitative analyses are recommended, along with the exploration of global influences on radiographers' career decisions through international studies.

Conclusion

This study elucidates significant challenges encountered by radiographers in Ireland, including excessive workloads, staffing deficiencies, and mental health concerns, which substantially impact employee retention. To effectively mitigate these issues, it is imperative for employers to prioritize strategies aimed at managing workloads and delivering mental health support. Furthermore, acknowledging the varying motivations for selecting between the public and private sectors can inform customized approaches to retention. Establishing clearer career progression pathways and enhancing training opportunities, particularly within the public sector, are essential for cultivating a motivated and satisfied workforce across both sectors.

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Supplementary material

Questionnaire

Participant Information Leaflet:

Public or private sector? Radiographers' career choices in the Republic of Ireland.

Taking part in this survey is **completely voluntary**. Before you decide whether or not you wish to take part, you may wish to read the information provided below.

The Study

Who is organising and carrying out this study?

This study is being carried out by MSc Diagnostic Radiography student Alison Considine at University College Cork, under the supervision of Prof. Mark McEntee, Dr. Andrew England and Rena Young of the Discipline of Medical Imaging and Radiation Therapy.

Why is this study being done?

This research project will explore what diagnostic radiographers believe to be advantages/disadvantages of working in the public and private healthcare sectors in Ireland. The study will account for various aspects of the profession in the clinical setting, and attempt to discern the reasoning behind radiographers' career decisions, in deciding which sector to work in. Information on reasons for certain career choices of clinical radiographers may be of interest to RSMs and diagnostic imaging clinic managers nationally. It may also be of use to newly qualified graduates of diagnostic radiography to assist in their decision making regarding their first job and how this decision may affect the potential for salary increases and career progression.

Why am I being invited to take part?

All state registered diagnostic radiographers who are currently working, or in the last five years have worked, in the clinical setting are being invited to take part in this study.

Do I have to take part?

Participation in this study is **completely voluntary**. There is no obligation to participate.

What is required of me in order to participate in this study?

Should you choose to participate, you will be asked to complete an online anonymous questionnaire comprising of questions regarding you and career. Participation should take a maximum of 15 minutes. Your views, experiences, and opinions on certain aspects your radiographic career will be examined and recorded.

Can I withdraw?

Should you decide to withdraw from the study while filling out the questionnaire you can do so prior to submission. After this point your data will be
fully anonymised and will be unable to be deleted from the study.

Are there any risks to me or others if I take part?

We do not anticipate any negative outcomes or risks from participating in this study.

Data Protection

Who will access and use my personal data as part of this study?

The information you provide in the survey will be examined by the primary researcher and relevant supervisors in UCC. The anonymised information you provide once analysed may contribute to research publications and/or conference presentations. The anonymised information you also provide may be used by future researchers as part of Open Research practices. You will be asked to provide your consent to this specific element of the study within the consent questions.

How will my data be stored and kept safe?

The anonymous data will be stored on a University College Cork supported cloud storage platform (Microsoft Office 365, OneDrive for Business – Sharepoint). Data will be stored for a minimum of ten years. All information you provide will be confidential and your anonymity will be protected throughout the study. The information you provide in the survey will be entered into an anonymised database which will not contain any personal details about you.

Approval

Has this study been approved by a research ethics committee?

This study has obtained ethical approval from the UCC Social Research Ethics Committee.

Further Information

Who should I contact for further information or any questions I may have?

Should you have any further questions regarding this study, you can contact me (Alison Considine) at 116344173@umail.ucc.ie or my research supervisor Dr Andrew England (aengland@ucc.ie).

Final Version of Questionnaire as Published Online:

Public or private sector? Radiographers' career choices in the Republic of Ireland.

Q1

Public or private sector? Radiographers' career choices in the Republic of Ireland.

You are being invited to take part in a research study conducted by MSc Diagnostic Radiography student Alison Considine at University College Cork, under the supervision of Prof. Mark McEntee, Dr. Andrew England and Rena Young of the Discipline of Medical Imaging and Radiation Therapy. **The purpose of this study is to investigate the current career differences between clinical diagnostic radiographers working in the public**

and private sectors in the Republic of Ireland, and what motivational factors exist for radiographers selecting a job in either sector.

Taking part in this survey is **completely voluntary**. Before you decide whether or not you wish to take part, you may wish to read the information provided below.

The Study

Who is organising and carrying out this study?

This study is being carried out by MSc Diagnostic Radiography student Alison Considine at University College Cork, under the supervision of Prof. Mark McEntee, Dr. Andrew England and Rena Young of the Discipline of Medical Imaging and Radiation Therapy.

Why is this study being done?

This research project will explore what diagnostic radiographers believe to be advantages/disadvantages of working in the public and private healthcare sectors in Ireland. The study will account for various aspects of the profession in the clinical setting, and attempt to discern the reasoning behind radiographers' career decisions, in deciding which sector to work in. Information on reasons for certain career choices of clinical radiographers may be of interest to RSMs and diagnostic imaging clinic managers nationally. It may also be of use to newly qualified graduates of diagnostic radiography to assist in their decision making regarding their first job and how this decision may affect the potential for salary increases and career progression.

Why am I being invited to take part?

All CORU registered diagnostic radiographers who are currently working, or in the last five years have worked, in the clinical setting in the Republic of Ireland are being invited to take part in this study.

Do I have to take part?

Participation in this study is **completely voluntary**. There is no obligation to participate.

What is required of me in order to participate in this study?

Should you choose to participate, you will be asked to complete a questionnaire comprising of questions regarding your career. Participation should take approximately 15 minutes. Your views, experiences and opinions on certain aspects your radiographic career will be examined.

Can I withdraw?

Should you decide to withdraw from the study while filling out the questionnaire you can do so prior to submission. After this point your data will be
fully anonymised and will be unable to be deleted from the study.

Are there any risks to me or others if I take part?

We do not anticipate any negative outcomes or risks from participating in this study.

Data Protection

Who will access and use my personal data as part of this study?

The information you provide in the survey will be examined by the primary researcher and relevant supervisors in UCC. The anonymised information you provide once analysed may contribute to research publications and/or conference presentations.

How will my data be stored and kept safe?

The anonymous data will be stored on a University College Cork supported cloud storage platform (Microsoft Office 365, OneDrive for Business – Sharepoint). Data will be stored for a minimum of ten years. All information you provide will be confidential and your anonymity will

be protected throughout the study. The information you provide in the survey will be entered into an anonymised database which will not contain any personal details about you.

Approval
Has this study been approved by a research ethics committee?
This study has obtained ethical approval from the UCC Social Research Ethics Committee.

Further Information
Who should I contact for further information or any questions I may have?
Should you have any further questions regarding this study, you can contact me (Alison Considine) at 116344173@umail.ucc.ie .

Q2 Please confirm that you have read the **Participant Information** (above) and that you have been given the opportunity to ask questions (via email) from a study researcher.

- Yes (1)
- No (2)

Q3 Please confirm that you wish to proceed and understand that your **participation is voluntary** and that you are free to withdraw from the study up until the point of submitting your completed questionnaire. At this point your data will be fully anonymised and will be unable to be deleted from the study database.

- Yes (1)
- No (2)

Q4 Open Research practices are becoming a requirement nationally and internationally, so that future researchers may have access to existing research data, often so that a study may be reproduced in another context. Access to the anonymous information collected for any potential future research would be in accordance with ethical codes of conduct for research and data protection regulations.

I consent to allowing future researchers access to the anonymous information that will be collected in the survey which will be in accordance with ethical codes of conduct for research and data protection regulations.

- Yes (1)
- No (2)

Q5 Are you currently registered with CORU as a diagnostic radiographer?

- Yes (1)
- No (2)

Q6 Are you currently working in a clinical healthcare setting within the Republic of Ireland?

- Yes (1)
- No (2)

Q7 Have you worked in a clinical healthcare setting in the Republic of Ireland during the last five years?

- Yes (2)
- No (3)

Q8 In answering the following questions, when asked about your "current" post or job you may refer to the position you last held working as a radiographer in a clinical setting in the ROI.

- I understand (1)

Page Break

Q9 What gender do you identify as?

- Male (1)
- Female (2)
- Transgender (3)
- Non-binary (4)
- Prefer not to say (5)
- Other (please specify) (6)

Q10 What is your age group?

- Under 20 (1)
- 21-30 (2)
- 31-40 (3)
- 41-50 (4)
- 51-60 (5)
- 61 and over (6)

Q11 Are you currently employed by the public or private sector? If no longer working in a clinical setting, were you previously employed by the public or private sector?

Public sector includes government/state run/funded healthcare facilities such as the Health Service Executive (HSE).
Private sector may include, but is not limited to, Alliance Medical, Affidea, Medica Group, Bon Secours Health System Network, Mater Private Hospital Network.

- Public (1)
- Private (2)
- Mix of both (3)

Q12 In answering the following questions, when asked about your "current" post or job, you may refer to the sector in which you predominantly work/undertake the most hours in.

- I understand and will answer based on public sector employment (1)
- I understand and will answer based on private sector employment (2)

Q13 How many years of experience do you have working as a radiographer in a clinical setting?

- 0-5 (1)
- 6-10 (2)
- 11-20 (3)
- 21-30 (4)
- 30+ (5)

Q14 To date, how long have you been in your **current** post?

- 0-1 year (1)
- 2-3 years (2)
- 4-6 years (3)
- 7-9 years (4)
- 10+ years (5)

Q15 Was the **previous** post you occupied in Ireland in the public or private sector?

- Public (1)
- Private (2)
- N/A (first post in clinical radiography) (3)
- N/A (first post in the ROI) (4)

Q16 How long did you remain in that post?

- 0-1 year (1)
- 2-3 years (2)
- 4-6 years (3)
- 7-9 years (4)
- 10+ years (5)
- N/A (first post in clinical radiography) (6)
- N/A (first post in the ROI) (7)

Q17 What best describes your **current** working contract?

- Full-time, permanent (1)
- Part-time, permanent (2)
- Fixed-term/temporary (3)
- Agency/Locum (4)
- Zero hour (5)

Q18 Are you contractually required to remain in your **current** post for a particular length of time due to any funding received from your employer? (e.g. towards any type of education costs)

- Yes (1)
- No (2)

Q19 Which of the following **best** describes your current position?

- Basic/Staff Grade Radiographer (1)
- Senior Radiographer (2)
- Clinical Specialist (3)
- Locum / Agency Radiographer (4)
- Radiography Services Manager/Clinical Lead (5)

Q20 In which bracket does your **current** basic salary/annual pay fit?

- Less than €20,000 (1)
- €20,000-€29,999 (2)
- €30,000-€39,999 (3)
- €40,000-€49,999 (4)
- €50,000-€59,999 (5)
- €60,000-€69,999 (6)
- €70,000-€79,999 (7)
- €80,000-€89,999 (8)

- €90,000-€99,999 (9)
- €100,000-€109,999 (10)
- More than €110,000 (11)
- Prefer not to say (12)

Q21 What modalities/areas do you **regularly** work in your **current** job? (Select all that apply)

- General X-ray (1)
- Theatre (2)
- Fluoroscopy (3)
- DXA (4)
- MRI (5)
- CT (6)
- PET-CT (7)
- Ultrasound (8)
- Cath Lab (9)
- Interventional Radiology (10)
- Mammography (11)
- Nuclear Medicine (12)
- Dental (13)
- RIS/PACS (14)
- Radiation Protection (15)
- Other (please specify) (16)

Q22 What are the working/opening hours of the radiology department you are **currently** working in? (e.g 24/7 with on-call staff available, Mon-Fri 9am-5pm, Mon-Sat 7am-7pm etc.)

- 24/7 with on-call staff available (15)
- Mon-Sun, 9am-5pm (20)
- Mon-Fri, 9am-5pm (16)
- Mon-Sat, 7am-7pm (17)
- Mon-Sun, 7am-8pm (18)
- Other (please specify) (19)

_____

Q23 What hours do you normally work?

- 8:00-16:00 (5)
- 8:30-16:30 (4)
- 9:00-17:00 (6)
- 7:00-19:00 (7)
- 7:00-20:00 (8)
- 8:00-20:00 (9)
- Night work (10)
- Other (please specify) (11)

Q24 Is it possible for you to avail of the breaks you are entitled to during a typical working day?

- Always (1)
- Often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

Q25 Please rank your motivation for accepting your **current/most** recent job from most (1) to least (6) important. (Drag to change)
_____ Salary (1)
_____ Pension (2)
_____ Benefits (examples may include health insurance, incentive schemes, bonuses etc.) (3)
_____ Opportunities for career progression (4)
_____ Pace of work (5)
_____ Hours/shifts offered (6)

Q26 With reference to any **future jobs** you may seek out or accept, please rank your motivation from most (1) to least (6) important. (Drag to change)
_____ Salary (1)
_____ Pension (2)
_____ Benefits (examples may include health insurance, incentive schemes, bonuses etc.) (3)
_____ Opportunities for career progression (4)
_____ Pace of work (5)
_____ Hours/shifts offered (6)

Q27 Were you required to relocate in order to work at your **current** job site?
- ○ Yes (1)
- ○ No (2)

Q28 Did your employer offer a relocation package?
- ○ Yes (1)
- ○ No (2)

Q29 In your opinion, is career progression feasible in your **current** job?
- ○ Yes (1)
- ○ No (2)
- ○ Not sure (3)

Q30 Please describe what opportunities exist for career progression in your **current** job?

Q31 Are there areas in which you wish there were opportunities for career progression?
- ○ No (1)

Q32 To what extent do you agree with the following statement?

I accepted my **current** job with the intention of being trained into a specialised imaging modality.
- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q33 To what extent do you **agree** with the following statement?

The waiting time to train in a specialised imaging modality would be a deciding factor for me when choosing to accept a job.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q34 To what extent do you **agree** with the following statement?

I accepted my **current** job with the intention of remaining an employee there for 5+ years.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q35 How did you first hear about the availability of the post you are **currently** in?

- Employment website e.g. indeed.com, jobs.ie (1)
- Employer/company website (2)
- Recruitment agency (3)
- LinkedIn (4)
- Word-of-mouth (5)
- Social media e.g. Twitter (6)
- Formally referred by an existing employee (7)
- Other (please specify) (8)

Q36 When investigating a potential job, do you seek out information regarding the employer, from either present or past employees?

- Always (1)
- Often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)

Q37 In your opinion, is employee retention an issue in your **current** workplace?

- Yes (1)
- No (2)
- Not sure (3)

Q38 In your opinion, what are the challenges to employee retention at your **current** workplace? (Select all that apply)

- Staff shortages (1)
- Heavy workload (2)
- Lack of timely career progression (3)
- Better pay offered elsewhere (4)
- Physically demanding nature of work (5)
- Burnout/mental health challenges (6)

- Lack of financial reward/benefits (7)
- Limited opportunities for Continuing Professional Development (CPD) (8)
- Poor employee relations (9)
- Inadequate/outdated equipment (10)
- Poor staff facilities (11)
- Other(s) (please specify) (12)

Q39 Does your **current** employer conduct **formal exit interviews** with employees who have decided to leave their job?

- Always (1)
- Often (2)
- Sometimes (3)
- Rarely (4)
- Never (5)
- Not sure (6)

Q40 Did your **previous** employer conduct a **formal exit interview**?

- Yes, and I chose to take part (1)
- Yes, but I chose not to take part (2)
- No (3)
- Not sure/cannot recall (4)
- N/A (first post in clinical radiography) (5)
- N/A (first post in the ROI) (6)

Q41 In your opinion, what are the advantages of working as a radiographer in the **public sector**? (Select all that apply)

- State/public sector pension (1)
- Broad choice of site locations (2)
- Variety of imaging modalities available (3)
- Flexibility in hours of work (4)
- Amount of available on-call work (5)
- Training opportunities in specialised modalities (6)
- Opportunities for CPD (7)
- Newer/more advanced technology/equipment (8)
- Amount of annual leave (13)
- Paid sick leave (12)
- Job security (9)
- Support offered to staff (10)
- Other (please specify) (11)

Q42 In your opinion, what are the advantages of working as a radiographer in the **private sector**? (Select all that apply)

- Flexibility in hours of work (1)
- Variety of imaging modalities available (2)
- Benefits (examples may include health insurance, incentive schemes, bonuses etc.) (3)
- Amount of available on-call work (4)
- Training opportunities in specialised modalities (5)
- Opportunities for CPD (6)
- Newer/more advanced technology/equipment (7)
- Amount of annual leave (11)
- Paid sick leave (10)
- Support offered to staff (8)
- Other (please specify) (9)

Q43 Submit response?

- Yes (1)