#### **Research Title**

Finding Innovative Strategic Solutions To Workforce Challenges Within Radiography Departments

Across Wales: An Ethnographic Case Study

#### **Author**

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This PhD Study is in Progress (2022-2026)

## **Background**

In 2020, a review conducted by the RCR identified that, additional to the increasing reporting demand, there is huge shortage of both diagnostic and interventional radiologists within the majority of radiology departments across the United Kingdom (RCR, 2020). Specifically in Wales alone, there are seven radiologists per a 100,000 population which is significantly less than the European average of 12 radiologists per 100,000 population (Welsh Government, 2018), causing unacceptable delays to image reporting and the need for lengthy workforce development strategies.

The number of trained reporting radiographers within the UK is insufficient to cope with these challenges and a recent report by the Ombudsman has suggested that at least another 500 reporting radiographers will be needed to help overhaul imaging services (Parliamentary and Health Service Ombudsman, 2021). Similarly, there will need to be an increase in clinical radiographers to backfill the training of new reporting radiographers, and yet a recent workforce census also highlighted that many radiography departments are critically under-staffed (RCR, 2020).

Recommendations from stakeholders were made which require action from radiography departments to improve current reporting targets and outcomes due to the current shortfall in the radiography workforce (Parliamentary and Health Service Ombudsman, 2021). Due to this, government initiatives have suggested that current operational standards and ways of working are not sustainable, providing an incentive for many healthcare organisations to consider the need for quality improvements for better and safer patient care and workforce development (Department of Health and Social Care, 2021).

## **Study Objectives**

Research Question:

How are Radiography departments in Wales responding to the challenges of workforce capacity and what is the sector wide learning that can be derived from local level service innovations?

Study Aims:

- 1. To identify the workforce challenges in Radiography departments across Wales
- 2. To map approaches to innovation, improvement and implementation
- 3. To undertake a number of in-depth case studies of a range of innovation in order to explore what works best, for whom, in what circumstances and why
- 4. Synthesise the findings from across case studies to enhance cross sector learning

#### Methodology

There are two main research work streams: -

(1) Identifying the new innovative changes that are being implemented within Radiology departments across Wales, through interviews with senior radiographers across health boards in Wales.

This element of the study will be a scoping exercise, in which semi-structured interviews will be undertaken across all health boards in Wales, with NHS Radiographers that have knowledge of the current contextual challenges within Radiography Departments and will either be directly involved in the innovative solutions required, or will be able to direct me to those who are.

(2) Evaluating a purposive sample of these innovations to better understand how they actually work in practice, using ethnographic case studies.

Purposively selected innovations will be selected as the basis for up to 3 in-depth ethnographic case studies for this part of the study. Clinical non-participant and participant observations will allow me to study the components of Normalisation Process Theory (NPT) as they are happening in the clinical department.

# **Data Analysis**

Thematic analysis will be utilised for the semi-structured interviews and each case study will be written up separately to enable individual analysis from each health board.

## References

Department of Health and Social Care (2021) 'Integration and Innovation: Working Together To Improve Health and Social Care For All' [Online] Available at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file /960548/integration-and-innovation-working-together-to-improve-health-and-social-care-for-all-web-version.pdf (Accessed 19th July 2021)

Parliamentary and Health Service Ombudsman (2021) *Unlocking Solutions In Imaging: Working Together To Learn From Failings In The NHS'* [Online] Available at <a href="https://www.ombudsman.org.uk/sites/default/files/Unlocking Solutions in Imaging working toge">https://www.ombudsman.org.uk/sites/default/files/Unlocking Solutions in Imaging working toge</a> ther to learn from failings in the NHS.pdf (Accessed 19th July 2021)

Royal College of Radiologists (2020) 'Clinical Radiology: UK Workforce Census 2020 Report' [Online] Available at <a href="https://www.rcr.ac.uk/system/files/publication/field\_publication\_files/clinical-radiology-uk-workforce-census-2020-report.pdf">https://www.rcr.ac.uk/system/files/publication/field\_publication\_files/clinical-radiology-uk-workforce-census-2020-report.pdf</a> (Accessed 21st July 2021)

Welsh Government (2018) 'Imaging Statement of Intent' [Online] Available at <a href="https://gov.wales/sites/default/files/publications/2019-03/imaging-statement-of-intent.pdf">https://gov.wales/sites/default/files/publications/2019-03/imaging-statement-of-intent.pdf</a> (Accessed 20th October 2021)