

Understanding barriers and enablers to Radiology-led research in North East and North Cumbria



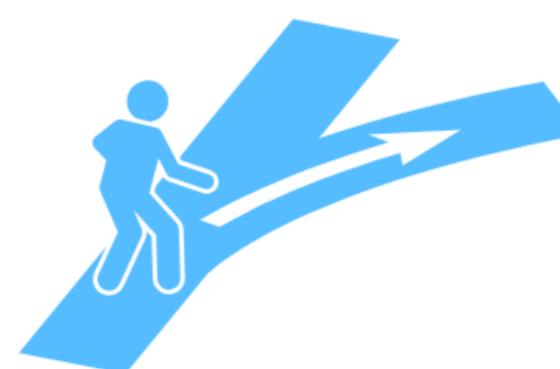
The advancement of radiology is dependent upon knowledge and implementation of new technologies and practices (Auffermann and Tridandapani, 2016). Historically, Radiology is a supporting department enabling research within other directorates. It was acknowledged by McNulty (2018) that radiographers need to progress beyond merely assisting with research and take on more collaborative and leadership research roles, embedding research into clinical practice. Radiology-led research is under-represented within North East and North Cumbria (NENC). Understanding the reasons for this will enable Radiology teams to work together to educate the workforce and assess potential removal of barriers.

Has it been done before?

Literature searches have shown cross-sectional studies have been done on research in Radiology before, but these have mainly been outside the UK. Radiographer perceptions towards radiology research remain hard to find (Saukko et al., 2021)

Will it change practice?

YES!!



If Radiology staff are enabled to do Radiology-led research in an area they are interested in, it could improve job satisfaction and retention as well as increased knowledge and confidence in clinical practice. Radiology-led research could lead to changes in the patient care pathway or advancement in medical imaging.

Methodology



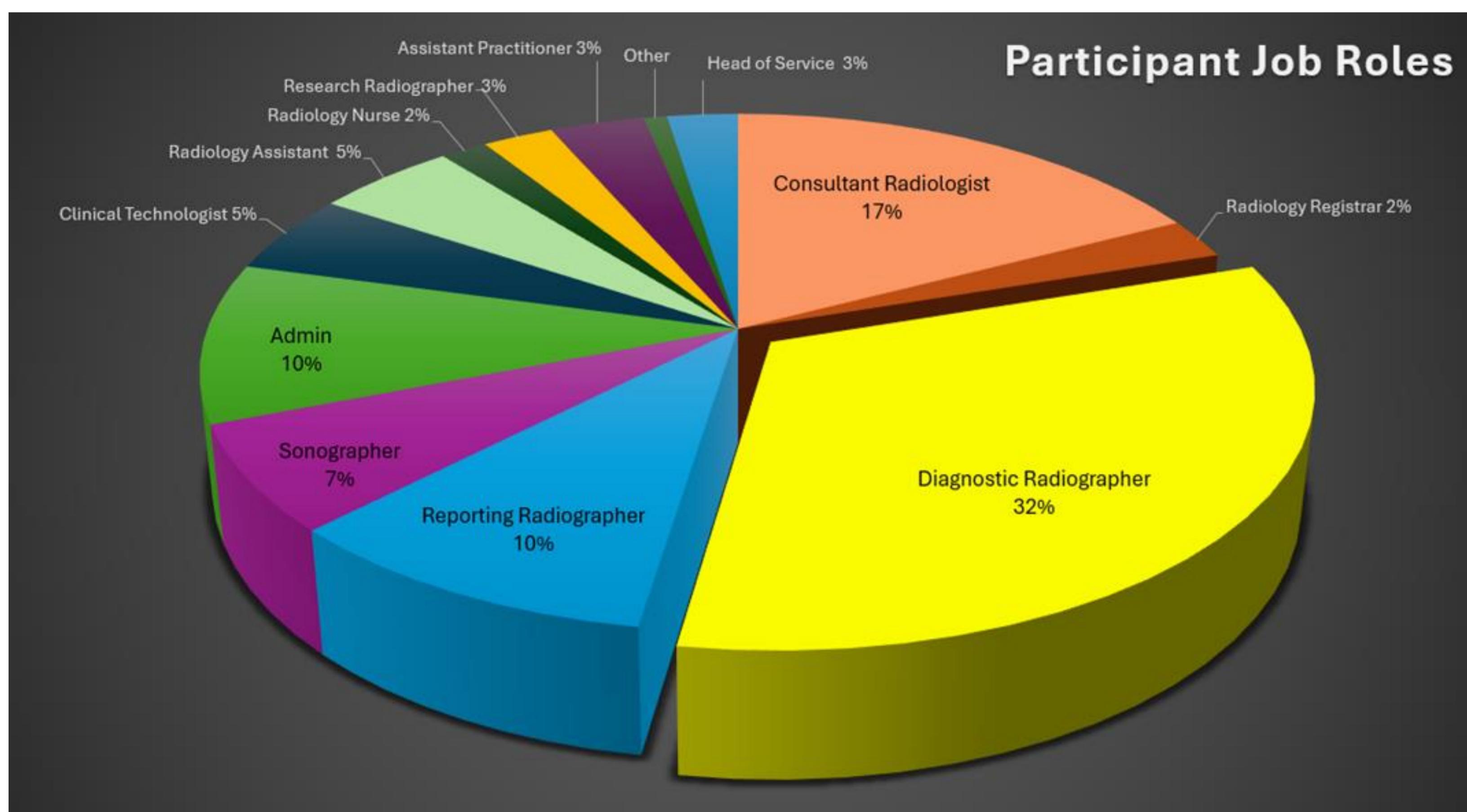
- ✓ Online survey
- ✓ 16 questions - open & closed
- ✓ Live for 1 calendar month
- ✓ Aimed at whole Radiology workforce in NENC (8 NHS Trusts)
- ✓ Distributed widely via email & Trust communications throughout NENC, followed up after 2 weeks to increase participation
- ✓ Thematic analysis on open answers
- ✓ Results shared regionally & formulation of a research and development plan

148 Participants

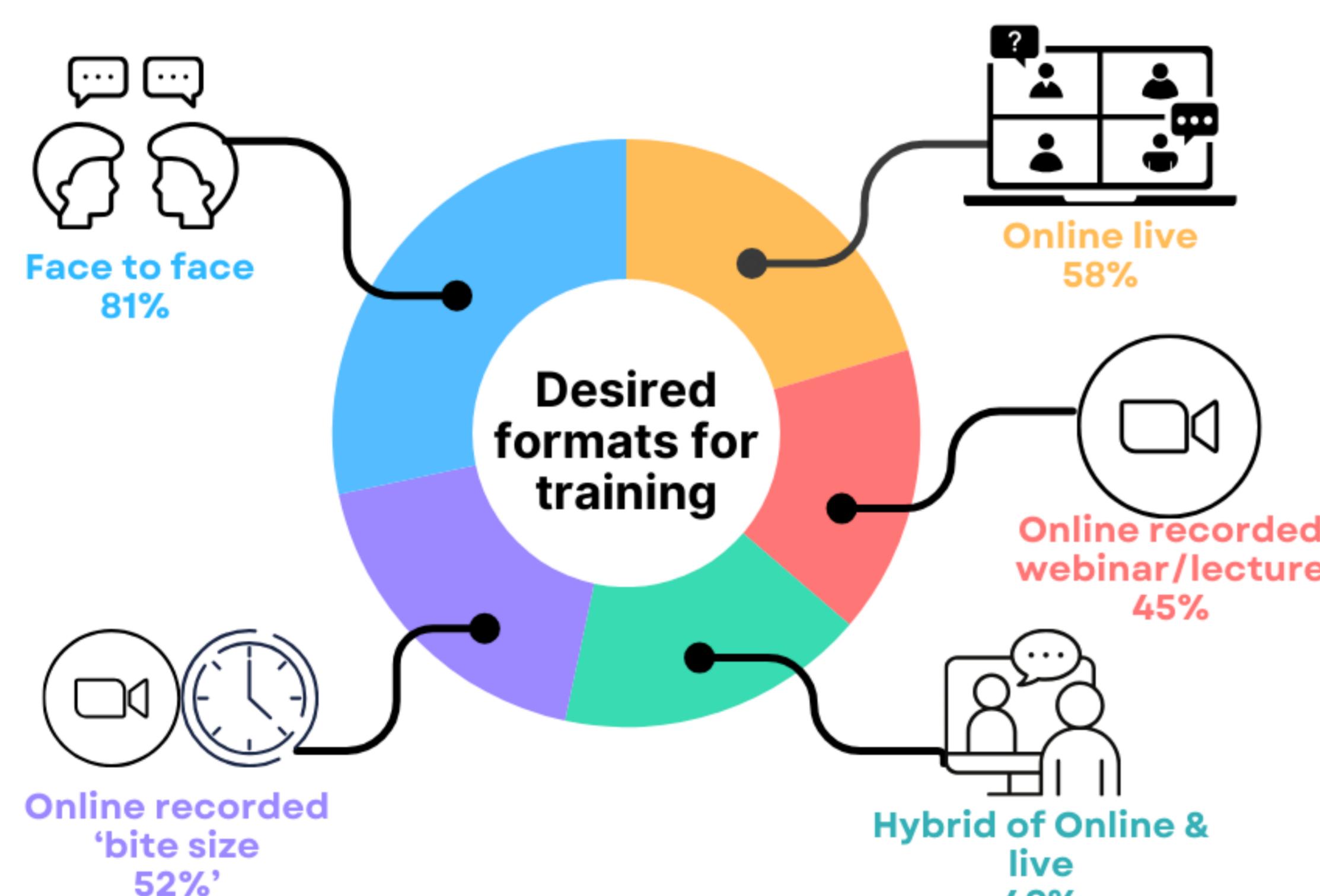
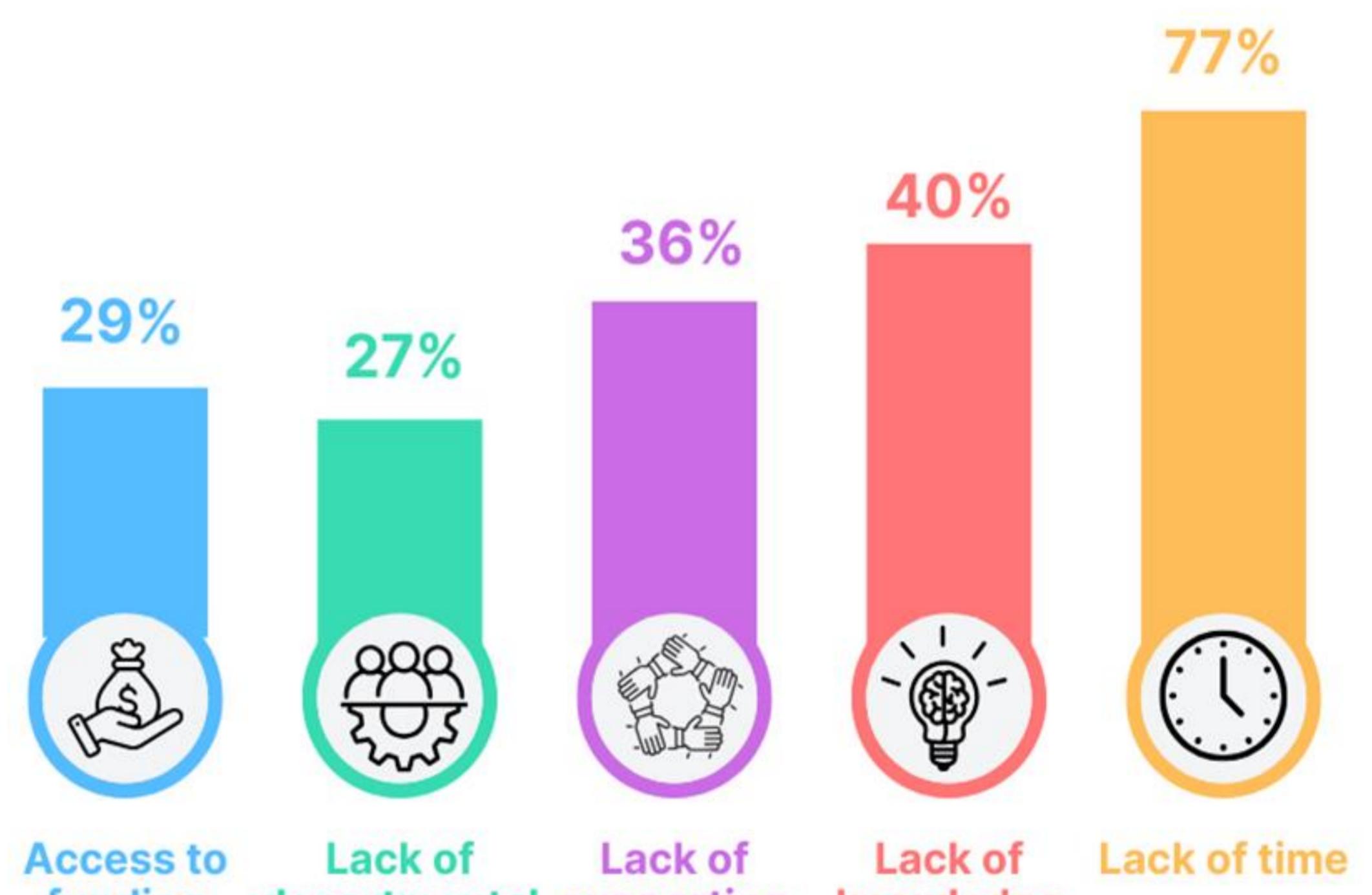
8/8 All NENC Trusts participated

Survey Results

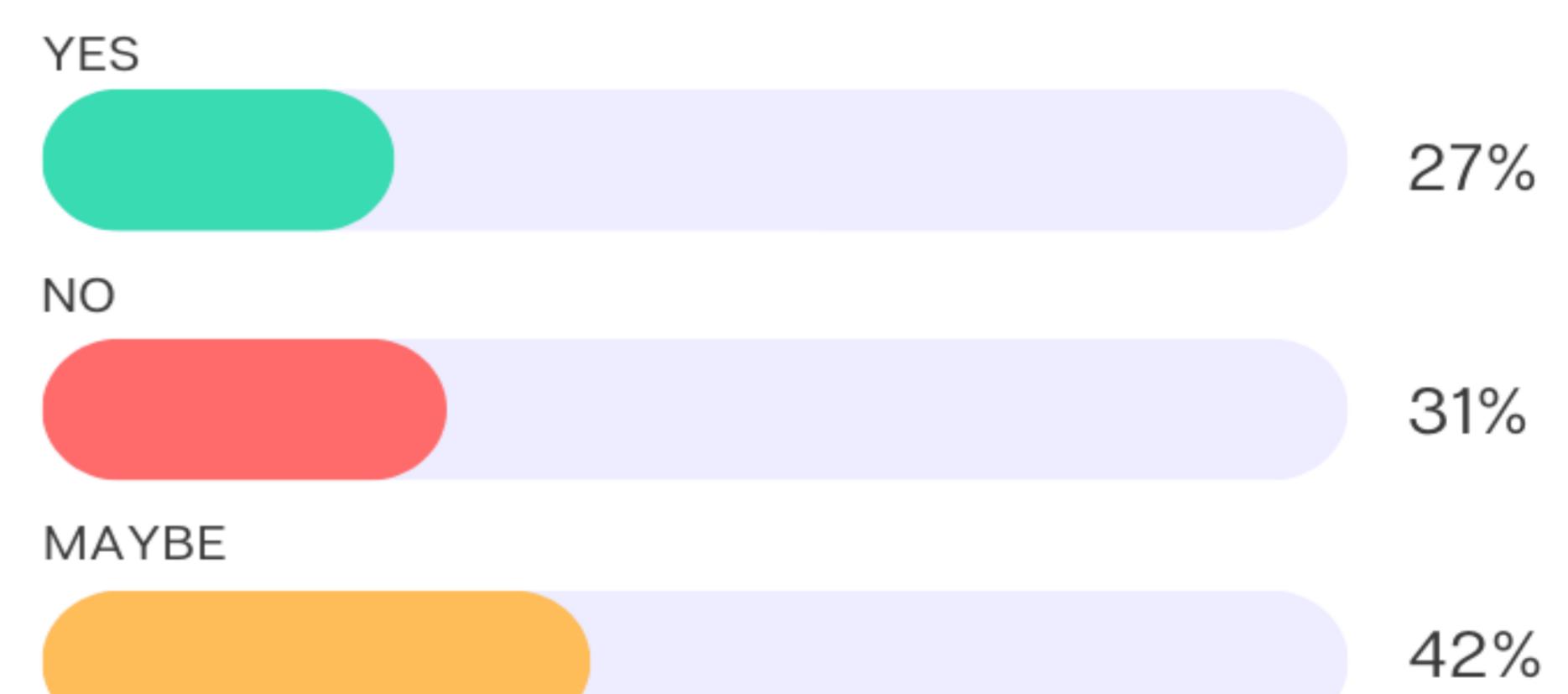
60% are unaware of research happening in their Radiology department.



Perceived Barriers to Research



Are you interested in conducting your own research?



Discussion & Actions

- Knowing participant job roles helps tailor the use of survey results to support different staff groups. The **10% response rate from administration staff** highlights the need to include them in Radiology research.
- With **60% unaware of research activity**, there's a clear need to improve communication and build workforce confidence in showcasing their work.
- Lack of time was the largest barrier** with knowledge, support and funding also key components. All these perceived barriers can be addressed by promoting regional funding opportunities, signposting to learning resources/mentors and improving access to education about research.
- Over 80% prefer face to face training**, followed by live online events and short recorded learning. How education is delivered needs to be tailored to the needs of the workforce, encouraging participation and interest.
- Only **27% were interested in conducting research**. Acting on the survey results to provide support and education is hoped to transfer some of the 42% of 'maybe' and add them to the 27% of 'yes' interested people.
- The NENC Imaging Academy are using these results to **formulate a radiology research and development plan**. Effectiveness of the plan will be measured by repeating this survey after 12 months.
- Limitations of the study include relying on emailed survey being read & acted upon. In-person Trust visits may have increased the participation rate.

References

Auffermann, W. F., & Tridandapani, S. (2016). Clinical radiology and radiology research in a sea of change. *Academic Radiology*, 23(1), 6-7.

McNulty, J. (2018). Fostering clinical research in imaging departments. *Health-Management.org*, 18(3).

Saukko, E., Andersson, B. T., Bolejko, A., Debess, J., Fridell, K., Henner, A., ... & Sanderud, A. (2021). Radiographers' involvement in research activities and opinions on radiography research: A Nordic survey. *Radiography*, 27(3), 867-872.