**Title:** The visibility of research within mandatory National Health Service Trust (NHS) Induction programmes in England: an exploratory survey study.

#### **Abstract**

Background: Mandatory NHS Trust induction programmes are an integral part of staff orientation processes. Although research is recognised as fundamental to high quality care, little data exists regarding whether research information is included within hospital induction.

Methods: Two online national surveys were developed, with the aim of identifying Trusts which included research within their mandatory induction programme. Survey one was distributed to Research and Development managers across England (n=201). Survey two collated information on the research content and delivery methods of induction material. The work was classified as service evaluation and reported in accordance with CHERRIES reporting standards.

Results: Survey one generated 124 unique responses (61% response rate). Thirty-nine percent of Trusts (n=48) featured information about research delivery and 24% (n=30) about training or support to develop clinical academic careers. There was wide variation in how materials were delivered, by whom and for how long.

Conclusions: Currently research has a limited profile within English NHS Trust mandatory induction programmes. This needs to be addressed if research is truly to be considered part of core NHS business. Guidance or a modifiable template could help Trusts communicate about research delivery and clinical academic development and training to all new employees.

**Keywords:** nursing clinical research, mandatory training, Inservice training, mandatory program, employee orientation program, induction.

### **Background**

National Health Service (NHS) policy in England states clinical research is core business and fundamental to delivering high quality clinical care (NHS England 2019; DHSC 2021a). There is evidence that research active organisations offer patients improved outcomes and greater treatment opportunities (Hanney et al., 2013; Jonker et al 2020). This is reflected in the Care Quality Commission (CQC) 'Trust-Wide Well-Led' inspection framework for England, with research participation incorporated into the assessment criteria (CQC 2018). In addition, the promotion of research aligns to several key policy initiatives, including 'Best Research for Best Health' (NIHR, 2021a) and strategies for nursing (NHSE, 2021) and Allied Health Professionals (AHPs) within England (NHS HEE, 2022). Despite this, research is often a 'hidden' aspect of organisational activity, primarily conducted by dedicated research staff who are often unrecognised as crucial to clinical care delivery. Although, many NHS job descriptions state that health care professionals have a role in supporting the conduct of research, the reality is often different, with research considered an 'add-on' (Peckham et al, 2021).

Initiatives to increase research awareness and activity across Nurses, Midwives and Allied Health Professionals (NMAHPs) are emerging. These range from schemes to develop senior nurse and

midwifery research leadership (Henshall et al 2020), training and support to facilitate clinical academic career development for NMAHPs (Oulton et al 2021) and innovations such as Chief Nurse Fellows to engage clinically based staff in identifying and addressing local clinical research priorities (Bramley et al 2018, Shepherd et al 2022). However, for an organisation to signal that research is part of its core business, messages about research opportunities need to reach all health care professionals across the organisation. One way of achieving this is by incorporating information about research into NHS Trust mandatory induction programmes for all new staff. In doing so, an awareness of local research activity can provide a conduit for staff to promote and offer research participation opportunities to patients, in alignment with a pledge in the NHS Constitution (DHSC 2021b).

Mandatory NHS Trust induction programmes are an integral part of welcoming new staff and provide opportunities for them to settle quickly and effectively into their new organisational roles (Gibbs 2002). Traditionally, on-site delivery of induction programmes was the norm; however, the COVID-19 pandemic prompted moves to online delivery via a range of e-platforms and providers (Quality Assurance Agency for Higher Education, 2020). The coordination of induction programmes and delivery of its content is usually implemented by staff from multiple professional backgrounds. Induction programme length and content may vary but commonly comprises information on mandatory training, local knowledge, policies, procedures, and Trust-specific core values. Despite induction programmes being ubiquitous, there is a paucity of evidence about their specific content; whether research is incorporated into them and to what extent, and whether research aligns with organisational goals. Induction programmes vary in quality and content, highlighting missed opportunities to introduce staff to organisational core values and priorities (Stanton and Lemer 2010; Ward 1998). The increasing importance placed on research as a key NHS priority should be reflected in the information given to all new staff starting within an organisation. This is highlighted by a recent report from Cancer Research UK which recommended that induction programmes for all NHS staff should include information on their organisation's research strategy, how it is being delivered and the role all staff can play in its implementation (Peckham et al 2021). In addition, many clinical NHS job descriptions state that staff have a role to play in supporting the conduct of research, but there is little understanding of the research information staff receive at induction, making these job descriptors difficult to operationalise from the outset.

This paper reports on the results of a survey conducted to gain insights into whether local research activities and opportunities were a feature of mandatory NHS Trust induction programmes provided to 'staff' within England. The survey was not designed to capture bespoke or separate training for specific health care professional groups, staff in particular departments or within specific roles, but to capture the training offered to **all** new 'staff', defined as new starters within an NHS Trust required to attend mandatory induction. Establishing the extent to which research is included in mandatory NHS induction programmes can help identify any gaps in induction programme content regionally and nationally. Recommendations can then be made to promote greater consistency and quality of research content across future NHS Trust induction programmes. Thus, the aim of the study was to identify NHS Trusts across England which included information about research activity and opportunities for staff engagement with research within their mandatory induction programmes.

#### Method

The study design was an online national survey study. No validated survey relevant to the project aims and objectives to evaluate training material within Trust Induction existed, therefore electronic surveys were developed by the project team (See table 1).

# \*Insert table 1\*

Survey content was generated that focused on firstly, the research profile of the organisations (research delivery) and secondly, staff development opportunities (clinical academic opportunities). Face and content validity of the surveys was achieved by pilot testing them with National Institute for Health and Care Research (NIHR) Senior Nurse and Midwife Research Leaders (SNMRLs) (n=2), research delivery nurses (n=2), a local Trust education lead (n=1) and an NIHR Governance manager (n=1). Following piloting, minor changes to the introductory text were made to add clarity that the survey data was collecting information on organisational mandatory induction training, as opposed to local department specific training. Additional changes included the addition of 'I don't know' responses to avoid non-completion and alterations to the survey's usability and functionality. Introductory text was also added to encourage staff to forward the survey to the relevant person within their organisation, recognising that the responsibility for developing and delivering induction material was held by different people across different organisations. The study was designed in accordance with the CHERRIES guidelines (Eysenbach, 2004). Although the survey was not administered on the internet, many of the CHERRIES items are valid for surveys administered via email. We have also referred to the SURVEY guidance for reporting survey studies robustly (Latour and Tume, 2021). Two online surveys hosted on Google Forms were developed by the project team. The first (Table 1) screened for organisations that provided information within the mandatory trust induction for new starters about research being carried out within the Trust (research delivery and opportunities for staff to get involved in research (research engagement/clinical academic opportunities). The survey also included free text questions about the available time allocated for this session and who delivered the teaching.

A second survey was then distributed to NHS organisations that had responded to survey one indicating that they did provide information about research within their mandatory trust inductions. Survey 2 asked more detailed questions about the content of the research induction material and asked respondents to share information if possible (table 1). The surveys were distributed to all acute, community and mental health NHS Trusts in England. NHS Trusts were identified from those listed on the 15 NIHR Local Clinical Research Network (CRN) websites (NIHR, 2021b).

Data collection was initially planned to take place between August – October 2021. This was extended to February 2022 due to the research team having to respond to COVID-19 related service pressures. Multiple methods were used to distribute the survey. Initially Trust education leads were targeted; however, an effective method of dissemination through them was not identified. A link to the online survey was therefore sent via email to Research and Development (R&D) Department managers of all identified NHS Trusts, with a request for them to complete it themselves or direct it to an appropriate individual for completion. All NIHR SNMRL's were also sent the link and asked to encourage completion within their NHS organisation. Two follow-up reminders were sent (November 2021 and December 2021). Contact details for non-responding sites were reviewed and sites contacted via alternative email or telephone contacts where this information was available.

Submitted data were exported into a Microsoft Excel spreadsheet and duplicated responses from NHS Trusts were removed. Where duplicate responses were received from the same person, the most recent response was retained. Where more than one response was received from the same NHS Trust, information was combined or prioritised in the order of responses from a. R&D Office, b. 'Lead' Research Nurse, c. SNMRL d. other. Descriptive analysis was conducted, and results are presented as frequencies and percentages using tables and histograms.

The project was classified as a service evaluation; undertaken with the purpose of defining the current service and to generate information to inform decision-making (Twycross and Shorten, 2014). The invitation email contained information about the study and submission of a completed survey implied consent. The names of NHS Trusts were required to enable analysis; however, the provision of contact details of survey respondents was optional. If this information was provided it was used to contact the respondents to ask them to share any relevant induction resources with the project team. Data was stored on the NIHR secure database and accessed only by the research team in accordance with General Data Protection Regulations.

#### **Results**

### **Demographics**

Of 201 eligible Trusts, 141 responses were received from Survey 1 (70% response rate), with 124 responses (61% response rate), after the removal of duplicates (see figure 1).

# \*Insert Figure 1\*

Figure 1: diagram of all survey respondents and response rates

There was widespread variation in respondent roles (see Table 2); however, the largest proportion of responses were from the NHS Trust R&D Leads/ Managers 35% (n=44).

### \*Insert Table 2\*

### Survey one

Of the 124 included responses, 39% (n=48) of Trusts reported including research in their mandatory induction. All 48 featured information about research delivery and 24% (n=30) featured information about opportunities for staff development or engagement in research (table 3).

#### \*Insert table 3\*

Reporting of the duration of research induction training was variable, with many respondents not reporting the amount of time for research delivery (n=11, 23%) and clinical academic opportunities (n=12, 40%) (Table 4). Where time was reported for research delivery (n=35, 73%) and clinical academic opportunities (n=24, 50%) a median time of five mins (IQR 20 minutes) was allocated for research delivery and five minutes (IQR 15minutes) for clinical academic opportunities. Reporting about who delivered the training also varied. Only 50% (n=24) of respondents provided information on who delivered teaching about research delivery and 50% (n=15) for clinical academic opportunities. Where this information about training was provided, this was commonly reported to be delivered by R&D managers/R&D team members (n=11, 23%, research delivery and n=6, 20% clinical academic

opportunities). The most common method for delivering information about both research delivery and staff development opportunities were PowerPoint slides (17%, n=10), a marketplace stand which staff could visit during breaks (12%, n=7) and leaflets (handout / virtual) (12%, n=7). Several respondents identified challenges to securing protected time dedicated to research within mandatory induction programmes:

"Minimal time as we have had barriers to even having a five-minute slot for research awareness" (Lead Nurse for Research: Large Acute Trust including community services)

Other free text comments referred to the negative impact of COVID-19 limiting the opportunity to promote research.

"While there is information about research in our induction it is currently limited to a leaflet. We do not have any face-to-face or personal presence at the induction currently – this is something we are constantly working on and, I hope, that once things settle down a bit after COVID, we will be able to start doing a bit more about this to embed research more fully in the trust." (Head of R&D: Mental Health Trust)

However, some Trusts had worked creatively around this and utilised techniques such as a rolling screen displayed during breaks (virtual delivery) to help promote research:

"Since COVID we now have one or two PowerPoint slides as part of a rolling screen at lunchtime." (Trust Lead Nursing, Midwifery and AHP Research: Acute Trust)

# \*Insert table 4\*

Of the 48 respondents who indicated that their induction programme covered research, 44 (92%) indicated they would be willing to complete Survey two. All 44 covered research delivery, with 29 respondents also stating their inductions covered information about clinical academic opportunities. Sixty-eight respondents (55%) stated they would be interested in receiving information about material that could be included in future mandatory training programmes.

#### Survey two

# \*Insert figure 2\*

Figure 2: survey responses on the content of induction material (n=21)

There were twenty-one survey two respondents (48% response rate) (Figure two). In relation to research delivery (Questions 1-4), the most reported aspects were information on the role of the research nurse/midwife (67%, n=14) and research active specialties (62%, n=13). The most reported information in relation to clinical academic training opportunities (questions 5-7), was signposting on where to obtain advice and support for developing research ideas (75%, n=15).

Respondents were asked if they would be willing to share copies of the material they used in their induction. Sixty-two percent (n=13) of respondents were happy to provide these materials. Of these 12 sites were contacted and five sites provided material (42%) (see figure three). All five site

respondents provided information that covered research delivery, with variation in the depth of coverage.

# \*Insert figure 3\*

Figure 3: summary of the material received from sites (n=5)

Material was summarised as highlighting the value/importance of research, Trust specific visions and goals, collaborations across NIHR Local CRNs, Trusts, Higher Education Institutions, industry and charities and information about research delivery and activity, including R&D contact details. Only two sites featured information specifically about clinical academic opportunities and careers within the Trusts. One site specifically mentioned a Nursing, Midwifery and Allied Health Professional (NMAHP) strategy and associated training opportunities.

### Discussion

To our knowledge, this is the first national survey of NHS Trusts in England that aimed to identify whether research was included as part of NHS induction programmes for new staff members. Despite the evidence that research active NHS Trusts have better outcomes for patients (Ozdemir et al 2015), achieve higher Care Quality Commission (CQC) ratings, (Jonker and Fisher 2018; Jonker et al, 2020) and increased patient satisfaction (Salge et al 2009), 61% of responding sites did not feature information about research within mandatory induction. Even for sites where time was allocated to discuss research, the time provision was relatively short. Reasons for this lack of time provision were not well-documented, however, they might be seen as a reflection of research being regarded as lower priority, or that research is considered 'specialist activity' and not relevant for all members of staff (Shepherd et al, 2022). This is at odds with the message that research is core NHS business (NHS England 2019; DHSC 2021a).

There is existing evidence that healthcare staff value role development opportunities, including research roles (Nightingale et al, 2021). This has potential implications for effective recruitment and retention of staff and a comprehensive induction programme has been identified as a foundation for staff development (NHS Employers, 2019). Research active organisations have improved staff retention, staff satisfaction and improved organisational efficiency (Harding et al 2016); offering research initiatives therefore has the potential to attract and retain high-quality multi-disciplinary staff (Trusson et al 2019, Olive et al 2022). Stimulating research engagement within nursing, midwifery and AHPs are also part of the strategic vision of NHS England (NHSE 2021, NHS HEE, 2022). NMAHP clinical academic success is strongly linked to mentorship and signposting to resources and support (Oulton et al 2021, Olive et al 2022), so including information about professional development opportunities at the start of employment sends a message that research activity and NMAHP led research are part of core business. Career development opportunities need to have increased visibility from the outset of employment if we are to achieve the aspirational figure of 1% of the nursing and midwifery workforce holding clinical academic roles by 2030 (Carrick-Sen et al 2016). Currently there is little published material to guide mandatory induction programme content, but with 55% of respondents interested in a template, there is recognition that this is an area for improvement. Research is required to understand the level of decision-making and responsibility for defining mandatory induction

content and delivery in order to help standardise the way research opportunities are promoted within organisations. The UK strategy for research highlights that research needs to be meaningfully embedded as part of the experience of patients and service users, regardless of where they live, with more holistic research questions addressed and increased engagement in research from multi-disciplinary staff (NIHR 2021a). Alongside the strategy and vision being set by NHS England for nurses and AHPs (NHSE 2021, NHS HEE 2022), there is a clear message about the importance of research and innovation as core NHS Business.

The study limitations reflect challenges in identifying the optimum distribution method for the survey. With a response rate of 61% of Trusts engaging and most respondents linked to R&D, targeting R&D departments appeared to have been an effective recruitment strategy. However, a lack of reach could account for some of the non-responding NHS sites. There were also challenges relating to the accuracy of the NHS contact lists, as some contacts had moved on from organisations or had inaccurate emails addresses. Where possible we identified an alternative contact but were not always successful. Where respondents indicated 'I don't know' to questions, we reviewed the role of the respondents to review if the most appropriate person had completed the survey on behalf of their organisation and were satisfied that the survey had been completed by respondents with appropriate knowledge.

#### Conclusion

Despite the requirement for NHS organisations to be research active and engaged, our findings indicate that this message is not prioritised to new staff within mandatory Trust Induction processes. Only 39% of Trusts provide information about research delivery within the organisation and only 24% provide signposting to information about clinical academic opportunities. If research is to be seen as a priority within NHS organisations, then this must start by incorporating research within Trust orientation programmes. With research identified as the single most important way in which we improve our healthcare, there is a requirement to embed research throughout the NHS, making participation as easy as possible and ensuring all health and care staff feel empowered to support research (DHSC, 2021a). This message should start from the moment staff are introduced to the organisation's values and vision within the mandatory induction process. Our survey identified an enthusiasm from respondents for a template of materials to help standardise communication around research delivery and clinical academic opportunities. Further work is required to develop these materials.

# **Key points**

- 1. Despite the importance of research activity, only 39% of responding English NHS trusts featured information about research activity within their mandatory trust induction programme.
- 2. At a time of challenges to staff recruitment and retention, 76% of English Trusts did not include information about available clinical academic or research-specific training opportunities.
- 3. Where research does feature in mandatory induction, there is a lack of standardisation in who delivers information, the content of material and the method of delivery.
- 4. If research is truly to be considered part of core NHS business this needs to be visible from the outset of employment. Guidance or a modifiable template could help Trusts communicate this message to all new employees.

# **Ethical permission**

Research Ethics Committee approval was not required as the work was categorised as service evaluation (NHS Health Research Authority 2021). Approval for the survey was granted through the NIHR governance team, with the Department of Health and Social Care acting as data controllers.

#### References

Bramley L, Manning JC, Cooper J. 2018. Engaging and developing front-line clinical nurses to drive care excellence: Evaluating the Chief Nurse Excellence in Care Junior Fellowship initiative. Journal of Research in Nursing. 23 (8). 678-689. https://doi.org/10.1177/1744987118808843

Care Quality Commission (CQC) Inspection Framework: NHS Trusts and Foundation Trusts. 2018. <a href="https://www.cqc.org.uk/sites/default/files/20200115">https://www.cqc.org.uk/sites/default/files/20200115</a> Trust wide well led inspection framework <a href="https://www.cqc.org.uk/sites/default/files/20200115">V7.pdf</a> Accessed 25 January 2023

Carrick-Sen D, Richardson A, Moore A, Dolan S . 2016. Transforming healthcare through clinical academic roles in nursing, midwifery and allied health professions: A practical resource for healthcare provider organisations. <a href="https://councilofdeans.org.uk/wp-content/uploads/2019/02/AUKUH-Transforming-Healthcare.pdf">https://councilofdeans.org.uk/wp-content/uploads/2019/02/AUKUH-Transforming-Healthcare.pdf</a> Accessed 01.11.202

Department of Health and Social Care. 2021a. Saving and improving lives: the future of UK clinical research delivery. DHSC.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/995768/The-future-of-UK-clinical-research-delivery.pdf Accessed 25 January 2023 Accessed 01.11.2022

Department of Health and Social Care. 2021b. The NHS Constitution for England Updated 1 January 2021. DHSC. <a href="https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-england">https://www.gov.uk/government/publications/the-nhs-constitution-for-england/the-nhs-constitution-for-en

Eysenbach, G. 2004. Improving the quality of Web Surveys: the Checklist for Reporting Results of Internet E-Surveys (CHERRIES). Journal of Medical Internet Research. 6(3):e34. doi: 10.2196/jmir.6.3.e34.

Gibbs, V. 2002. Hospital induction and its effects on staff turnover. British Journal of Therapy and Rehabilitation, 9(8), pp.309-313.

Hanney S, Boaz A, Jones, T, Soper B . 2013. Engagement in research: an innovative three-stage review of the benefits for health-care performance. Health Service Delivery Research. 1, 8. doi:10.3310/hsdr01080

Harding K, Lynch L, Porter J, Taylor NF. 2017. Organisational benefits of a strong research culture in a health service: a systematic review. Australian Health Review 41, 45-53. https://doi.org/10.1071/AH15180

Henshall C, Greenfield DM, Jarman H, Rostron H, Jones H, Barrett S. 2020. A nationwide initiative to increase nursing and midwifery research leadership: overview of year one programme development, implementation and evaluation. Journal of Clinical Nursing. 00. 1-13. DOI: 10.1111/jocn.15657

Jonker L and Fisher SJ. 2018. The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study. Public Health. 157:1-6. doi: 10.1016/j.puhe.2017.12.022

Jonker L, Fisher SJ, Dagnan D. 2020. Patients admitted to more research-active hospitals have more confidence in staff and are better informed about their condition and medication: Results from a retrospective cross-sectional study. J Eval Clin Pract. 26.203-208. https://doi.org/10.1111/jep.13118JONKERET AL.208

Latour JM, Tume LN. 2021. How to do and report survey studies robustly: a helpful mnemonic SURVEY. Nursing in Critical Care. 1.1-2. doi: <a href="https://doi.org/10.1111/nicc.12669">https://doi.org/10.1111/nicc.12669</a>.

NHS Employers. 2019. Improving staff retention: A guide for employers. <a href="https://www.nhsemployers.org/publications/improving-staff-retention">https://www.nhsemployers.org/publications/improving-staff-retention</a>. Accessed 01.12.2022.

NHS England. 2019. The NHS Long term plan. <a href="https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf">https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf</a> Accessed 17 August 2022

National Institute for Health and Care Research. 2019. CQC inspections to give more exposure to clinical research taking place in NHS trusts: NIHR. <a href="https://www.nihr.ac.uk/news/cqc-inspections-to-give-more-exposure-toclinical-research-taking-place-in-nhs-trusts/20352">https://www.nihr.ac.uk/news/cqc-inspections-to-give-more-exposure-toclinical-research-taking-place-in-nhs-trusts/20352</a>. Accessed 01.11.2022

National Institute for Health and Care Research (NIHR). 2021a. Best Research for Best Health: The Next Chapter, NIHR. Available: https://www.nihr.ac.uk/documents/best-research-for-besthealth-the-next-chapter/27778. Accessed 17th July 2023.

National Institute for Health and Care Research (NIHR) Clinical Research Network. 2021b. <a href="https://www.nihr.ac.uk/explore-nihr/support/clinical-research-network.htm#one">https://www.nihr.ac.uk/explore-nihr/support/clinical-research-network.htm#one</a>. Accessed 25 January 2022

NHS Health Research Authority. 2021. Is my study research? Available online at: <a href="http://www.hra-decisiontools.org.uk/research/">http://www.hra-decisiontools.org.uk/research/</a>. Accessed 01.03.2021

National Health Service for England (NHSE). 2021. Making research matter: Chief Nursing Officer for England's strategic plan for research. Version 2. Available: <a href="https://www.england.nhs.uk/wp-content/uploads/2021/11/B0880-cno-for-englands-strategic-plan-fo-research.pdf">https://www.england.nhs.uk/wp-content/uploads/2021/11/B0880-cno-for-englands-strategic-plan-fo-research.pdf</a>. Accessed 03.02.2023.

National Health Service Health Education England. 2022. Allied Health Professions' Research and Innovation Strategy for England.

https://www.hee.nhs.uk/sites/default/files/documents/HEE%20Allied%20Health%20Professions%20 Research%20and%20Innovation%20Strategy%20FINAL 0.pdf Accessed 17<sup>th</sup> July 2023.

Nightingale J, Burton M, Appleyard R, Sevens T, Campbell S. 2021. Retention of radiographers: A qualitative exploration of factors influencing decisions to leave or remain within the NHS. Radiography. 27 (3). 795-802 <a href="https://doi.org/10.1016/j.radi.2020.12.008">https://doi.org/10.1016/j.radi.2020.12.008</a>

Olive P, Maxton F, Bell CA et al. 2022. Clinical academic research internships: What works for nurses and the wider nursing, midwifery and allied health professional workforce. J Clin Nurs. 31. 318–328. https://doi.org/10.1111/jocn.15611

Oulton, K, Wray, J, Kelly, P, Khair, K, Sell, D, Gibson, F. 2021. Culture, cognisance, capacity and capability: the interrelationship of individual and organisational factors in developing a research hospital. Journal of Clinical Nursing. 00. 1-16. https://doi.org/10.1111/jocn.15867

Ozdemir B A, Karthikesalingam A, Sinha S et al. 2015. Research Activity and the Association with Mortality. PLoS One. 10(2),e0118253. doi.org/10.1371/journal.pone.0118253

Peckham S, Eida T, Zhang W et al. 2021. Creating Time for Research: Identifying and Improving the Capacity of Healthcare Staff to Conduct Research. Cancer Research UK <u>Creating Time for Research</u> (February 2021) - Full Report (cancerresearchuk.org) Accessed 18 August 2022

Quality Assurance Agency for Higher Education. 2020. How UK Higher Education Providers Managed the Shift to Digital Delivery During the COVID-19 Pandemic. QAA, Gloucester.

https://www.qaa.ac.uk/docs/qaa/guidance/how-uk-higher-education-providers-managed-the-shift-to-digital-delivery-during-the-covid-19-pandemic.pdf Accessed 21<sup>st</sup> January 2023.

Salge TO and VeraA. 2009. Hospital innovativeness and organizational performance: evidence from English public acute care. Health Care Manage Rev. 34(1). 54–67. doi: 10.1097/01.HMR.0000342978.84307.80.

Shepherd M, Endacott R, Quinn H, 2022. Bridging the gap between research and clinical care: strategies to increase staff awareness and engagement in clinical research. Journal of Research in Nursing, 27(1-2), pp.168-181. https://doi.org/10.1177/17449871211034545

Stanton E and Lemer C. 2010. The art of NHS induction. BMJ, 340. c274. https://www.bmj.com/content/340/bmj.c274.full

Trusson D, Rowley E, Bramley L. 2019. A mixed-methods study of challenges and benefits of clinical academic careers for nurses, midwives and allied health professionals. BMJ Open. 9:e030595. doi:10.1136/bmjopen-2019-030595

Twycross A and Shorten A. 2014. Service evaluation, audit and research: what is the difference? Evid Based Nurs. July. 17(3). 65-66. doi: 10.1136/eb-2014-101871

Ward S. 1998. Improving quality in hospital induction programmes. BMJ 316:2. DOI:10.1136/BMJ.316.7131.2