The DEFiNe Study

(Determining Excellence Factors in Nursing and Midwifery)

Authors:

Michelle Hartanto & Gishi Sashidharan, Research Fellows, Nursing & Midwifery Excellence, UHCW

Study Team:

Nicolas Aldridge, Lead Nurse for Research and Development, UHCW

Lisa Dunn, Pathway to Excellence® Facilitator Lead, UHCW

Liz Lees-Deutsch, Professor of Nursing Practice, UHCW

ISBN: **978-1-84600-128-4**

DOI: **10.18552/CHC/2025/0001**

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

This study has been commissioned by:

The NHS England – Midlands Regional Team, with funding and sponsorship from the Chief Nursing Officer for England's Policy and Strategy Unit within the NHS England national team.

This study has been delivered by:

University Hospitals Coventry and Warwickshire NHS Trust (UHCW)

Special thanks are extended to the study sponsors:

Professor Nina Morgan, Regional Chief Nurse, NHS England – Midlands

Tracey Brigstock, Chief Nursing Officer, UHCW / Midlands Senior Responsible Officer, Nursing & Midwifery Excellence

Helen Bayley, Deputy Director of Nursing, NHS England – Midlands

The study team would also like to thank the members of the Midlands Regional Excellence Network and the team at NHS England for their engagement in co-creating this work. Thanks are also extended to each participant who gave their time to contribute and leaders who encouraged their colleagues to participate in shaping this.

Thank you to Abby Kendrick, the Clinical Evidence Based Information Service, and the Library & Knowledge Services at UHCW for supporting the scoping review. Thank you to Jason Allen, Digital and Data Delivery Manager from the Research & Development department at UHCW, for contributing to data analysis.

Michelle Hartanto and Gishi Sashidharan would like to extend a special thank you to Heather Price, Associate Director of Nursing, Education and Research, and Vicky Williams, Deputy Chief Nursing Officer/ Director of Nursing – Professional Standards at UHCW, for their support and guidance throughout the study. Finally, a very special thank you to Liz Lees-Deutsch, Nicolas Aldridge, and Lisa Dunn. As part of the study team and UHCW Operational Delivery Group, their support, methods expertise, and experience enabled the delivery of this study at pace.

EXECUTIVE SUMMARY

The DEFiNe Study: Determining Excellence Factors in Nursing and Midwifery

Introduction and Methods

The Midlands Regional Excellence Network (MREN) meet bi-monthly as a 'community of practice' with representatives from each of the 11 Integrated Care Systems in the region, with the purpose of sharing learning and exploring a collective approach to Excellence.

The NHS England Midlands Regional Team, with funding and sponsorship from the CNO for England's Policy and Strategy Unit from the NHS England national team, commissioned University Hospitals Coventry and Warwickshire NHS Trust via the MREN to undertake a research study into Nursing and Midwifery Excellence.

A mixed-methods approach including literature review, survey, interviews, and metrics was selected to explore Excellence in acute and non-acute provider settings using an evidence-based behavioural framework (COM-B) to understand key factors to success.

Findings

1. The following themes were identified as the six pillars underpinning Excellence:
   - Shared professional decision-making
   - Local accreditation
   - Meaningful recognition
   - Distributed leadership
   - Continuous quality improvement
   - Research and innovation

2. Non-acute providers starting on their Excellence journey demonstrated cultural readiness for change and transferability of the six pillars.

3. Professional leadership and organisational culture emerged as key factors in creating conditions for behavioural change and continuous improvement.

4. Results demonstrated a positive impact on workforce metrics through improved workforce stability index rates and reduced leaver rates for nurses and midwives.

Recommendations

Recommendations for future research opportunities include exploring:

- Experiences of patients and families, through care quality and improved outcomes
- Transferability into additional health and social care settings
- Impact of Excellence on workforce including recruitment, retention, and succession planning
- Impact of Excellence on productivity and efficiency

ABBREVIATIONS

In alphabetical order:

BCW	Behaviour Change Wheel
CEBIS	Clinical Evidence Based Information Service
CNO	Chief Nursing Officer
CQC	Care Quality Commission
CROSS	Consensus-based Checklist for Reporting of Survey Studies
EDI	Equality, Diversity, and Inclusion
MREN	Midlands Regional Excellence Network
NHSE	NHS England
PI	Principal Investigator
PRISMA	Preferred Reporting Items for Systematic Review and Meta Analyses
PSIRF	Patient Safety Incident Response Framework
QI	Quality Improvement
SDM	Shared decision-making
SPDM	Shared professional decision-making
UHCW	University Hospitals Coventry and Warwickshire

GLOSSARY OF TERMS

In alphabetical order:

7 Lenses Maturity Matrix	A tool developed and reviewed by the UK Government, to assess the maturity of a programme and identify areas that need more development based on strategic areas of Vision, Design, Plan, Transformational leadership, Collaboration, Accountability and People. The tool enables each area to be assessed through five levels of maturity.[31]
Aggregated data	High-level data from combining individual-level data
Behaviour Change Wheel	A framework enabling those designing behavioural interventions to identify and develop interventions and policies driving behaviour change[12]
Capability	Psychological and physical capability including knowledge, strength, and skills[12]
COM-B model	A theoretical model developed by Michie et al.[12] which provides a foundation for identifying and designing interventions aimed at behaviour change
Continuous quality improvement	A methodical approach to solve problems, improve the quality of processes and services, and improve outcomes.
Distributed leadership	Building and sustaining leadership capacity at all levels, through different roles in organisations
Excellence	Nursing and Midwifery Excellence
Excellence pillars	The framework of six Excellence pillars explored in this study, namely: 1) shared professional decision-making, 2) meaningful recognition, 3) local accreditation, 4) distributed leadership, 5) continuous quality improvement, 6) research and innovation
Innovation	New novel methods and ideas.

Local accreditation	A framework for standards of care; a comprehensive assessment of the quality of care at a local level enabling areas of improvement to be identified and areas of Excellence to be celebrated
Meaningful recognition	The recognition of nurses and/or midwives for their contributions and value which promotes fulfilment and professional pride
Motivation	Internal automatic and reflective processes that influence behaviour and includes analytical decision-making, emotional responses, and habitual behaviour[12]
Opportunity	External factors that make behaviour possible and includes physical environmental opportunities as well as social opportunities due to cultural norms and cues[12]
Regression analysis	A set of statistical methods used for the estimation of relationship between a dependent variable and one or more independent variables. It can be utilised to assess the strength of the relationship between variables and for modelling the future relationship between them[30]
Research	The scientific inquiry to generate new knowledge
Shared professional decision-making	A non-hierarchical approach where staff are involved in making decisions about their practice; also known as shared decision-making, shared governance, or collective leadership

SUMMARY

Introduction: The Midlands Regional Excellence Network (MREN) formed in 2023 brings together senior nurse leaders across 11 integrated care boards to focus on developing collective leadership, positive work environments and a culture of Excellence, which align with the vision of the CNO for England. Six pillars of Excellence have emerged through the MREN namely; shared professional decision making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement and research and innovation. The study was co-created through the MREN and NHSE regional and national strategic partners during December 2023 to build on the existing knowledge.

Aims: To describe approaches to Nursing and Midwifery Excellence in acute provider settings and explore the potential transferability of these to non-acute provider settings. To explore behaviours that drive Excellence, to provide recommendations shaping approaches to Excellence and opportunities for further study.

Methods: A mixed methods design was employed commencing with a literature review (scoping method) to explore the available evidence; a staff survey, administered via QR code using MS Forms online (Office 365); case study interviews with acute providers via MS Teams; interviews with non-acute providers via MS Teams and an exploration of key metrics determining impacts of Excellence in improving care quality and staff outcomes. The six pillars of Excellence formed a framework throughout the study and was also guided by the COM-B model[18] of behavioural change, which proposes three necessary components of behaviour namely Capability, Opportunity, and Motivation(s). In this study, behaviours associated with achieving Excellence in Nursing and Midwifery were reported. Forty-four organisations across the Midlands were invited to participate.

Key Findings:

Twenty-six organisations responded to the online survey. Twelve acute organisations participated in case study interviews, and three non-acute organisations participated in interviews to explore transferability of findings to such settings.

- The literature review identified 23 studies; 20 from the USA with one each from Denmark, Iran, and Philippines. Sixteen of the studies focused on formal accreditation through the Magnet Recognition Programme®. This programme is endorsed by the American Nurses Credentialing Centre and uses a set of criteria to bring about continual transformation and improvement towards nursing and midwifery excellence.
- The case study interviews with acute provider organisations demonstrated how the pillars of Excellence are evident across the Midlands region.

- Professional leadership and organisational culture are two key factors identified in creating conditions for behavioural change and continuous improvement.
- Some of the guiding principles for Excellence were found within some non-acute organisations taking part in the interviews.
- Non-acute provider organisations demonstrated a willingness to adopt Excellence approaches and cultural readiness for change (transferability of excellence).
- Higher workforce stability and lower leaver rates were found in those organisations employing Excellence approaches compared to those who did not use these approaches.

Conclusion: This study identified well-developed approaches across the Midlands region. Key factors driving Excellence behaviours and culture identified the benefits of implementing the pillars of Excellence and demonstrated that Excellence where adopted has a positive impact on workforce stability and turnover rates. Non-acute organisations are at an earlier stage of development of Excellence approaches and are open to exploration/adoption and co-production.

Recommendations:

The following recommendations are informed by study findings and help build on the national Excellence work, to determine what Excellence in Nursing and Midwifery looks like and to transfer initiatives into non-acute settings. There is scope for organisational, regional, and national strategic leaders to shape work based on these recommendations.

- Disseminate findings and share learning with key stakeholders including the MREN and relevant national networks. This will ensure the study findings inform future work.
- Prepare leaders to develop, implement, and sustain Excellence as part of organisational culture. Strategic leaders are key to the success of the regional and national Excellence work; they can use their influence to role model positive attitudes towards continuous improvement, prioritise the development of positive practice environments, and set out strategic priorities aligned to national Excellence ambitions.
- Co-develop with non-acute organisations, through the MREN, an Excellence framework and delivery plan for non-acute settings. Identify dedicated leads from these organisations to champion the work. This will enable co-design and opportunities for learning and support.
- Continue to drive forward the Excellence agenda using an evidence-based approach informed by research and robust methodology and co-creation. This approach adds to the national evidence base and engages key stakeholders.
- Consider alignment of the six pillars of Excellence to the national strategy.

- As the first study to explore Excellence within the Midlands, there is much more that needs to be understood. Further research is warranted to explore the gaps identified by this study, such as:
    - Including a wider geographical range, e.g. England-wide
    - Scoping transferability into other health and social care settings;
    - Understanding the experiences of direct care nurses and midwives through the lens of the Excellence framework;
    - Exploring the experiences of patients and families, through care quality and improved outcomes;
    - Exploring shared professional decision-making as an approach to drive Equality, Diversity, and Inclusion (EDI) initiatives;
    - Conducting face-to-face interviews to allow richer data collection;
    - Identifying nursing and midwifery-specific parameters to understand the direct impacts of Excellence;
    - Identifying the impact of Excellence on workforce including recruitment, retention, and succession planning;
    - Identifying the impact of Excellence on productivity and efficiency.

Report

The DEFiNe Study:
Determining Excellence Factors in Nursing and Midwifery

1. INTRODUCTION

The Chief Nursing Officer (CNO) for England's vision for Nursing and Midwifery Excellence (described herein as Excellence) includes establishing a national collective leadership model with a focus on transformational leadership, research, and innovation.[1] The evidence suggests that these factors positively influence staff satisfaction and are key factors in promoting positive workplace environments.[2] Transformational leadership behaviour enables direct care staff to innovate through the use of quality improvement (QI) approaches[3] and is linked to improved quality of care and patient outcomes.[2] Staff and patients benefit from environments with positive workplace and organisational cultures, with staff demonstrating higher rates of engagement, job satisfaction, and retention,[4,5,6] and patients benefit from improved clinical outcomes and higher satisfaction with their care.[6] The CNO for England's national Excellence programme is underpinned by ensuring evidence-based approaches in the development of positive practice environments.

The Midlands Regional Excellence Network (MREN), formed in 2023, brings together senior nurse leaders across 11 integrated care systems to focus on harnessing a non-hierarchical approach collective leadership and creating positive work environments for staff, which aligns with the CNO for England's vision.

Six pillars of Excellence have emerged that reflect common themes from the MREN, namely: shared professional decision-making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement, and research and innovation. Definitions are provided here:

(1) Shared professional decision-making; a non-hierarchical approach where staff are involved in making decisions about their practice.[7] It is also known as shared decision-making, shared governance, or collective leadership.
(2) Local accreditation; a framework for a comprehensive assessment of care quality at a local level.[8] This framework includes standards of care and enables areas of improvement to be identified and areas of Excellence to be celebrated.[8]
(3) Meaningful recognition; the recognition of nurses and/or midwives for their contributions and value which promotes fulfilment and professional pride.[9] This may include awards, honours, celebrations, and a culture of day-to-day recognition.
(4) Distributed leadership; building and sustaining leadership capacity at all levels, through different roles in organisations.

(5) Continuous quality improvement; a methodical approach to solve problems, improve the quality of services, and improve outcomes.[10]
(6) Research; the scientific inquiry to generate new knowledge. Innovation encompasses new novel methods and ideas.

A literature review was undertaken as part of this study; it identified an abundance of studies from the USA with clear gaps in the current evidence base, namely: a paucity of research studies from England exploring what Excellence is, its impacts, and the non-acute healthcare provider perspective. This identified an opportunity to define Excellence in England beyond existing frameworks, and to explore Excellence in both acute and non-acute healthcare provider settings.

NHS England (NHSE) commissioned University Hospitals Coventry and Warwickshire NHS Trust (UHCW) via the MREN to deliver this study in December 2023. The study was co-created with regional and national stakeholders through the MREN and NHSE strategic partners, to ensure the research would be meaningful and relevant to end-users, as well as scientifically robust. The six pillars of Excellence comprise the framework of Excellence approaches to be explored within this study, and the scope was agreed with NHSE commissioners. This report sets out the study design, methods, findings, and recommendations, and identifies further research opportunities.

2. BACKGROUND

The CNO for England set out three key priorities which align with the NHS Long Term Plan: 'building a workforce fit for the future; renewing the reputation of our profession for the future, and recognising the value of nurses and midwives'.[1] As part of this, strong leadership promoting quality and safety and the development of an engaged and empowered workforce are crucial in ensuring the delivery of this vision and the NHS Long Term Plan.[11]

In alignment with this vision and workforce plan, foundation programmes have been developed by NHSE, with resources in development for shared professional decision-making,[7] local accreditation,[8,12] and collective leadership,[13] together with the commissioning of programmes such as Pathway to Excellence®.[15, 16] Work has been undertaken across England developing and implementing these approaches.

To support the quality and safety agendas, local accreditation provides nurses and midwives with a comprehensive framework to assess the quality of care at local levels.[8] In April 2019 a guide was launched to support the development of local accreditation programmes.[12]

To support the development of an engaged and empowered workforce, the CNO for England also set out a vision for a national collective leadership model, where nursing and midwifery collective voices are valued.[13] The first national CNO Shared Professional Decision-Making Council was established in May 2020,[7] and nurses and midwives shared innovative ways of working during the COVID-19 pandemic through shared decision-making councils and case study publications.[14] As part of the collective leadership programme, NHSE also supported a national cohort of organisations to apply for Pathway to Excellence® designation, a framework for creating positive practice environments for staff to improve satisfaction and retention.[15, 16]

Building on this work, the CNO Excellence programme aligns with the CNO's national vision to establish an England-wide collective leadership model with a focus on transformational leadership, research, and innovation. It supports the growth of the evidence base regarding Excellence and ensures the Excellence agenda is driven forwards for the benefit of our communities.

In 2023 the MREN, a collaboration of 44 organisations across the Midlands region, was formed to support these aims, act as a test bed for new approaches, and share learning. This study was commissioned to support the aims of the MREN and Excellence agenda within the wider national context.

3. AIMS

To explore organisational approaches to adopting and embedding Excellence. To identify and analyse case studies from existing Excellence work within acute provider settings in the Midlands, understand transferability of elements from acute providers into non-acute settings, and demonstrate the impacts of Excellence approaches on outcomes.

4. OBJECTIVES

The following objectives were agreed with NHSE:

1) Review the literature;
2) Describe current state of Excellence approaches in acute and non-acute provider settings in the Midlands region;
3) Explore behaviours that drive Excellence;
4) Explore transferability of Excellence into non-acute healthcare provider settings;
5) Explore the association and impact of Excellence approaches on metrics;
6) Provide recommendations regarding the transferability of Excellence pillars;

7) Provide recommendations to build on the national Excellence work to help determine approaches to Excellence in Nursing and Midwifery;
8) Provide recommendations for further study.

5. STUDY DESIGN

This study used a mixed methods design[17] conducted through five key stages of data collection (work packages) namely; literature review (scoping method), an online survey (cross sectional), case studies, interviews, and analysis of previously reported data. A mixed methods approach was chosen to ensure the methods adequately addressed the breadth of study questions. Study design included using the COM-B behavioural change model[18] throughout to explore the conditions for change and the behaviours associated with the drive for continuous improvement in Excellence adoption. COM-B, together with values-based co-creation, also guided question development (see section 5.2 and 5.3).

Data were organised and managed using the Framework Approach[19] often used for large-scale data collections, providing continuity throughout each work package of the study. Data analysis and synthesis were guided by COM-B and conducted within an overall framework provided by the six pillars of Excellence as defined by the MREN.

5.1 An overview providing more detail of the five work packages supporting data collection for this study is listed here:

(1) A review of the available literature through a scoping review method[20], to inform the study gap, study questions and design.
(2) Survey (online-cross-sectional) that was sent to organisational leads for Excellence from acute and non-acute care providers in the Midlands (using inclusion criteria), to establish the current Excellence state.
(3) Case studies (through a call for case studies and subsequent mini-interviews) with organisational leads for Excellence from acute providers to explore key factors contributing to Excellence in the Midlands region and establish illustrative examples for publication.
(4) Interviews (semi-structured) with organisational leads for Excellence from non-acute providers to explore and understand transferability of Excellence approaches into non-acute settings.
(5) Extraction and analysis of previously reported data from regional and national databases.

5.2 COM-B model

The COM-B model, developed by Michie et al.[18] was selected as the evidence-based model to guide the study. In healthcare, this model provides a recognised foundation for identifying and designing interventions aimed at behaviour change. It recognises that capability, opportunity, and motivation are dynamic, interactive and environmental factors that can be influenced and contribute to shaping desired behavioural outcomes (Figure 1).

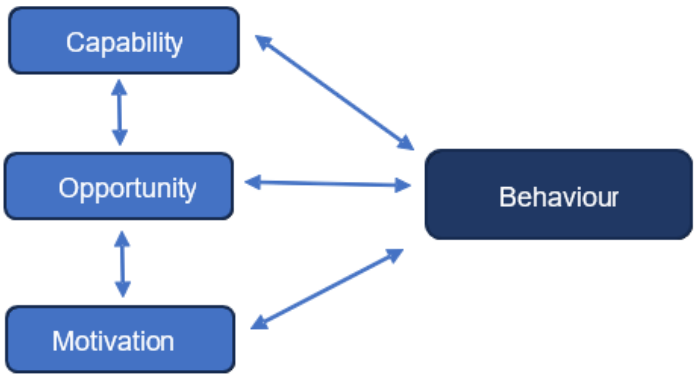


Figure 1: COM-B model[18]

According to Michie et al.,[18] capability is defined as psychological and physical capability, including staff knowledge and skills. Opportunity is defined as factors that make the behaviour possible and includes physical environmental opportunities as well as social opportunities according to cultural norms. Motivation is defined as internal automatic and reflective processes that influence behaviours. This includes analytical decision-making, emotional responses, and habitual behaviour.

The COM-B model[18] was used throughout to guide the study design, develop study questions, and devise a framework to organise and manage data, for deductive and inductive iterations of data analysis. It was also used to integrate data during the process of data collection, analysis, and interpretation, in line with 'mixed' methodology.[17] Through this model, the study team sought to understand how positive practice environments inclusive of capability, opportunity, and motivation could be developed, leading to Excellence as the desired outcome.

5.3 Co-creation with key stakeholders

Key stakeholders were identified and involved throughout the study development to achieve value co-creation[21] and sense checking. The value co-creation approach focused on creating value with and for multiple stakeholders which involve both service providers and service users.[21] It was co-created in its field of application (Excellence) with a focus on translation to practice, so the research would be meaningful and relevant to end-users as well as

scientifically robust.[21] Key stakeholders involved in co-design through all study phases included the UHCW Operational Delivery Group, NHSE strategic partners, Excellence subject matter experts, and regional and national stakeholders through the MREN.

5.4 Development of study questions

The study team first developed their understanding of the topic through background reading, the literature review, and sharing their experience and expertise. The study questions were then developed through engagement with key stakeholders from the UHCW Operational Delivery Group.

5.5 Participants and settings

Participants are the designated leads for Excellence from organisations that meet the study inclusion criteria:

Inclusion criteria: Care Quality Commission (CQC) registered acute care provider organisations in the Midlands; CQC-registered non-acute care providers in the Midlands to include hospices, care homes, GP practices, community, and mental health organisations. This includes NHS and non-NHS organisations that have at least one provider site in the Midlands region.

Exclusion criteria: Any organisations that do not meet the above criteria.

There are 2,742 distinct provider organisations in the CQC care directory[22] as of 10th January 2024, with a "Region" of West Midlands or East Midlands, which have a "Service type" including one or more of the following terms: Hospital, GP, Community, Hospice, Care home, Residential, and Mental health. From this pool, 44 organisational leads for Excellence whose organisations were part of the MREN and met the inclusion criteria were invited to participate in the study.

5.6 Recruitment

The process for contacting and recruiting organisational Excellence leads was agreed with NHSE commissioners during study set-up (Appendix 1). A wide range of approaches were used to recruit participants, described here:

(1) Presentations given to the MREN, with invitation from the Chair;

(2) Study information sent to all members of the MREN and organisational leads for Excellence;
(3) Letter for engagement developed by the PI and shared on behalf of the MREN Chair and the NHS England – Midlands Chief Nurse, with members of the MREN;
(4) Call for case studies and study invitation, with information and key contact details, sent by email to all organisational leads for Excellence within the MREN.

5.7 Ethical approval

The study was approved by the Coventry University Research Ethics Committee (Reference P172363, Appendix 2a). Approval by the Research & Development Department at UHCW to organise and manage the study was obtained (GF0897 and GF0898, Appendix 2b).

5.8 Study management

A robust and systematic study protocol was developed and agreed with commissioners; this protocol guided the study methods and analysis as described in section 6. The Principal Investigator (PI) met weekly with the study team; a combination of subject matter expertise and experience enabled the study to be delivered at pace. Oversight and assurance were provided regularly to the Operational Delivery Group and NHSE commissioners.

6. METHODS

Quantitative and qualitative data were collected and analysed throughout the mixed-methods study (Appendix 3).

6.1 The literature review (Scoping method) – Work package 1

The literature review was conducted using scoping review methodology, through the framework set out by Arksey and O'Malley.[20] This uses a six-stage process to examine the scope of research, namely;

I. Specify the research question
II. Identify the relevant literature
III. Select studies
IV. Chart the data
V. Summarise and synthesise data
VI. Use expert consultation

This process was supported by PRISMA (Preferred Reporting Items for Systematic reviews and Meta Analyses) to organise the screening and manage the flow of literature. Within the literature, the team sought to understand the following key questions:

Literature review questions:

1. Is Excellence defined?
2. If yes, what are the commonalities and differences across definitions?
3. What are the range of components of Excellence?
4. Are the outcomes reported?
5. If yes, what are the outcomes?

A literature review and protocol (Appendix 4) were produced and refined with review and feedback from the UHCW Operational Delivery Group and NHSE commissioners. The search strategy (Appendix 4) was developed using key words devised by the study team based on their knowledge and further refined with expertise from a specialist health librarian from the UHCW Clinical Evidence Based Information Service (CEBIS) team. Searches were conducted in the following databases: PubMed, EMBASE, and CINAHL according to those with appropriate focus and scope to reduce duplication in available information and expedite the review. After inclusion/exclusion criteria were established (Appendix 4), papers were screened for eligibility using RAYYAN, which is a software application designed to facilitate ease of collaborative decision-making across a study team in literature reviews.[23] The process of study selection was conducted using PRISMA.

The quality of each paper was appraised using the checklist from Hawker et al. (2002).[24] In accordance with the Arksey and O'Malley framework for scoping studies,[20] papers were not excluded based on a quality assessment. Instead, all data relevant to answer the review questions were charted using a piloted data extraction form, analysed, interpreted and displayed using the stages of a scoping review study.[20]

6.2 Survey – Work package 2

The COM-B model[18] guided development of questions, which were populated into a cross-sectional mixed-methods survey to collect data across all organisations, surveyed at one point in time. The survey consisted of 28 questions, in eight sections (Appendix 5). Six Excellence approaches (n=6) were selected to frame the study after consultation with stakeholders from NHSE and the MREN, and agreed with NHSE commissioners, namely:

(1) Shared professional decision-making
(2) Local accreditation
(3) Meaningful recognition
(4) Distributed leadership
(5) Continuous quality improvement
(6) Research and innovation

The survey was reviewed by the study team and verified according to the Consensus-based Checklist for Reporting of Survey Studies (CROSS) guidelines[25] for survey development. Prior to distribution, the survey was piloted to confirm suitability of the questions. Each participant was asked to self-assess their organisation's use of the six pillars to establish their current position and understand baseline data.

The survey was distributed (via Microsoft 365 Forms) to 44 organisational leads for Excellence from acute and non-acute provider organisations in the MREN who met the study inclusion criteria. Single stage population cross-sectional sampling was used.

The survey was performed during the first two and a half weeks of March 2024. A Participant Information Sheet (Appendix 6a) was developed and provided to participants with the email invitation and survey link. Data was collected via the online survey using Microsoft 365 Forms. The first page of the online survey included an integrated consent statement. Participants were informed that all data would remain confidential, and survey results would be reported as aggregate data. Individual names of organisations would not be published with their survey responses, and names would be anonymised for reporting.

Once participants ticked the box provided to indicate their consent and proceeded beyond the consent page, this was received as evidence of their consent.

Survey results were not received anonymously. Each participant was given the option to provide their email address if they wished to nominate their organisation to participate in the case studies or interviews. Participants who provided their email address were reviewed by the PI where the Excellence pillars used by the organisation were documented in the study database. The PI selected organisations who used at least one pillar of Excellence to achieve a maximum variation of pillars across the range determined by the MREN (n=6). These decisions were recorded on the sampling strategy record (Appendix 7).

6.3 Case studies of acute organisations – Work package 3

Mini- interviews lasting 15-30 minutes were designed to contextualise and quantify the existing Excellence work within acute provider organisations. A semi-structured interview guide with 18 questions was developed (Appendix 8a) guided by the COM-B model,[18] providing a range of interview questions. The mini-interviews enabled further information augmenting the survey, to establish illustrative practice examples, developed into a compendium of case studies.

Participants were selected from organisational leads for Excellence from acute provider organisations who completed the survey and provided their contact email address. They were sent an email invitation to participate in a one-to-one mini-interview. A Participant Information Sheet (Appendix 6b) was provided for participants in the email invitation.

The interviews took place via Microsoft Teams, and participants were asked to choose a location to do the interview where they would not be disturbed. On the day of the interview, participants completed a digital consent form (Appendix 9) and were informed that confidentiality for the interview process was assured. The participants were asked questions per the interview schedule to explore what Excellence looks like at their organisation.

Interviews were not recorded; the researcher took notes during the interview directly into an Excel document. Following the interview, these notes were deductively summarised according to study questions, fractured, and transferred into the pre-prepared theoretical framework where it was organised and managed in accordance with the Framework Approach.[19] Using Microsoft Excel, data was displayed for analysis within and across cases, per interview, to establish connections and themes to be reported. Analysis and synthesis were guided by the COM-B model.[18]

The information provided was used to write narrated case studies. Participants were given the opportunity to review and confirm the accuracy of their case studies by email. The case studies were compiled into an e-book for online publication through NHSE.

6.4 Interviews with non-acute organisations – Work package 4

The same processes as per acute provider case studies (work package 3) section 6.3 were followed. The essential differences are described below.

Interviews lasting up to one hour were designed to explore and contextualise the current state of non-acute providers and understand transferability of Excellence initiatives into non-acute

settings. A semi-structured interview guide (using COM-B) with 37 questions (Appendix 8b) was developed to augment information given by participants in the survey and to explore transferability of initiatives.

Participants were organisational leads for Excellence from non-acute provider organisations who were purposefully selected from work package 1. A Participant Information Sheet (Appendix 6c) was provided. Participants were asked questions per the interview schedule to explore what Excellence looks like at their organisation and understand transferability of initiatives into non-acute settings. Anonymity was ensured for the interviews and data was not identifiable; names and identifying features relayed during the interviews were removed and replaced with unique identifier codes and pseudonyms.

6.5 Metrics – Work package 5

This work package was designed to include extraction and analysis of previously-reported, publicly available non-anonymised data for 44 healthcare providers in the Midlands from five existing regional and national databases. The aims were to measure the impact and association of the six selected Excellence approaches on outcomes, to add to the evidence base, and demonstrate the benefits to patients and staff of engaging in Excellence activities via the framework of Excellence pillars.

The outcomes agreed with NHSE commissioners were:

(1) Staff retention and leaver rates
(2) NHS Staff Survey results[26]
(3) Pathway to Excellence® designation
(4) Magnet® designation
(5) NHS Kitemark for Preceptorship[27]
(6) NHS Kitemark for Pastoral Support for internationally-educated nurses[28]
(7) CQC results[29]

This work package was designed to explore if a correlation exists between the presence of Excellence in Nursing and Midwifery (as defined in the literature review findings, section 7.1) and improved outcomes at organisations. Data measures recorded by NHS and health care organisations have been reviewed against an Excellence Score and Maturity Matrix created as part of this research.

To enable descriptive statistics and regression analysis, scores reflecting Excellence activity at each organisation, maturity of each organisation's Excellence journey, and coding of non-numerical data was required. Regression analysis[30] is a set of statistical methods used for the estimation of relationship between a dependent variable and one or more independent variables. It can be utilised to assess the strength of the relationship between variables and for modelling the future relationship between them.[30]

The method in which this was done is described below.

Excellence Activity Scoring

To enable descriptive statistics and regression analysis to be undertaken, each site was scored against the following four Excellence measures (as defined in the literature review findings, section 7.1):

1. Attainment of Pathway to Excellence® / Magnet® designation
2. Attainment of NHS Kitemark for Preceptorship[27]
3. Attainment of NHS Kitemark for Pastoral Support for internationally educated nurses[28]
4. Use of a Quality Improvement approach at their organisation

Each site was scored accordingly for each measure: 1 for "Yes, this does exist;" 0 for "No, this does not exist." Using this scoring system, all organisations were assigned an Excellence Measure Score from 0-4. The following scores were assigned:

Scores	Number of organisations with the assigned Excellence score
0	2
1	3
2	7
3	7
4	1

Maturity Matrix score:

To enable descriptive statistics and regression analysis to be undertaken, a maturity matrix score[31] was assigned to each site. This allowed further exploration of the maturity of Excellence activities self-reported by each organisation.

The 7 Lenses maturity matrix[31]: A tool developed and reviewed by the UK Government, to assess the maturity of a programme and identify areas that need more development based on strategic areas of Vision, Design, Plan, Transformational leadership, Collaboration, Accountability and People. The tool enables each area to be assessed through five levels of maturity.[31]

Using the 7 Lenses maturity matrix,[31] all sites were assigned a maturity matrix score to gauge the position of organisational development based on survey responses on the six pillars of Excellence (page 10) and the duration of their existence in each organisation. The following scores were assigned:

Scores	Number of organisations with corresponding Maturity Matrix score
0	0
1	5
2	6
3	3
4	6

Data parameters were chosen via the Research Steering Committee as being appropriate to review correlation and perform regression analysis**. T**he following inclusion/exclusion criteria were applied to data parameters:

- **Inclusion criteria for data parameters:** The most recently available full data sets from all organisations, as defined in the study, to avoid bias and ensure equity.
- **Exclusion criteria:** Incomplete or/and unavailable data sets.

Pre-existing data parameters were previously reported, publicly available information from organisations and individuals responsible for maintaining a database, for acute and non-acute organisations, comprising of:

1) NHS Staff Survey results[26] for the year 2023, for the following:
   a) We are recognised and rewarded
   b) We each have a voice that counts
   c) We are a team
   d) Staff engagement
   e) Morale
2) NHS staff stability index and leaver rates for nurses, health visitors and midwives from 2023-2024.
3) Latest CQC ratings for acute and non-acute healthcare provider organisations.[29]

To allow for regression analysis, all data parameters included from the criteria had numerical codes assigned. The following numerical coding was assigned to non-numerical data for analysis:

Data Parameter	Numeric scoring
CQC rating	Requires improvement: 0, Good :1, Outstanding: 2
Pathway to Excellence®/ Magnet® designation	Yes: 1, No: 0
NHS Kitemark for Preceptorship	Yes: 1, No: 0
NHS Kitemark for Pastoral support for internationally educated nurses	Yes: 1, No: 0
Quality improvement approaches	Yes: 1, No: 0

With the Excellence rating score, maturity matrix score, and numeric coding assigned against the NHS data parameters (NHS Staff Survey, NHS stability index and leaver rate, and CQC ratings), it was possible to begin regression analysis and test the following hypothesis to support one of the aims of the study: *Demonstrate impacts of Excellence approaches on outcomes*.

Hypothesis testing

- Hypothesis 1: There is a relation between Excellence scores and pre-existing data parameters.
- Hypothesis 2: There is a relation between maturity matrix scores and pre-existing data parameters.

- Hypothesis 3: It is possible to present and explain the descriptive statistical findings, standard deviation, and median (NHS Staff Survey results, leaver rate, stability index, average CQC result).

6.6 Confidentiality

All data in this study was kept confidential. Data and digital consent forms for all work packages were returned electronically to the PI through the password-protected Microsoft 365 Forms account and automatically downloaded and stored in a Microsoft Excel Workbook. All files are password-protected on a secure password-protected NHS server accessible only to the research team and will be retained for 10 years, in accordance with UHCW data regulations.

7. FINDINGS

An overview of the findings for each work package of the study are provided in this section.

7.1 Literature review (Scoping method) – Work package 1

7.1.1 *Study selection*

A total of 892 papers were identified by the search strategy. After removal of duplicates, 507 papers were screened by title and abstract, and 229 were screened by full text review. Twenty-three studies were included in the review (Figure 2).

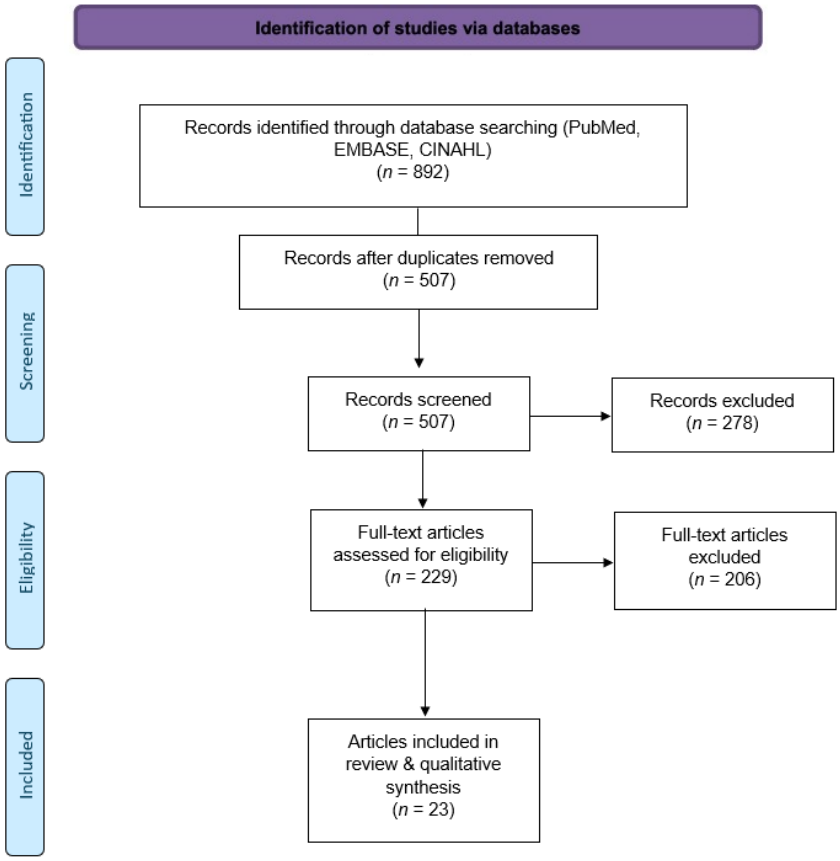


Figure 2: PRISMA flow diagram of study selection

7.1.2 *Study characteristics*

Of the 23 studies, 20 were conducted in the USA,[32, 34-45, 47-50, 52-54] one in Iran,[33] one in Denmark,[46] and one in the Philippines.[51] All studies explored Excellence in hospital settings. There were 19 quantitative studies,[34-45, 47-49, 51-54] two qualitative studies,[33, 46] and two mixed-methods studies.[32, 50] One study explored qualitative data from the perspective of patients[32] and three studies from the perspective of direct care nurses.[33, 46, 50] Most of the papers viewed

Excellence through the lens of a formal accreditation programme (Magnet Recognition Programme n=16; Pathway to Excellence® n=1; Beacon Award for Excellence n=1).

7.1.3 *Summary of findings*

The summary of findings for each review question are described below.

Review question 1: Is the concept of Excellence defined? If yes, how is it defined?

The concept of Excellence is directly defined in four studies;[33, 45-46, 50] the remaining studies referred to it indirectly. Excellence is complex, with "wide and varied definitions,"[45] and there are limited studies exploring this.[33] Excellence can be applied at individual, ward, or organisational levels.[45] The concept of Excellence is relational to exemplary evidence-based professional practice and high-quality patient care outcomes.

There are definitions from accrediting organisations,[45, 50] as well as definitions from philosophy and theory.[33, 46] Organisational excellence is recognised through benchmarking programmes such as ANCC Magnet Recognition Programme® and AACN Beacon Award for Excellence, with high-quality empirical outcomes through Magnet® and positive practice environments through the Pathway to Excellence® programme. [45, 50] Philosophers and theorists explore individual Excellence through values, pattern recognition based on clinical experience, and sensing a surplus of meaning in interactions with patients. [33, 46]

Review question 2: Are the range of components defined? If yes, how is it defined?

The range of components of Excellence are defined in 16 studies.[32-36, 38-39, 41-43, 47, 49-53] Components of Excellence include personal values-based qualities;[32-33] interpersonal qualities towards patients, relatives, and colleagues;[32-33] and organisational professional components.[34-36, 38-39, 41-43, 47, 49-53] Excellence can be achieved through demonstrating values, transformational leadership, QI, and evidence-based practice.

Review question 3: Are the outcomes of Excellence reported? If yes, what are the reported outcomes?

The outcomes of Excellence are reported in 19 out of 23 studies.[34-45, 47-49, 51-54] The primary exposure to Excellence is via the Magnet Recognition Programme® (n=16). The reported outcomes include: 1) Outcomes related to patient quality, safety, and experience (n=14; mortality rates, readmission rates, length of stay, nurse-sensitive indicators, patient experience);[34-35, 37-38, 40-44, 48, 51-54] 2) Outcomes related to staff satisfaction and experience (n=3;

staff satisfaction, engagement, and collaboration);[36, 40, 45] 3) Financial performance (n=2);[39, 47] and 4) Electronic health record use (n=1).[49]

Most studies demonstrate a positive association between Excellence and improved outcomes, particularly for patient length of stay, mortality rates, patient satisfaction, and staff satisfaction and engagement. Excellence achieves improved outcomes for staff and patients.

7.1.4 *Conclusion*

The literature review identified a proliferation of literature from the USA with clear gaps in the current evidence base, namely; a dearth of evidence from England and the non-acute healthcare provider perspective. This provides opportunity to define Excellence beyond existing frameworks and to explore Excellence in acute and non-acute healthcare provider settings.

The DEFiNe study addresses these gaps in the research; it has been conducted in the Midlands region using robust research methodology and the COM-B model.[18] It defines Excellence beyond existing frameworks and explores Excellence in both acute and non-acute healthcare provider settings across the Midlands.

7.2 **Survey – Work package 2**

From the 44 provider organisations in the Midlands region who met the inclusion criteria, Excellence leads from 26 organisations responded to the survey (59% response rate). From the 26 organisations, 16 were acute and 10 were non-acute provider organisations. All 16 acute providers were NHS organisations. From the 10 non-acute providers, six were NHS organisations and four were non-NHS organisations.

All survey respondents who nominated their organisation to participate were invited to join the relevant work package. Twelve acute provider organisations participated in work package 3 (case studies), and three non-acute provider organisations participated in work package 4 (interviews). Survey results informed findings in work packages 3, 4, and 5 (metrics).

Since the advent of digital surveys, response rates have been increasing to 56% (2022)[55]; our survey would therefore indicate a good response rate (59%) and uses a replicable process. However, the response rate would likely fluctuate over time related to participant motivation to complete the survey. Larger and more diverse sampling of participating organisations would increase generalisability of findings.

7.3 Case studies of acute organisations – Work package 3

Designated Excellence leads from 12 acute provider organisations in the Midlands region participated in the case study interviews. All were from acute NHS organisations.

7.3.1. *Summary of findings: The six pillars of Excellence in acute organisations*

The following is a summary of findings from the six individual pillars of Excellence as reported by acute organisations. Commonalities and differences across cases were identified, integrated from survey responses and case study interviews.

Pillar 1: Shared professional decision-making (SPDM)

The most recurring concept for this pillar was SPDM as a vehicle for staff empowerment, promoting the voice of direct care staff in driving change (n=6). SPDM provides professional development and career progression opportunities (n=5) and improves staff engagement and well-being (n=3) and patient experiences (n=3). From the four organisations who reported challenges releasing staff from clinical duties for SPDM, one organisation protected staff time for SPDM through the electronic rostering system. In the highest-achieving exemplar organisations, SPDM was perceived as multi-disciplinary and inclusive (n=3) and accepted by the wider organisation as an approach to drive Equality, Diversity, and Inclusion (EDI) initiatives (n=3).

Pillar 2: Local accreditation

Staff ownership of practice and care outcomes were the most common concepts within local accreditation (n=6). The accreditation framework was described as a useful tool for assurance (n=3) and a valuable method for motivating staff to improve outcomes (n=6) and reassuring patients and families of standards of care (n=5). The most successful organisations closely engaged clinical leaders such as Ward Managers and Matrons in the accreditation process (n=4), included multidisciplinary colleagues (n=2), and ensured data was accessible for local teams (n=1).

Pillar 3: Meaningful recognition

Meaningful recognition was identified as an approach that generates individual and team motivation (n=9), promotes a culture of celebration (n=6), improves staff well-being and pride (n=9), and improves care (n=6). It was the one pillar where participants discussed having fun or invoking deep emotions (n=2), such as crying from an emotive experience and remembering

why they chose to enter the profession. Five organisations reported other professions initially felt excluded from nursing and midwifery specific awards, so offerings were expanded to include other groups. Two organisations used this approach to celebrate diversity and promoted diverse representation on award panels. One organisation reported building staff capability to engage in meaningful recognition through a dedicated Facilitator to support with staff preparations for showcases and presentations.

Pillar 4: Continuous quality improvement (QI)

Continuous QI was embedded through formal Trust-wide models in six organisations and driven through organisational strategy and culture that was open to improvement, led by the CNO with Board-level and senior nursing and midwifery leaders (described herein as “senior leaders”) (n=3). QI develops leaders as coaches (n=3) and fosters a culture that embraces improvement (n=3), leading to improved outcomes and experiences for patients and families (n=7). Two organisations had QI programmes in place but experienced challenges; respondents attributed these challenges to leadership styles and organisational cultures that were not open to change. (Analysis on the two divergent cases is described on page 34.)

Pillar 5: Distributed leadership

Distributed leadership was identified as a principle to promote leadership at all levels (n=3), build leadership capability (n=2), and empower direct care staff to make decisions and drive change (n=2). There was variation in how organisations achieved this: organisations accomplished this through leadership training for all levels of staff (n=2), principles of shared governance (n=2), and providing opportunities for direct care nurses and midwives to communicate openly with leaders through forums (n=1).

Pillar 6: Research and innovation

Through research and innovation, staff feel valued and invested (n=4), evidence is translated to clinical practice and outcomes are improved (n=3). The highest-achieving exemplar organisations developed capability in research and innovation through internal Fellowship programmes (n=4) incorporating leadership skills to complement external training programmes. The most common barrier reported was the perception of research as “daunting” or “irrelevant” (n=4). One organisation discussed using a “building block approach” to build confidence and capability, e.g. supporting staff to write reflections and perform audits, then building on these experiences.

7.3.2. *Analysis: Behaviours that drive Excellence as the outcome*

Findings have been analysed and synthesised through the COM-B model[18] which establishes that capability, opportunity, and motivation are dynamic factors that can be influenced to shape the desired behavioural outcome. Through the Behaviour Change Wheel framework within this model,[18] interventions driving large-scale behaviour change are generalisable to organisations and entire populations. Through this theoretical lens, positive practice environments promoting capability, opportunity, and motivation lead to Excellence as the desired outcome. The dynamic factors driving Excellence as a behavioural outcome are illustrated in Figure 3.

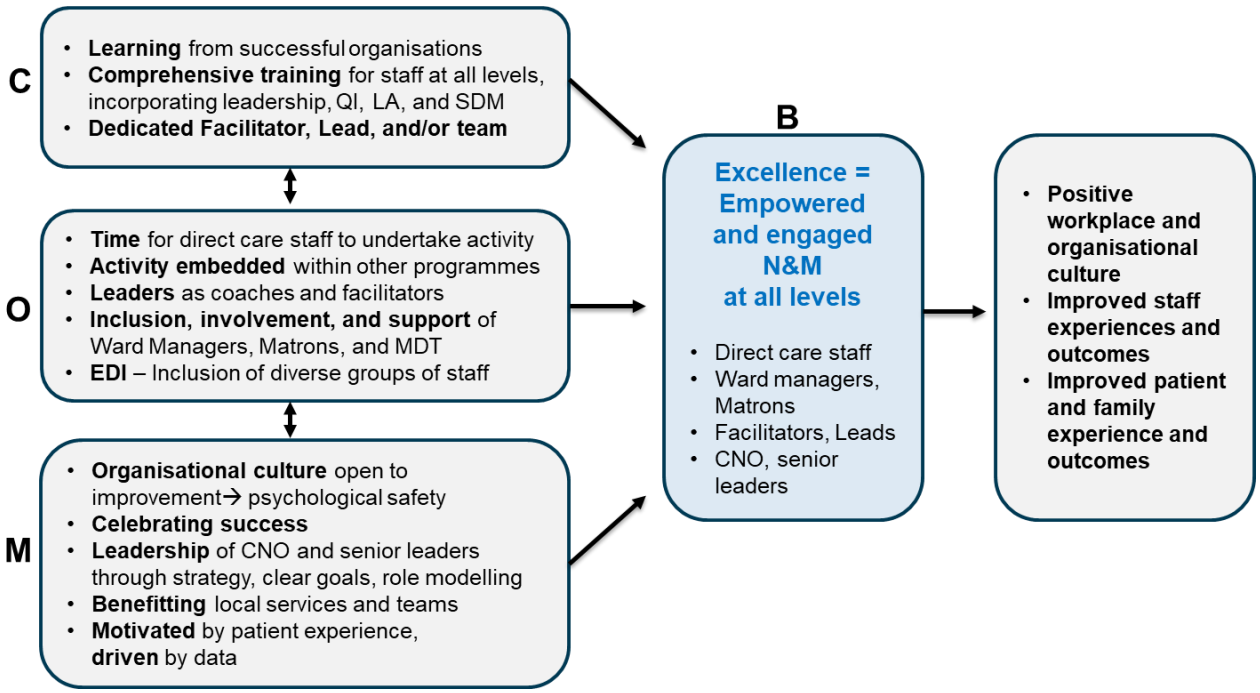


Figure 3: Dynamic factors driving Excellence as the behavioural outcome (COM-B model[18])

The behaviours that drive Excellence as the outcome are described below.

Capability

Capability is built through comprehensive training for nurses and midwives at all levels. Dedicated Facilitators, Leads, and/or teams with subject matter expertise deliver training and coaching, building knowledge, skills, and confidence in their capabilities to initiate change and deliver successful outcomes. The highest-achieving exemplar organisations align training across the Excellence framework and integrate principles of leadership, continuous QI, local accreditation, and SPDM. These comprehensive training packages equip teams with the knowledge, skills, and confidence to engage in Excellence and navigate complex systems.

For organisations beginning their Excellence journey, CNOs and senior leaders find it valuable to learn through visits and meetings from experienced organisations who have successfully implemented and embedded Excellence programmes. They use this learning to design programmes and develop infrastructure that build capability.

Opportunity

Nurses and midwives require not only training and support to achieve Excellence; they also need accessible opportunities to become involved. Support of time away from clinical duties provides opportunities to fully engage in Excellence-related activities. When the Excellence pillars are embedded within other programmes, it increases staff exposure to these concepts whilst providing additional opportunities to become involved. Leaders demonstrating coaching and facilitative transformational leadership styles also provide collective opportunities for nurses and midwives to contribute, as these leadership styles place value on engaging and encouraging others.

A sense of inclusion was a recurring key concept. When clinical leaders such as Ward Managers and Matrons feel involved and understand the relevance of the Excellence pillars, they encourage their teams to participate and support their time released from clinical duties. Involvement from multidisciplinary colleagues is key in obtaining wider team and organisational support and embedding these principles across the organisation. Involvement of staff from diverse backgrounds and/or with protected characteristics also promotes a sense of inclusion. When staff feel they belong, they engage with Excellence and use it as a vehicle to promote EDI initiatives. Additionally, positive action programmes and targeted interventions for staff from diverse backgrounds promote the sociability and accessibility of these opportunities.

Motivation

In addition to building capability and providing accessible opportunities for involvement, staff need to feel psychologically safe and have the desire to engage. Psychological safety is a perception or shared belief that it is safe to take interpersonal risks within a team without fear of negative consequences such as blame.[56, 57] In psychologically safe work environments, people feel they can be open and speak up, and they feel comfortable challenging the system.[56, 57] Analysis of the highest-achieving exemplar organisations revealed that their staff feel secure voicing ideas and changing practice. In these organisations, staff feel comfortable doing so because their organisational culture is open to improvement and their CNO and senior leaders role model positive attitudes towards continuous improvement.

Whilst many organisations report successes into committees, exemplar organisations within the case studies also meaningfully recognise and intentionally celebrate their staff and teams. Celebrations invoke emotions such as pride and joy that influence automatic motivational processes and reinforce positive behaviour driving Excellence. For celebrations to be received well, staff must want to be celebrated; this is influenced by organisational culture and role modelling from the CNO and senior leaders.

Excellence is intentionally driven by reflective motivational factors such as strategic priorities with clear goals and desired outcomes. This highlights the importance of transformational leadership in setting out an inspiring vision for Excellence that nurses and midwives can aspire to achieve.

When Excellence benefits local services and teams, managers and teams see the value of the work and support it. Realising the benefit of their investment may help overcome reported challenges such as taking time out of clinical duties. Furthermore, when staff are compassionate and empathetic, understand the patient experience, and are trained to use data, they are motivated to improve patient experiences and use data to drive and demonstrate improvements.

<u>What does Excellence as the behavioural outcome look like?</u>

The dynamic factors described above build capability, opportunity, and motivation and drive Excellence as the desired behavioural outcome. From recurring concepts across survey and interview data, Excellence as a behaviour is exemplified by empowered and engaged nurses and midwives at all levels, from direct care staff to the CNO.

What does Excellence at all levels look like?

Participants reported that direct care nurses and midwives are motivated and engaged in Excellence activities. They feel psychologically safe and empowered to use their voice, make decisions, and own their practice. They demonstrate compassion and empathy to patients and use data and evidence to lead, drive change, and improve outcomes. They are open to learning, professionally developed, satisfied with their work, recruited, and retained. They feel included and valued, are proud to be nurses and midwives, and celebrate each other.

Clinical leaders such as Ward Managers and Matrons understand the Excellence framework, see the value and relevance, and support their teams' time released from clinical duties. They demonstrate coaching and facilitative leadership styles to develop their teams' capabilities and

confidence. They value the voice of direct care nurses and midwives and encourage staff to demonstrate leadership and make decisions. They are proud and celebrate their teams.

Facilitators and leads for programmes related to the Excellence framework empower nurses and midwives by building capability, linking them into opportunities, and motivating them. Facilitators and leads give them the knowledge, skills, and confidence to navigate complex systems, lead, and contribute.

Findings show that the CNO and senior leaders are engaged and understand the value of the Excellence framework. They intentionally drive Excellence through strategy, infrastructure, and visible involvement. They motivate and empower nurses and midwives across the organisation by role modelling the principles underpinning the Excellence framework, such as collective leadership, valuing improvement, and celebrating. They use their behaviour and influence to shape a culture that fosters Excellence and empowers nurses and midwives at all levels.

Additional outcomes from Excellence

Participants reported that Excellence promotes positive workplace and organisational cultures that are open to improvement and values the contributions of nurses and midwives. Participants also reported that Excellence improves experiences and outcomes for staff, including well-being and satisfaction, experiences for patients and families, and quality and safety outcomes for patients.

As the model is a dynamic cycle, Excellence promotes these positive outcomes, which in turn strengthen the sources of behaviour and make the behaviour more likely to occur. This is illustrated below in Figure 4.

Figure 4. A dynamic cycle: Interventions drive Excellence as a behaviour, leading to improved outcomes and reinforcing the cycle by strengthening the sources of behaviour.

Divergent cases

Two organisations reported divergent activity and perceptions. Although both organisations had QI programmes in place, these programmes experienced challenges and reported no tangible outputs or successes. There was no reported structured Trust-endorsed QI methodology, and the Excellence leads reported that neither their organisational cultures nor their leaders were open to change or improvement. As a result, staff did not feel empowered to use their voice, identify new ideas, or engage with the programmes in place.

Vignette: In case study interviews with organisational Excellence Leads from acute providers, participants were asked to describe how QI is used in their organisation and describe barriers or challenges. Two organisations reported experiencing challenges with their QI programmes:

"We have a continuous QI programme in place but we really struggle… We've tried to give teams the tools to implement changes and own it, but we have leadership and management that don't support continuous improvement and aren't open to it. So, people don't feel enabled to make changes themselves and wait for others to come in and do it… Our leaders expect others to fix their own problems without engaging them. We need to do better engaging and involving our nurses and midwives... We have a poor leadership culture around this, and it's a barrier to activity." (Organisational Excellence Lead 2)

"The organisation has been stagnant and not trying to improve, and the QI programme has struggled… Although we have a QI team, [the organisation] hasn't invested in a specific QI model or the resource, so we don't have the capability internally for improvement work… [Leaders] haven't engaged with any direct care staff about this." (Organisational Excellence Lead 3)

These two examples depict broad challenges within leadership and organisational culture in relation to the delivery of QI work.

Whilst the COM-B model[18] was used to analyse and synthesise cases, Azjen's Theory of Planned Behaviour[58] was applied to interpret the divergent cases. This theory establishes that an individual's 'intention to engage in a behaviour' determines whether they will engage in the behaviour.[58] Their intentions are influenced by personal attitudes, subjective norms, and perceived behavioural control. Personal attitudes include perceptions and assumptions. Subjective norms include how the attitudes of others are perceived. Perceived behavioural

control is the extent they believe they control their own behaviour, shaped by internal and external factors.

In the two divergent cases, although QI programmes were in place, nurses and midwives did not feel empowered to engage or contribute. Through the Theory of Planned Behaviour,[58] when nurses and midwives did not feel empowered to voice ideas, perceived their leaders did not welcome change, and perceived a low level of control, they would not have the intention to engage with Excellence as a behaviour, even if programmes were available. These two cases highlight the crucial role of positive organisational culture and leadership to determine the success of Excellence programmes after implementation.

7.3.3. *Key points from case studies of acute organisations*

The following is a summary of key points to create conditions for change, where behaviours that drive Excellence can grow and be sustained as part of positive organisational culture.

Where organisations identified success, they had the following:

- Professional leadership that role modelled positive attitudes to change, fostered meaningful recognition, and invested in building capability and providing opportunities for continuous improvement.
- An organisational culture that was open to learning and change, focused on continuous improvement.
- Psychologically safe work environments, where staff felt comfortable speaking up and changing practice.
- Engagement and buy-in from nurses and midwives at all levels, from direct care staff to the CNO and senior leaders.

7.3.4. *Conclusion from case studies of acute organisations*

- The six pillars of Excellence are reflected in the organisations taking part in the case study interviews. They demonstrate how the six pillars drive capability, opportunity, and motivation to impact behaviours.
- Key conditions for change are professional leadership and organisational culture that are open to change, with a focus on continuous improvement.
- Building capability, opportunity, and motivation results in behaviours for sustainable improvement in culture to embed and drive Excellence.

7.4 Interviews with non-acute organisations – Work package 4

The interviews included participants from three non-acute provider organisations in the Midlands region, all of which were hospices.

7.4.1 *Summary of findings: The individual pillars of Excellence*

The following is a summary of findings from the six individual pillars of Excellence as reported by non-acute organisations. Three responses were received, all from hospices.

Pillar 1: Shared professional decision-making (SPDM)

Leaders in the hospices see great value in implementing the principles of shared professional decision-making. Although two hospices did not have SPDM councils, they adopt the principles and ethos of SPDM. In one hospice, the concept of SPDM was interpreted as a way of 'helping' patients to make informed decisions.

Pillar 2: Local accreditation

None of the hospices had guidance in place to deliver local accreditation, and two respondents were not aware of local accreditation.

Pillar 3: Meaningful recognition

One hospice used meaningful recognition and described this as 'a focus on building staff resilience through huddles, reflective practice, to recognise, retain and support them'. Two hospices had indefinable approaches for meaningful recognition of their staff. Staff felt their contribution to patient care is relatively insignificant, for example, 'the hospice staff feel left behind acute trusts due to the nature of the work, e.g., they felt this was saving lives compared to end-of-life care.'

Promoting recognition requires leadership to communicate and reinforce staff value. Leaders stated that 'letting [staff] know they're as important as [staff working in] the acute settings and they are valued' and 'allowing [staff] to tweak a system that works in the acute setting, by identifying and transferring core concepts, empowers them to help build the framework and initiatives needed themselves'. [Hospice 3]

Pillar 4: Continuous quality improvement (QI)

Overall, each hospice lacked a robust model and framework for delivery of QI. Despite this, in one hospice, continuous QI was achieved by promoting the safety culture, e.g., conducting training on human factors, 'incivility' and Patient Safety Incident Response Framework (PSIRF) linked to nursing and midwifery Excellence. It was also cited that 'newly registered nurses are reluctant to express their ideas regarding quality improvement'. Hospices are smaller charitable organisations, which may lack a typical organisational structure, resulting in disparate frameworks. Consequently, the efforts of the lead practice educator, lead nurses, and individual nurses in hospices to enhance the quality of care may not be documented or linked into professional forums/frameworks leading to the absence of reportable mechanisms.

Pillar 5: Distributed leadership

The three hospice leads interviewed stated that 'they followed a hierarchical leadership approach'. The second hospice stated they followed 'a leading together approach' for distributed leadership. In this hospice, open forums were held where leaders provided opportunities for staff to create 'leadership tools', to generate attitudes for change. This promoted feedback from staff regarding new approaches to the management of patient care. The final hospice focused on building distributed leadership regardless of hierarchy to include targeted training for aspiring leaders, to develop an understanding of leadership styles, decision-making, and collaboration with other colleagues and services. Training places were filled through manager nominations, to promote shared leadership. There was representation of leadership from clinical and non-clinical teams to promote distributed leadership as a multi-professional approach.

Pillar 6: Research & innovation

One hospice stated, 'We have been involved in research projects with local universities. We have developed our own innovative programmes and tools that have been presented at national conferences'. At a second hospice some nurses have completed research training, leading to growing enthusiasm from other staff. Growing research capacity and capability poses a challenge for the development of research in non-acute organisations.

7.4.2 *Analysis: The Excellence Framework*

The overall analysis and synthesis from the Excellence pillars is illustrated using the COM-B model (Figure 5). The responses from non-acute organisations (n=3) were derived for behaviour change, associated with relevant capability, opportunity, motivation, and interpreted as they were perceived to influence behaviours. The final element of this (Figure 5) shows the potential / anticipated outcomes of behavioural changes.

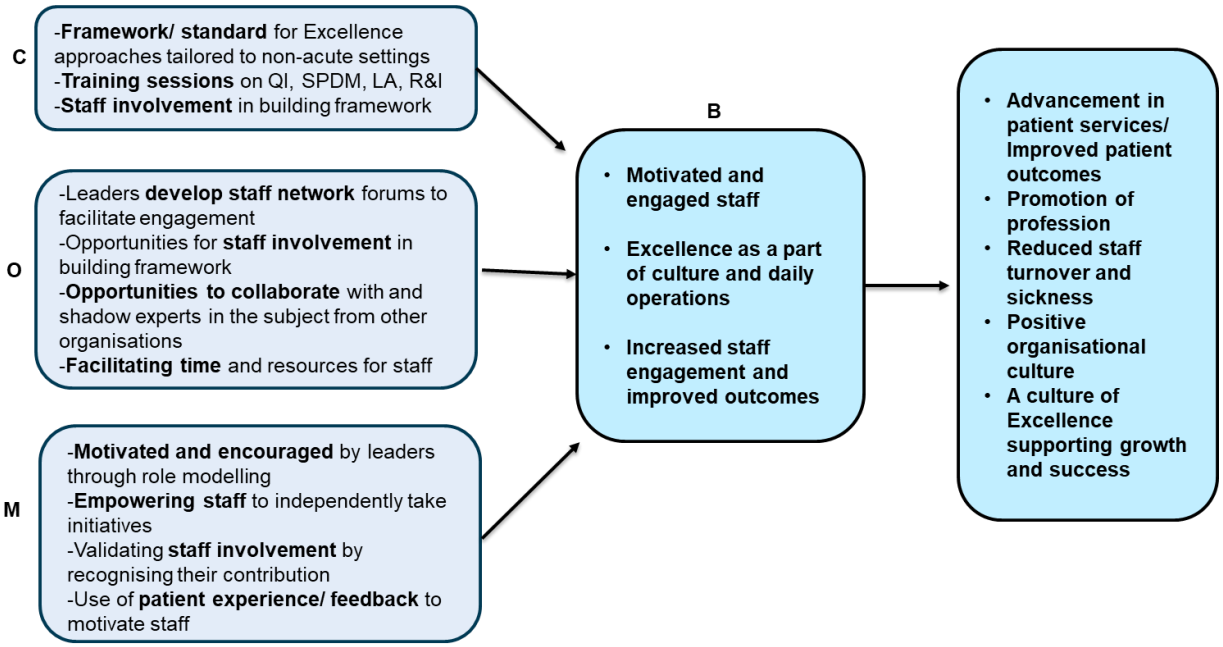


Figure 5: COM-B model illustrating dynamic factors driving Excellence in non-acute settings

Capability

Capability is built by involving staff in building the framework and taking their experience and recommendations into consideration. All the hospices recognised the need for training across the six pillars of Excellence to foster interest and promote enthusiasm among staff.

Opportunity

Collaborating with and learning from subject matter experts in other organisations is essential for providing staff with the exposure needed to understand the frameworks and systems employed by different organisations. This exposure allows staff to adapt best practices in their own organisations, leading to improved efficiency and effectiveness in their work.

Motivation

Staff are particularly motivated and inspired when they receive encouragement and support from their leaders who role-model Excellence behaviours. Leaders empowering staff to take self-initiatives aimed at achieving Excellence in their work and driving improvements within the organisation are key elements. When staff are provided with appropriate training and resources, they recognise the need for change and improvement and are more likely to take proactive steps to bring about positive transformations.

Staff are motivated through various methods, such as acknowledging and validating their contributions. Additionally, incorporating patient experience and feedback into the workplace can also serve as an effective motivational tool. The factors described above serve to cultivate capability, opportunity, and motivation, propelling Excellence as the behavioural outcome.

Findings

Findings described here present a summary from key questions asked at interviews with non-acute organisations regarding current Excellence measures, transferability, and timeframes.

Leaders stated that 'they are aligned and actively involved in all measures of Excellence' and they have a 'clear understanding of Excellence'. Leaders also demonstrated the benefits of Excellence to staff, the organisation, and patients, communicating the importance of providing staff with appropriate resources to deliver high standards of care for patients. They stated that 'Visibility of leaders [is created by] going into [clinical] areas, spending time with different services.' Leaders adhere to this ethos, take ownership and responsibility for their actions, to encourage other staff. They gave examples of 'developing staff through training on continuous quality improvement', which promotes a safety culture through training on human factors, incivility, and PSIRF to improve the patient and family experience. Using the principles of shared professional decision-making (SPDM) enables staff participation and decision-making with an aim to create a culture of open engagement with all staff, regardless of their role or level, ensuring equal access to contributions for everyone.

To successfully implement measures for Excellence, it is essential to involve direct care staff, giving dedicated time and space to learn and contribute to the development of these measures. It is important to provide them with opportunities to share their opinions and understand how these measures are relevant to their roles. Additionally, leadership and coaching training can allow them to support others. Feedback sessions, focus groups with staff, and engagement with change-makers can be organised to bring about positive changes in local workplaces,

while utilising change management theory. Motivating staff through patient feedback and improved outcomes is also essential.

Additional Outcomes from Excellence behaviours

If these behavioural changes were achieved, the overall Excellence outcome would include advancements in patient services and improved patient outcomes. There will be promotion of the Nursing and Midwifery professions because of motivated and engaged staff, leading to a reduction in staff turnover and sickness. Positive organisational culture will be promoted, fostering a culture of Excellence that supports growth and success.

7.4.3 *Key points from interviews with non-acute organisations*

- The findings from non-acute participating organisations (n=3) are limited in their wider application due to lack of respondents.
- Non-acute organisations face challenges measuring the impact of Excellence approaches like SPDM, meaningful recognition, research and innovation, and continuous quality improvement due to the lack of a framework and dedicated personnel.
- Engaging expertise and the opportunity to learn from acute settings would assist this process.
- Nurse and midwife leaders must explore leadership support regarding the development of Excellence measures and associated staff training required.
- Delivery of a nursing and midwifery plan for Excellence through the MREN will enable staff to participate in the process. Creating a staff network would enable staff to engage in decision-making and develop leadership skills, especially using the SPDM approach.
- Developing a framework for each of the Excellence pillars and recruiting dedicated resources to establish these in non-acute settings would help measure the impact of Excellence approaches and plan necessary improvements.

7.4.4 *Conclusion from interviews with non-acute organisations*

To implement the six pillars of Excellence successfully, leaders in non-acute organisations need greater knowledge and awareness of these to drive successful implementation. They recognise the importance of these pillars to elicit positive changes and improve patient outcomes. They are, however, keen to empower their staff to use the pillars effectively by learning from examples within acute organisations. Despite this they have the awareness that they do not have a typical organisational structure, processes and framework seen in larger acute organisations to implement the Excellence pillars.

7.5 Metrics – Work package 5

Twenty participating organisations that met the criteria as detailed in section 6.5 (Methods) were subject to analyses, comprising of 15 acute and 5 non-acute organisations. The summary of findings is described below; the full findings for this work package can be found in Appendix 10.

7.5.1 *Summary of findings: Metrics*

From creating Excellence and maturity matrix scores for participating sites, it was possible to explore sites by score and the corresponding NHS outcome measures in the form of regression analysis to test hypotheses 1 -3 (page 23).

The following key findings have been identified:

- Although not statistically significant, a correlation was found between nursing and midwifery Excellence and specific NHS nursing and midwifery workforce specific parameters.
- When the Excellence measure is applied to organisational outcomes rather than nursing or midwifery specific outcomes, a correlation cannot be seen.
- A trend can be seen that shows the following: Organisations that have higher Excellence scores (achieved through Excellence designation marks and QI approaches) and higher maturity scores demonstrate improved retention of nurses and midwives, evidenced through lower leaver rates and higher workforce stability.

7.5.2 *Conclusion: Metrics*

Excellence approaches targeting nurses and midwives improves the stability index and decreases leaver rates, demonstrating that Excellence where adopted has a positive impact on workforce retention of nurses and midwives.

8. DISCUSSION

The following is a discussion of all the work packages across the study, exploring key findings and influencing factors.

This is the first study to identify and analyse case studies of Nursing and Midwifery Excellence within acute provider settings across the Midlands region, scope transferability to non-acute settings, and explore impacts of Excellence on outcomes. These findings provide valuable insights into what Excellence looks like in acute settings, how these principles can be transferred into non-acute settings, and how Excellence might be measured to understand impact and outcomes for patients, staff, and organisations.

Findings of work package 1 (the literature review) showed that Excellence can be applied at individual, ward/department, or organisational levels. This demonstrates the importance of Excellence frameworks that consider and promote Excellence within each of those levels.

Findings of work package 3 (case study interviews with acute organisations) highlight the importance of psychological safety at work for nurses and midwives. When staff feel comfortable speaking up without fear of blame or reprisal, they can challenge existing practice and drive improvement.[56, 57] Psychological safety improves learning, communication, team performance, and patient safety outcomes.[59, 60]

As demonstrated in the case study interview findings, professional leadership and organisational cultures that are open to change and continuous improvement are key influencing factors; these two factors shape psychologically safe work environments and establish conditions for change within acute settings. Transformational leaders are crucial in role modelling desired behaviours, establishing strategic priorities with clear goals and outcomes, and setting the tone of workplace culture. Leaders can also strategically design programmes and develop infrastructure that builds capability, opportunity, and motivation, promoting behaviours for sustainable improvement in culture which influence local workplaces and direct care nurses and midwives.

Excellence in acute settings is exemplified by nurses and midwives that are engaged and empowered at all levels. When nurses and midwives are engaged with their work and feel professionally empowered, this ultimately benefits patients and the wider workforce; studies report improved patient quality and safety outcomes, as well as improved staff satisfaction.[61, 62] Direct care nurses and midwives may find it valuable to be engaged in the shaping of the Excellence framework; although not explored due to the scope of this study, direct care nurses

and midwives could be involved in a future study exploring their experiences through the lens of the Excellence framework.

Findings of work package 4 (interviews with non-acute providers) reveal that although the six pillars of Excellence are not always intentionally integrated, some of the guiding principles are present within some organisations. Non-acute organisations demonstrated an openness to learn about transferable principles and a willingness to embrace and adopt Excellence approaches, which are important aspects of cultural readiness for change.

As demonstrated in the findings of work package 5 (metrics), approaches targeting a specific workforce (in this case, nurses and midwives) improves workforce outcomes (e.g. stability index of nurses and midwives, reflecting workforce retention). As acute and non-acute organisations were included in the analysis, this suggests that regardless of setting, Excellence approaches targeting a specific workforce have beneficial impacts on workforce outcomes. Although not explored further due to the scope of this study, this is a finding of interest that warrants further research.

It is worth noting that the results for work package 5 (metrics) only demonstrated a change in metrics within the nursing and midwifery profession, and not the wider multidisciplinary team outside of these professions; the organisation-wide impact is yet to be seen. This would require future targeted research to understand how maturity of approaches influences its impact and spread outside of the nursing and midwifery profession and across the wider system.

The strengths and limitations of the study are described below.

Strengths of the study include the mixed-methods study design which captured both quantitative and qualitative data to comprehensively address study questions and add richness to the data. Furthermore, study design, question development, and data synthesis were underpinned by an evidence-based theory-driven approach, using a theoretical framework to identify interventions aimed at behaviour change, allowing the findings to be transferable across settings and populations. The study followed a robust and systematic research protocol which was developed through a co-creation approach with key stakeholders including the Regional Nursing & Midwifery Excellence Network, NHSE funders, and the UHCW Operational Delivery Group. Through co-creation, end-users in the field collaborated with research and Excellence subject matter experts to ensure the study would be meaningful and relevant to end-users, as well as scientifically robust.

There are limitations to the study. The interviews in work package 3 (case studies with acute organisations) and 4 (interviews with non-acute organisations) were intentionally planned, through co-design, to be conducted online for participants' convenience. However, it is acknowledged that the lack of face-to-face interaction may have influenced the quality of responses from participants.[63]

For work package 5 (metrics), the study team initially sought to capture five years' worth of data. However, due to incomplete data parameters regarding NHS Staff Survey results for 5 elements (We are recognised and rewarded; We each have a voice that counts; We are a team; Staff engagement; Morale) and workforce data availability, the decision was made to limit analysis to data based on 2023-24. This decision ensured consistency in measurements, avoided bias to organisations with full data parameters, and promoted equity in the analysis process. Additionally in work package 5 (metrics), the study team initially sought to collect and analyse retention rates for nurses and midwives. However, due to incomplete data parameters on how retention rates for nurses and midwives were reported, the decision was made to use Stability Index measurements instead, as this was reported in a standardised manner for nurses and midwives. This decision ensured consistency in analysis and avoided bias to sites with full data parameters.

As the study sample was taken from the Midlands region, the extent to which findings can be generalised nationally is unknown and requires further research.

Overall, the study highlights the pivotal role in both acute and non-acute settings of professional leadership and culture in fostering openness to change, with a focus on continuous improvement. These create conditions for change, where behaviours that drive Excellence can be encouraged and sustained.

9. CONCLUSION

In conclusion, as the first study to explore Nursing and Midwifery Excellence in the Midlands region, the DEFiNe study (Determining Excellence Factors in Nursing and Midwifery) is a valuable contribution which adds to the national evidence base in England. It addresses gaps in research and informs regional and national work. Study aims and objectives, as set out in sections 3 and 4, were achieved.

The literature review (work package 1) demonstrated gaps in the research: A paucity of evidence from England defining Excellence beyond existing frameworks, including non-acute healthcare settings. This study addresses these gaps; it has been conducted in the Midlands region using robust research methodology and the COM-B model.[18] It defines Excellence beyond existing frameworks and explores Excellence in both acute and non-acute healthcare provider settings across the Midlands.

The survey (work package 2), case studies with acute providers (work package 3), and interviews with non-acute providers (work package 4) enabled:

- Understanding the current state of Excellence in both acute and non-acute settings across the Midlands;
- The identification and analysis of case studies from acute organisations;
- The exploration of behaviours that drive Excellence;
- Understanding the transferability of elements from acute to non-acute settings, leading to recommendations for transferability.

Metrics (work package 5) enabled the exploration of association and impact of Excellence approaches on outcomes. All the work packages of this study shaped the recommendations to build on the national Excellence work, to help determine approaches to Excellence in Nursing and Midwifery, and informed the recommendations for future research.

The study has clearly identified key factors and behaviours that drive Excellence, shown the benefits of implementing the pillars of Excellence, and demonstrated that the Excellence framework benefits the nursing and midwifery workforce. Further research is required to address gaps identified by this study.

10. RECOMMENDATIONS

The following are recommendations to build on the national Excellence work, to help determine what Excellence looks like, and to transfer initiatives into non-acute settings. These recommendations are informed by study findings, including case study interviews with acute providers, interviews with non-acute providers, and metrics. There is scope for organisational, regional, and national strategic leaders to shape work based on these recommendations.

- Disseminate findings and share learning with key stakeholders including the MREN and relevant national networks. This will ensure the study findings inform future work.[64]
- Prepare leaders to develop, implement, and sustain Excellence as part of organisational culture. Strategic leaders are key to the success of the regional and national Excellence work; they can use their influence to role model positive attitudes towards continuous improvement, prioritise the development of positive practice environments, and set out strategic priorities aligned to national Excellence ambitions.
- Co-develop with non-acute organisations, through the MREN, an Excellence framework and delivery plan for non-acute settings. Identify dedicated leads from these settings to champion the work. This will enable co-design and opportunities for learning and support.
- Continue to drive forward the Excellence agenda using an evidence-based approach informed by research, robust methodology, and co-creation. This approach adds to the national evidence base and engages key stakeholders.
- Consider alignment of the six pillars of Excellence to the national strategy.
- As the first study to explore Excellence within the Midlands, there is much more that needs to be understood. Further research is warranted exploring the gaps identified by this study:
    - Including a wider geographical range, e.g. England-wide
    - Scoping transferability into other health and social care settings;
    - Understanding the experiences of direct care nurses and midwives through the lens of the Excellence framework;
    - Exploring the experiences of patients and families, through care quality and improved outcomes;
    - Exploring shared professional decision-making as an approach to drive EDI;
    - Conducting face-to-face interviews to allow richer data collection;
    - Identifying nursing and midwifery-specific parameters to understand the direct impacts of Excellence;
    - Identifying the impact of Excellence on workforce including recruitment, retention, and succession planning;
    - Identifying the impact of Excellence on productivity and efficiency.

11. REFERENCES

1) NHS England. Chief Nursing Officer for England. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/chief-nursing-officer-for-england/. Accessed 11th February 2024.
2) Gebreheat G, Teame H, and Costa E. The impact of transformational leadership style on nurses' job satisfaction: an integrative review. *SAGE Open Nurs* 2023; 9:1-10.
3) Alderwick H, et al. Making the case for quality improvement. The King's Fund (UK), 2017. Available from: https://www.kingsfund.org.uk/insight-and-analysis/long-reads/making-case-quality-improvement. Accessed 3rd March 2024.
4) Goyal R, Kaur G. Determining the role of employee engagement in nurse retention along with the mediation of organizational culture. *Healthcare* 2023; 11:760.
5) Dorigan G, Guirardello E. Effect of the practice environment of nurses on job outcomes and safety climate. *Rev Lat Am Enfermagem* 2018; 26:e3056.
6) Braithwaite J, et al. Association between organisational and workplace cultures, and patient outcomes: systematic review. *BMJ Open* 2017; 7:e017708.
7) NHS England. Shared professional decision-making: Putting collective leadership into practice. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/shared-governance-and-collective-leadership/sdm/. Accessed 10th February 2024.
8) NHS England. Local accreditation. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/shared-governance-and-collective-leadership/local-accreditation/. Accessed 12th February 2024.
9) American Association of Critical Care Nurses. Meaningful recognition. Available from: https://www.aacn.org/nursing-excellence/healthy-work-environments/meaningful-recognition. Accessed 26th February 2024.
10) NHS Improving Quality. First step to quality improvement: A simple guide to improving services. NHS England (UK), 2014. Available from: https://www.england.nhs.uk/improvement-hub/wp-content/uploads/sites/44/2011/06/service_improvement_guide_2014.pdf. Accessed 20th February 2024.
11) NHS England. Nursing, midwifery, and care staff delivering the NHS Long Term Plan. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/delivering-the-nhs-ltp/. Accessed 11th February 2024.
12) NHS England. Guide to developing and implementing ward and unit accreditation programmes. NHS England (UK), 2021. Available from:

https://www.england.nhs.uk/publication/guide-to-developing-and-implementing-ward-and-unit-accreditation-programmes/. Accessed 19th February 2024.

13) NHS England. Shared governance: Collective leadership programme. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/shared-governance-and-collective-leadership/. Accessed 11th February 2024.
14) NHS England. Nursing and Midwifery COVID-19 catalogue of change. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/shared-governance-and-collective-leadership/nursing-covid-19-catalogue-of-change/. Accessed 14th February 2024.
15) NHS England. Nursing and Midwifery Excellence. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/shared-governance-and-collective-leadership/nursing-midwifery-excellence/. Accessed 12th February 2024.
16) American Nurses Credentialing Center. About Pathway. ANCC (USA). Available from: https://www.nursingworld.org/organizational-programs/pathway/overview/. Accessed 10th January 2024.
17) Kroll T, Neri M. Designs for mixed methods research. In: Andrew S, Halcomb EJ, editors. Mixed Methods Research for Nursing and the Health Sciences; 2009. https://doi.org/10.1002/9781444316490.ch3
18) Michie S, van Stralen M, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science* 2011; 6:42.
19) N. Gale et al. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology* 2013; 13:117.
20) Arksey H, O'Malley L. Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology* 2005; 8:19-32.
21) Greenhalgh T, et al. Achieving research impact through co-creation in community-based health services: Literature review and case study. *The Milbank Quarterly* 2015; 94:392-429.
22) Care Quality Commission. Using CQC data. CQC (UK), 2024. Available from: https://www.cqc.org.uk/about-us/transparency/using-cqc-data. Accessed 10th January 2024.
23) Ouzzani M et al. Rayyan — a web and mobile app for systematic reviews. *Systematic Reviews* 2016; 5:210.
24) Hawker S et al. Appraising the evidence: Reviewing disparate data systematically. *Qualitative Health Research* 2002; 12(9): 1284-1299.
25) Sharma A et al. A consensus-based checklist for reporting of survey studies (CROSS). *J Gen Intern Med* 2021; 36:3179-87.
26) NHS Staff Survey. NHS Staff Survey local results. NHS England (UK), no date. Available from: https://www.nhsstaffsurveys.com/results/local-results/. Accessed 27th February 2024.

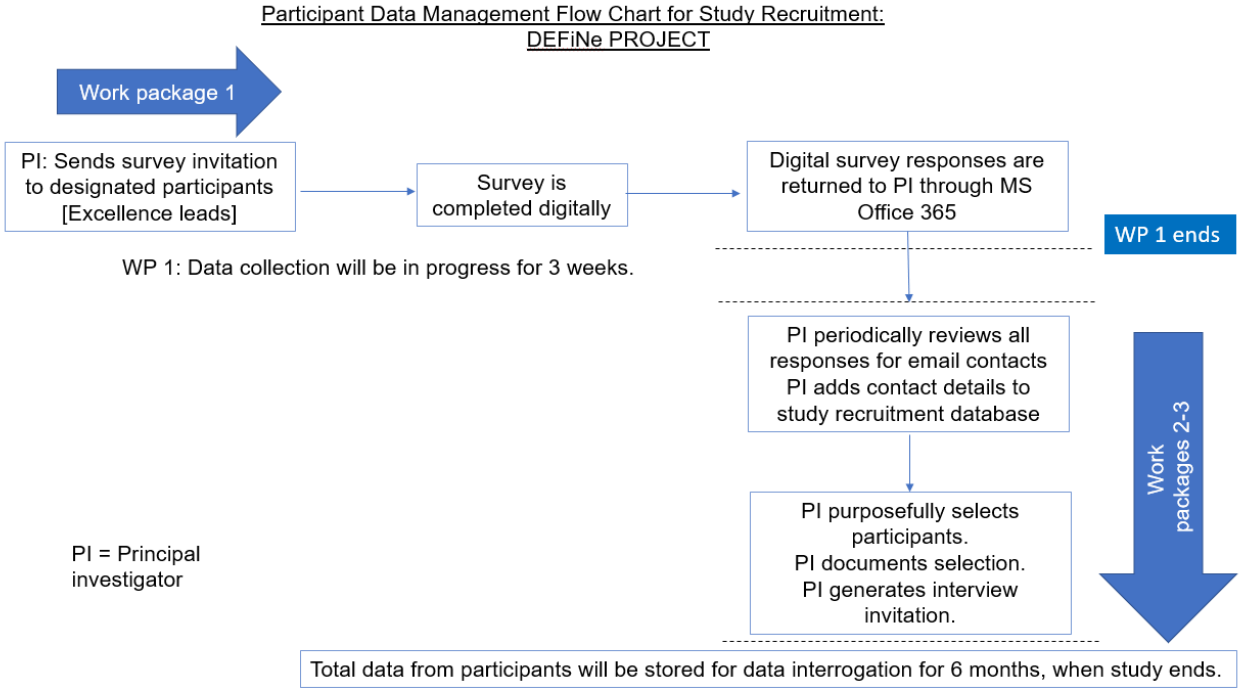
27) NHS National Workforce Skills Development Unit. National Preceptorship Interim Quality Mark. National Workforce Skills Development Unit (UK), 2024. Available from: https://workforceskills.nhs.uk/projects/nhse-i-national-preceptorship-programme-2022/national-preceptorship-interim-quality-mark/. Accessed 20th January 2024.
28) NHS England. NHS Pastoral Care Quality Award – International nurses and midwives. NHS England (UK), no date. Available from: https://www.england.nhs.uk/nursingmidwifery/international-recruitment/nhs-pastoral-care-quality-award/. Accessed 10th January 2024.
29) Care Quality Commission. Find and compare services. CQC (UK), no date. Available from: https://www.cqc.org.uk/search/all. Accessed 27th February 2024.
30) Taylor, S. Regression Analysis, no date. Available from: https://corporatefinanceinstitute.com/resources/data-science/regression-analysis/ . Accessed 20th June 2024.
31) GOV.UK. Guidance: 7 lenses maturity matrix. GOV.UK (UK), 2019. Available from: https://www.gov.uk/government/publications/7-lenses-maturity-matrix. Accessed 8th January 2024.
32) Assi M, Guney S. Understanding the patient's perspective on nursing excellence: Insights from patient experience data. *JONA* 2023; 53(10): 508-14.
33) Bakhtiari et al. Perspective and experience of hospital operating room nurses with the concept of excellence: A qualitative study. *Risk Management and Healthcare Policy* 2020; 13: 125-34.
34) Bekelis K, Missios S, Mackenzie T. Association of Magnet status with hospitalization outcomes for ischemic stroke patients. *J Am Heart Assoc* 2017; 6: e005880.
35) Bekelis K, Missios S, Mackenzie T. Correlation of hospital magnet status with the quality of physicians performing neurosurgical procedures in New York State. *British Journal of Neurosurgery* 2018; 32:13-17.
36) Benedict A, Griffin C. Beacon Award for Excellence: The impact of recognition on the nursing practice environment. *Critical Care Nurse* 2017; 37(4): 81-3.
37) Bettger et al. Meeting Medicare requirements for transitional care: Do stroke care and policy align? *Neurology* 2019; 92:427-34.
38) Bilgin N, Ozmen D. Mortality in Magnet hospitals: A systematic review. *Nigerian J Clin Pract* 2022; 2:1203-10.
39) Boylan et al. Association of Magnet nursing status with hospital performance on nationwide quality metrics. *Journal for Healthcare Quality* 2019; 41(4): 189-94.
40) Brickner et al. Professional values and nursing care quality: A descriptive study. *Nursing Ethics* 2023; 0(0). doi:10.1177/09697330231200567.

41) Evans et al. Magnet hospitals are a magnet for higher survival rates at adult trauma centers. *J Trauma Acute Care Surg* 2014; 77(1): 89-94.
42) Friese et al. Hospitals in 'Magnet' program show better patient outcomes on mortality measures compared to non-'Magnet' hospitals. *Health Aff (Millwood)* 2015; 34(6): 986-92.
43) Hamadi et al. Magnet hospitals and 30-day readmission and mortality rates for Medicare beneficiaries. *Med Care* 2021a; 59:6-12.
44) Hamadi et al. Hospital-Acquired Conditions Reduction Program, patient safety, and Magnet designation in the United States. *J Patient Saf* 2021b; 17:e1814–e1820.
45) Heath et al. Tobacco-cessation interventions and attributes of individual and organisational excellence in acute care. *Am J Crit Care* 2017; 26(1):53-61.
46) Herholdt-Lomholdt S. Invisible but sensible aesthetic aspects of excellence in nursing. *Nurs Philos* 2019; 20: e12238.
47) Lasater et al. Hospitals known for nursing excellence perform better on value based purchasing measures. *Policy, Politics, & Nursing Practice* 2016;17(4):177-86.
48) Lasater K, Schlak A. Quality of end of life care in Magnet® and non-Magnet hospitals. *J Nurs Adm* 2020; 50(2): 72–7.
49) Lippincott et al. The relationship between Magnet designation, electronic health record adoption, and Medicare Meaningful Use payments. *Comput Inform Nurs* 2017; 35(8): 385–91.
50) McDowell et al. The SPN Pediatric Nursing Excellence Model: Differentiating pediatrics. *Journal of Pediatric Nursing* 2023; 68: 10–17.
51) Rodriguez K, Cura J, Aringo R. Fostering a culture of nursing excellence during the COVID-19 crisis. *Nursing Management* 2022; 53(5): 18-27.
52) Stimpfel et al. Hospitals known for nursing excellence associated with better hospital experience for patients. *Health Services Research* 2016; 51(3): 1120-34.
53) Stimpfel A, Rosen J, McHugh M. Understanding the role of the professional practice environment on quality of care in Magnet® and non-Magnet hospitals. *J Nurs Adm* 2015; 45(10):52-8.
54) Zhu et al. Association of Magnet status and nurse staffing with improvements in patient experience with hospital care, 2008–2015. *Med Care* 2018; 56: 111–20.
55) Holtom et al. Survey response rates: Trends and a validity assessment framework. *Human relations* 2022; 75(8): 1560-84.
56) NHS England. Safety culture: Learning from best practice. NHS England (UK), 2022. Available from: https://www.england.nhs.uk/wp-content/uploads/2022/11/B1760-safety-culture-learning-from-best-practice.pdf. Accessed 6th June 2024.
57) Ito et al. A concept analysis of psychological safety: Further understanding for application to health care. *Nurs Open* 2022; 9(1):467-489.

58) Azjen, I. The theory of planned behaviour. *Organizational Behavior and Human Decision Processes* 1991*;* 50(2):179-211.
59) Ortega et al. The influence of change-oriented leadership and psychological safety on team learning in healthcare teams. *J Bus Psychol* 2014; 29:311-21.
60) Dietl et al. Interdisciplinary and interprofessional communication intervention: How psychological safety fosters communication and increases patient safety. *Front Psychol* 2023; 14:e1164288.
61) Kutney-Lee et al. Nurse engagement in shared governance and patient and nurse outcomes. *Journal of Nursing Administration* 2016; 46(11): 605-12.
62) Speroni et al. Effect of shared governance on nurse-sensitive indicator and satisfaction outcomes: An international comparison. *Journal of Nursing Administration* 2021; 51(5):287-96.
63) Marshall, C. Face-to-Face Interviews- Advantages and Disadvantages, 15th January 2016. Available from: Face-to-Face Interviews - Advantages and Disadvantages (linkedin.com). Accessed 11th July 2024.
64) NIHR. NIHR position on the sharing of research data. 20th May 2019. Available from NIHR position on the sharing of research data | NIHR . Accessed 25th July 2024.

12. APPENDICES

Appendix 1. Participant recruitment approach



Appendix 2a. Certificate of ethics approval

Coventry University

Certificate of Ethical Approval

Applicant:	Liz Deutsch
Project Title:	Determining Excellence Factors in Nursing and Midwifery (DEFINE)

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:	06 Feb 2024
Project Reference Number:	P172363

Appendix 2b. Letters for UHCW GAfREC approval

R&D RESEARCH & DEVELOPMENT

NHS University Hospitals Coventry and Warwickshire NHS Trust

Research & Development Department
University Hospitals Coventry & Warwickshire NHS Trust
4th Floor Rotunda, ADA40014
University Hospital
Clifford Bridge Road
Coventry
CV2 2DX

Commercial enquiries: 02476 964995
Governance/Non-commercial enquiries: 02476 966195
Research Funding & Grant enquires: 02476 964958
Email: R&D@uhcw.nhs.uk

28th February 2024

Michelle Hartanto
University Hospitals Coventry & Warwickshire NHS Trust
University Hospital
Clifford Bridge Road
Coventry
CV2 2DX

Dear Michelle,

Study Title: DEFiNe (Determining Excellence Factors in Nursing and Midwifery)
Clause: This approval relates to Work Package 1,2 & 3 of the DEFiNe Project
Study Ref: GF0898

Thank you for sending in the required documents and completing the GafREC form for the above study. Having reviewed the details of your proposed project, studies where staff are being approached due to the nature of their role, NHS Research Ethics Committee (REC) approval is not required, therefore, I can confirm that we are happy for you to carry out this project within UHCW NHS Trust.

R&D RESEARCH & DEVELOPMENT

NHS University Hospitals Coventry and Warwickshire NHS Trust

Research & Development Department
University Hospitals Coventry & Warwickshire NHS Trust
4th Floor Rotunda, ADA40014
University Hospital
Clifford Bridge Road
Coventry
CV2 2DX

Commercial enquiries: 02476 964995
Governance/Non-commercial enquiries: 02476 966195
Research Funding & Grant enquires: 02476 964958
Email: R&D@uhcw.nhs.uk

20th February 2024

Michelle Hartanto
University Hospitals Coventry & Warwickshire NHS Trust
University Hospital
Clifford Bridge Road
Coventry
CV2 2DX

Dear Michelle,

Study Title: DEFiNe (Determining Excellence Factors in Nursing and Midwifery)
Clause: This approval relates to Work Package 4 of the DEFiNe Project
Study Ref: GF0897

Thank you for sending in the required documents and completing the GafREC form for the above study. Having reviewed the details of your proposed project, research involving previously collected, non-identifiable information including research undertaken by staff within a care team using previously collected information during the course of care of their own patients or clients, are excluded from NHS Research Ethics Committee (REC) review therefore; I can confirm that we are happy for you to carry out this project within UHCW NHS Trust.

Appendix 3. Data collection methods across work packages

Work package	Survey (Mixed-methods)	Case studies (Qualitative)	Interviews (Qualitative)	Extraction of metrics (Quantitative)
1	X			
2		X		
3			X	
4				X

Appendix 4. Literature review protocol

Stage 1: Define the question

Aims

1. To inform the study team, the Regional Excellence Network, and wider Excellence work;
2. To deepen the knowledge base and add to the evidence base;
3. To demonstrate gaps in the literature
4. To shape and inform future research that warrants further exploration
5. To share and disseminate this knowledge.

Review questions

1. Is Excellence defined?
   1a. If yes, what are the commonalities and differences across definitions?
2. What are the range of components of Excellence?
3. Are the outcomes reported?
   3a. If yes, what are the reported outcomes?

The product will include binary responses (yes/no) and key definitions; responses will answer the questions listed above.

Stage 2: Identify relevant studies

Databases: PubMed, EMBASE, CINAHL

Limited to: published in the last 10 years, published literature from peer-reviewed academic and professional journals, English language

Search terms

PubMed 15/01/2024 – 251 results
"nursing excellence"[Title/Abstract:~3] OR "nurse excellence"[Title/Abstract:~3] OR "midwife excellence"[Title/Abstract:~3] OR "midwifery excellence"[Title/Abstract:~3] OR "midwives excellence"[Title/Abstract:~3]

EMBASE 15/01/2024 – 191 results
((nurs* or midwi*) adj3 excellence).ti,ab.

CINAHL 15/01/2024 – 450 results
TI ((nurs* or midwi*) N3 excellence) OR AB ((nurs* or midwi*) N3 excellence)

Stage 3: Study selection

Eligibility criteria:

	Inclusion Criteria	Exclusion Criteria
Population	Registered nurses (RNs) and/or midwives (RMs) at all stages of their practice career; Organisations employing RNs and/or RMs; Patients receiving care from RNs and/or RMs	Other healthcare staff Students
Exposure	Includes a direct or indirect definition or conceptual framework of excellence	Does not include a definition or conceptual framework of Excellence;

		Does not include the entire framework of Excellence.
Outcomes	Provides a definition or conceptual framework of what excellence is *and/or* Reports components of excellence *and/or* Reports on impact(s) of excellence on any measured outcome	Does not report on definition or framework, components, or impacts
Study design	All study types, quantitative or qualitative	Article does not include a research or QI methodology
Settings	All healthcare provider settings included (e.g. primary care, secondary care, hospitals, care homes, hospices, community providers, mental health providers, general practice)	Non-healthcare provider settings (e.g. higher education setting)
Other	Abstract & Article in English language Full articles Papers published in academic or professional journals Papers published in the last 10 years	Article not in English language Conference abstracts Publications in non-academic or non-professional journals Papers published before 2014
Stage 4: Chart the data.		
Data extraction pro forma developed.		
Stage 5: Collate, summarise, and report the results.		

Appendix 5. Survey questions

Online survey

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

Consent statement built into first page of survey:

You have been invited to participate in a survey commissioned by NHS England through University Hospitals Coventry and Warwickshire to explore Nursing and Midwifery Excellence work in the Midlands region. Your participation is voluntary.

The survey comprises up to 26 questions and takes approximately 20 minutes to complete.

Please confirm that you have read the participant information sheet for this online survey, had the opportunity to consider the information, ask questions, and have had these answered satisfactorily. [tick box here]

The information in the answers you supply can be withdrawn up to one week after submission. After this all information will have been aggregated and cannot be removed. If you should choose to do this, it will not affect your participation in other studies.

Please tick the next box to indicate your consent to participate in the survey. [tick box here]

By proceeding to complete the survey, your consent to participate in the survey is assumed. If you do not want to consent, please do not proceed past this page or complete the survey.

In addition, if you choose to provide your email address at the end of the survey, we may contact you for further information, through an interview.

Thank you very much for your time.

Questions:

1. Do you have a **shared decision-making model** at your organisation? *(Shared decision-making is a non-hierarchical approach to decision-making, where staff are involved in making decisions about their practice. It is also known as shared professional decision-making, shared governance, or collective leadership.)* (Yes/No)
2. If yes, please describe this at your organisation? (Free text box)
3. How long has this been in place? (Free text box)
4. What are the related successes or achievements regarding this? (Free text box)

5. Do you have a **local accreditation framework** at your organisation? *(Local accreditation is a framework for a comprehensive assessment of the quality of care at ward, service, department, or team level. It is a set of standards for care, so areas of improvement can be identified and areas of Excellence celebrated)* (Yes/No)
6. If yes, please describe this at your organisation? (Free text box)

7. How long has this been in place? (Free text box) 8. What are the related successes or achievements regarding this? (Free text box)
9. Do you have **meaningful recognition system/(s)** available to nurses and/or midwives at your organisation? *(Meaningful recognition is the recognition of nurses and/or midwives for their contributions and value which promotes fulfilment and professional pride. This may include awards, honours, celebrations, and a culture of day-to-day recognition.)* (Yes/No) 10. If yes, please describe these at your organisation? (Free text box) 11. How long have these been in place? (Free text box) 12. What are the related successes or achievements regarding this? (Free text box)
13. Do you have a **model of distributed leadership** at your organisation? *(Distributed leadership involves building and sustaining leadership capacity through different roles in organisations.)* (Yes/No) 14. If yes, please describe these at your organisation? (Free text box) 15. How long has this been in place? (Free text box) 16. What are the related successes or achievements regarding this? (Free text box)
17. Do you use **continuous quality improvement methodologies** at your organisation? *(Continuous quality improvement is a methodical approach to solve problems, improve the quality of processes and services, and provide better outcomes.)* (Yes/No) 18. If yes, please describe these at your organisation? (Free text box) 19. How long has this been in place? (Free text box) 20. What are the related successes or achievements regarding this? (Free text box)
21. Do you have **research and/or innovation** projects or programmes available to nurses and midwives at your organisation? *(Research is the scientific inquiry to discover and generate new knowledge. Innovation encompasses new novel methods, ideas, and/or products.)* (Yes/No) 22. If yes, please describe these at your organisation? (Free text box) 23. How long has this been in place? (Free text box) 24. What are the related successes or achievements regarding this? (Free text box)
25. Do you use any other Nursing and Midwifery Excellence approaches at your organisation? (Yes/No) 26. If yes, please provide details about other approaches used? (Free text box)

27. Would you be prepared to participate in a mini-interview (15 – 30 minutes) to provide additional information to build a case study about your achievements, where we could feature your organisation? (Y/N)

28. For non-NHS organisations, we are seeking very detailed information regarding transferability of processes used - would you be prepared to participate in a longer interview or focus group of up to 60 minutes? (N/A / Y/N)

    If yes to 15 or 16, please provide your work email address: (Free text)

Note: We will provide further information for those organisations who are willing to participate in either interview opportunity. We will also work with you to arrange the most convenient time for your interview via MS Teams.

Appendix 6a. Participant information sheet – Survey

Participant information sheet – Online survey

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

You are being invited to participate in an online survey as part of a study to explore ongoing Nursing and Midwifery Excellence work in the Midlands region. The survey comprises up to 26 questions and takes approximately 15 minutes to complete.

Before you decide if you would like to participate, it is important for you to understand why this study is being carried out and what it will involve for you. Please take the time to read the following information carefully. Please ask if there is anything that is not clear or if you would like more information.

What is the purpose of this study?

The aim of this study is to identify and analyse existing Nursing and Midwifery Excellence approaches in the Midlands region to demonstrate impacts of these on outcomes, and scope transferability of initiatives to other settings. Your responses are important because it will help us to understand the current Excellence work within the Midlands region and identify exemplar sites for case studies.

Who is organising and funding the study?

The study is being organised, delivered, and led by University Hospitals Coventry & Warwickshire NHS Trust, in collaboration with Professorial guidance from Coventry University. It is funded by the National Health Service England (NHSE).

Study Approvals

The study has been reviewed and approved by the Coventry University Research Ethics Committee (7th February 2024 - Reference P172363). Review and approval by R&D Department at University Hospitals Coventry and Warwickshire to organise and manage the study was obtained (GF0898).

Why have I been invited to take part?

You have been asked to participate as a designated lead for Excellence and your organisation is part of the Midlands region.

What are the benefits in taking part?

By taking part, you will help shape Excellence work moving forward. Your responses will help NHSE to better understand what Excellence looks like within Nursing and Midwifery in the Midlands region. We hope to show demonstrable benefits of these approaches on outcomes, as well as understand transferability of initiatives to other settings. No direct incentives are offered, including payments.

Do I have to take part?

No, your participation is entirely up to you. If you decide to take part, please keep this information sheet safe. If you wish to withdraw you are free to withdraw your information from the study at any time, until the data has been analysed (within 1 week of your participation). You do not need to provide a reason for withdrawing. A decision to withdraw, or not take part, will not affect you in any way.

What will happen if I decide to take part?

You will be asked to complete an online questionnaire. A QR code will be emailed to you; when connected to the questionnaire this will have an integral consent statement on the first page. Once you proceed beyond the consent page, you will be free to complete the questionnaire.

The questionnaire will assess your organisation's use of Nursing and Midwifery Excellence approaches. Even if you do not use any of the suggested approaches, a completed survey indicating that you do not use them would be helpful (a free textbox will be included), as that will allow us to understand current state in the region. Results of the questionnaire will be reported as aggregate data (high-level data from combining individual-level data) and all data will be kept confidential.

We will not collect any personal identifying information about you. We will give you the option to provide your email address only if you wish for your organisation to be considered and contacted for the second part of the study (e.g., (1) case study mini-interviews or (2) semi-structured interviews).

1) Exemplars from acute provider settings who voluntarily provide their contact email and meet the exemplar criteria (at least one Excellence approach used by the organisation) will be purposefully selected from questionnaire responses using the maximum variation sampling strategy of exemplars (shared decision-making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement, and research and innovation). Where exemplar cases are identified, those selected will be invited to participate in case study mini-interviews exploring to showcase their Excellence work. It is anticipated that these case studies will be published online via NHSE.

2) Non-acute providers who voluntarily provide their email address will be purposefully selected from questionnaire responses against predetermined criteria (demonstrating engagement with Excellence and/or the study) using a maximum variation sampling strategy of exemplars. Those selected will be invited to participate in semi-structured interviews exploring transferability of Excellence initiatives into non-acute settings.

What information is being collected in the study?

Information regarding Excellence work within your organisation will be collected from this questionnaire, to understand the current state of Excellence within the Midlands region and to identify sites that will be invited to participate in case study mini-interviews or interviews.

Who will have access to this information?

Your confidential data will only be accessed by the researcher team (Michelle Hartanto, Nicolas Aldridge, and Liz Lees-Deutsch) for the purposes of extraction, analysis, and summary.

Where will be information be stored and how long will it be kept for?

Your data will be processed in accordance with the UK General Data Protection Regulation 2016 (UK GDPR) and the Data Protection Act 2018. All information collected will be strictly confidential.

Data will be collected via the online survey using a QR code linked to a Microsoft Form via Office 365. All completed survey results are automatically downloaded and stored in Microsoft Excel Workbook. This will be password-protected, on a secure password-protected NHS computer. This will only be accessed by the researchers.

All collected data will be destroyed within ten years of the study conclusion.

What will happen to the results of the research?

The results of this study will be reported to the NHSE commissioners. The summary of the results will be shared with participants and key stakeholders. Following completion of the NHSE-commissioned work, data from this study may be summarised and shared in conference abstracts, published journal articles, and presentations.

If you would like to participate, please contact:

Michelle Hartanto, Research Fellow for Nursing and Midwifery Excellence, at Michelle.Hartanto@uhcw.nhs.uk.

Who do I contact if I have questions or concerns about this research?

If you have any questions or concerns about this study, please contact Michelle Hartanto using the listed details above.

Thank you very much for taking the time to read this information sheet and for considering participating in this study.

Appendix 6b. Participant information sheet – Case studies

Participant information sheet
for case study mini-interviews – acute provider organisations

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

You have been selected as an exemplar site for Nursing and Midwifery Excellence in the Midlands region and are being invited to participate in a case study mini-interview. It is anticipated that exemplar organisations will be featured as a narrated case study using the information you provide and published online, via the NHS England (NHSE) website.

This invitation is to participate in one interview, lasting up to 30 minutes.

Before you decide if you would like to participate, it is important for you to understand why this study is being carried out and what it will involve for you. Please take the time to read the following information carefully. Please ask if there is anything that is not clear or if you would like more information.

What is the purpose of this study?

The aim of this study is to identify and analyse Nursing and Midwifery Excellence work in the Midlands region and demonstrate impacts of these approaches on outcomes. The interviews are important because it will help us understand the current state of Excellence work ongoing within your organisation and within the Midlands region.

Who is organising and funding the research?

The research is being organised, delivered, and led by University Hospitals Coventry and Warwickshire NHS Trust, in collaboration with Professorial guidance from Coventry University, and funded by NHSE.

The study has been reviewed and approved by the Coventry University Research Ethics Committee (7th February 2024 - Reference P172363). Approval was gained from the R&D Department at University Hospitals Coventry and Warwickshire (GF0898).

Why have I been invited to take part?

You have been asked to participate as a designated lead for Excellence and your organisation is part of the Midlands region.

What are the benefits in taking part?

By taking part, you will help shape deeper understanding of Excellence key factors in the Midlands region and demonstrate impacts of these approaches on outcomes.

No direct incentives are offered, including payments.

What are the potential risks in taking part?

Although no significant risks are associated with participation, it is possible that through discussion sensitive matters may transpire. You do not have to answer any questions that make you uncomfortable or respond to any questions that you simply would not like to respond to. You will be able to withdraw freely at any time without giving a reason.

Do I have to take part?

No, your participation is entirely up to you. If you decide to take part, please keep this information sheet safe. On the day of interview, we will also ask you to complete a digital consent form. You are free to withdraw your information from the study at any time until the data has been analysed (within 1 week of your participation). You do not need to provide a reason for withdrawing.

What will happen if I decide to take part?

You will be invited to take part in a one-to-one semi-structured interview where a researcher will ask questions to explore what Nursing and Midwifery Excellence looks like at your organisation. This will explore a range of topics, such as the Excellence work and achievements, contributing factors, and perceptions of these activities. The interview will take place online via a digital video platform (e.g. Microsoft Teams) at a time that suits your individual circumstances. It should take no longer than 30 minutes, and the researcher will take notes during the interview to summarise your responses.

Confidentiality for the interview process will be assured. We ask that you choose a location to do the interview where you will not be disturbed. All data will be kept confidential.

What information is being collected in the case studies?

Deep dive information contextualising and quantifying the existing Excellence work within your organisation will be collected from this case study interview. We will probe information provided from the questionnaire to establish illustrative examples and deepen the data.

Who will have access to this information?

Your confidential data will only be accessed by the researchers (Michelle Hartanto, Nicolas Aldridge, and Liz Lees-Deutsch) for the purposes of extraction, analysis, and summary.

Where will be information be stored and how long will it be kept for?

Your data will be processed in accordance with the UK General Data Protection Regulation 2016 (UK GDPR) and the Data Protection Act 2018. All information collected will be strictly confidential.

All interview files will be stored in password-protected files on a secure password-protected NHS computer server. This will only be accessed by the researchers.

All collected data will be destroyed within ten years of the study conclusion.

What will happen to the results of the research?

The results of this study will be reported to the NHSE commissioners. The summary of the results will be shared with participants and key stakeholders. Following completion of the NHSE-commissioned work, data from this study may be summarised and shared in conference abstracts, published journal articles, and presentations. It is anticipated that these case studies will be published online via NHSE. The results will also be used to inform Excellence work moving forward.

If you would like to participate, please contact:

Michelle Hartanto, Research Fellow for Nursing and Midwifery Excellence, at Michelle.Hartanto@uhcw.nhs.uk.

Who do I contact if I have questions or concerns about this research?

If you have any questions or concerns about this research, please contact Michelle Hartanto using the listed details above.

Thank you very much for taking the time to read this information sheet and for considering participating in this research.

Appendix 6c. Participant information sheet - Interviews

Participant information sheet
for semi-structured interviews – non-acute provider organisations

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

You are being invited to participate in an interview exploring current state and transferability of Nursing and Midwifery Excellence initiatives into non-acute provider settings. This invitation is to participate in one interview, lasting up to one hour.

Before you decide if you would like to participate, it is important for you to understand why this study is being carried out and what it will involve for you. Please take the time to read the following information carefully. Please ask if there is anything that is not clear or if you would like more information.

What is the purpose of this study?

The aim of this study is to identify and analyse Nursing and Midwifery Excellence work in the Midlands region. The interviews are important because it will help us understand the current state of Excellence work ongoing within non-acute provider settings in the Midlands region and transferability of initiatives into these settings.

Who is organising and funding the research?

The research is being organised, delivered, and led by University Hospitals Coventry and Warwickshire NHS Trust, in collaboration with Professorial guidance from Coventry University, and funded by the National Health Service England (NHSE).

The research has been reviewed and approved by the Coventry University Research Ethics Committee (7th February 2024 - Reference P172363). Approval was gained from the R&D Department at University Hospitals Coventry and Warwickshire (GF0898).

Why have I been invited to take part?

You have been asked to participate as the designated lead for Excellence and your organisation is part of the Midlands region.

What are the benefits in taking part?

By taking part, you will help shape deeper understanding of Excellence key factors in the Midlands region and transferability of initiatives into non-acute settings. No direct incentives are offered, including payments.

What are the potential risks in taking part?

Although no significant risks are associated with participation, it is possible that through discussion sensitive matters may transpire. You do not have to answer any questions that make you uncomfortable or respond to any questions that you simply would not like to respond to. You will be able to withdraw freely at any time without giving a reason.

Do I have to take part?

No, your participation is entirely up to you. If you decide to take part, please keep this information sheet safe. On the day of interview, we will also ask you to complete a digital consent form. You will be given a unique participant number corresponding with our database. Please note this down on this participant information sheet and keep this in a safe place. Should you wish to withdraw from the research at a later date, this number will be needed to trace your data. You are free to withdraw your information from the study at any time until the data has been analysed (within 1 week of your participation). You do not need to provide a reason for withdrawing.

What will happen if I decide to take part?

You will be invited to take part in a one-to-one semi-structured interview where a researcher will ask questions to explore what Nursing and Midwifery Excellence looks like at your organisation. This will explore a range of topics, such as the Excellence work and achievements, perceptions of these activities, and transferability of initiatives into non-acute provider settings.

The interview will take place online via a digital video platform (e.g. Microsoft Teams) at a time that suits your individual circumstances. It should take no longer than one hour, and the researcher will take notes during the interview to summarise your responses.

Confidentiality for the interview process will be assured. We ask that you choose a location to do the interview where you will not be disturbed. All data will be kept confidential.

Anonymity will be ensured for the interviews (i.e. data will not be identifiable), such that we will remove the names and identifying features relayed to us and replace them with unique identifier codes and pseudonyms. In rare cases where data could possibly still be identifiable through being a very unusual case, anonymity will be protected by minor modification of the case before inclusion in analyses.

What information is being collected in the interviews?

Deep dive information contextualising and quantifying the existing Excellence work within your organisation will be collected from this interview. We will probe information provided from the questionnaire to deepen the data.

Who will have access to this information?

Your confidential data will only be accessed by the researchers (Michelle Hartanto, Nicolas Aldridge, and Liz Lees-Deutsch) for the purposes of extraction, analysis, and summary.

Where will be information be stored and how long will it be kept for?

Your data will be processed in accordance with the UK General Data Protection Regulation 2016 (UK GDPR) and the Data Protection Act 2018. All information collected will be strictly confidential. Your data will be referred to by a unique participant number rather than by name.

All interview files will be stored in password-protected files on a secure password-protected NHS computer server. This will only be accessed by the researchers. All collected data will be destroyed within ten years of the study conclusion.

What will happen to the results of the research?

The results of this study will be reported to the NHSE commissioners. The summary of the results will be shared with participants and key stakeholders. Following completion of the NHSE-commissioned work, data from this study may be summarised and shared in conference abstracts, published journal articles, and presentations. All data from this interview, including quotes and key findings, will be anonymised in any future outputs. The results will also be used to inform Excellence work moving forward.

If you would like to participate, please contact:

Michelle Hartanto, Research Fellow for Nursing and Midwifery Excellence, at Michelle.Hartanto@uhcw.nhs.uk.

Who do I contact if I have questions or concerns about this research?

If you have any questions or concerns about this research, please contact Michelle Hartanto using the listed details above.

Thank you very much for taking the time to read this information sheet and for considering participating in this research.

Appendix 7. Maximum variation sampling strategy

Provider Organisations ↓ / Excellence Approaches →	Shared Decision Making	Local accreditation	Meaningful Recognition	Distributed leadership	Continuous quality improvement	Research and Innovation
Acute (summary)						
Acute provider #1						
Acute provider #2						
Acute provider #3						
Acute provider #4						
Acute provider #5						
Acute provider #6						
Acute provider #7						
Acute provider #8						
Acute provider #9						
Acute provider #10						
Acute provider #11						
Non-acute (summary)						
Non-acute provider #1						
Non-acute provider #2						
Non-acute provider #3						
Non-acute provider #4						
Non-acute provider #5						
Non-acute provider #6						
Non-acute provider #7						
Non-acute provider #8						
Non-acute provider #9						
Non-acute provider #10						
Non-acute provider #11						

Selection by PI in accordance with one excellence factor (minimum) and to provide a variation of that selection across excellence approaches and to include acute and non-acute settings.

Key: initials of organisations selected in each summary box.

Appendix 8a. Interview guide – Case studies with acute providers

Semi-structured interview questions

Case study mini-interviews – Acute providers

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

The researcher will lead introductions then reconfirm the participant's consent: Can you please give verbal reconfirmation of your consent and that you are happy to continue, in keeping with the study consent you had completed as part of the online survey?

The researcher will re-affirm the purpose of the interviews: Thank you very much for your time to participate. The purpose of these interviews is to quantify information provided from the survey to establish illustrative examples from acute settings of Nursing and Midwifery Excellence work, namely shared decision-making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement, and research and innovation. The information provided will be used to write narrated case studies which may be published online via the NHS England website.

I will be taking you through a series of questions related to Nursing and Midwifery Excellence, where it will be helpful to think of examples – I will try to develop this as a conversation.

1. Can you describe Nursing and Midwifery Excellence approaches used at your organisation?

   1a. Can you tell me about examples where these approaches are used at your organisation?

2. What are the notable successes regarding this?
3. What factors have helped to make this successful?
4. Can you describe the involvement and engagement of leaders and direct care staff in this?
5. Can you describe how leaders and staff have been supported to develop knowledge, skills, and/or capability regarding this?
6. Can you describe how the organisation has provided leaders and staff with opportunities to become involved?
7. How does the organisation create the right environment to support this?
8. Can you describe how this has been embedded into the organisation to ensure that leaders and direct care staff are involved?
9. Can you describe how leaders and staff have been motivated regarding this?
10. How is this recognised and rewarded?
11. How would you describe perceptions of these activities at your organisation?

12. What are the key factors that impact/have impacted upon implementing this?

13. What are the key factors that impact/ have impacted upon embedding this?

14. Can you describe barriers or challenges regarding this?

15. What are key factors to address these challenges?

16. What impact or difference has this initiative made:
    16a. To the organisation?
    16b. To its leaders?
    16c. To direct care nurses and midwives?
    16d. To patients and/or families?

17. What aspects of this initiative have been most beneficial:
    17a. To the organisation?
    17b. To its leaders?
    17c. To direct care nurses and midwives?
    17d. To patients and/or families?

18. Does your organisation employ the use of any other Excellence approaches? *(If yes, refer to questions 1-2 above)*

Appendix 8b. Interview guide – Interviews with non-acute providers

Semi-structured interview questions

Semi-structured interviews – Non-acute providers

Determining **E**xcellence **F**actors **i**n **N**ursing and Midwif**e**ry (DEFiNe)

The researcher will lead introductions then reconfirm the participant's consent: Can you please give verbal reconfirmation of your consent and that you are happy to continue, in keeping with the study consent you had completed as part of the online survey?

The researcher will re-affirm the purpose of the interviews: Thank you very much for your time to participate. The purpose of these interviews is to understand current state and transferability of Nursing and Midwifery Excellence approaches in non-acute settings, namely shared decision-making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement, and research and innovation.

I will be taking you through a series of questions related to Nursing and Midwifery Excellence, where it will be helpful to think of examples – I will try to develop this as a conversation.

Current state

1. Do you use Nursing and Midwifery Excellence approaches at your organisation?

If yes, refer to questions 2-18:

2. Can you describe Nursing and Midwifery Excellence approaches used at your organisation?

   2a. Can you tell me about examples where these approaches are used at your organisation?

3. What are the notable successes regarding this?
4. What factors have helped to make this successful?
5. Can you describe the involvement and engagement of leaders and direct care staff in this?
6. Can you describe how leaders and staff have been supported to develop knowledge, skills, and/or capability regarding this?
7. Can you describe how the organisation has provided leaders and staff with opportunities to become involved?
8. How does the organisation create the right environment to support this?
9. Can you describe how this has been embedded into the organisation to ensure that leaders and direct care staff are involved?
10. Can you describe how leaders and staff have been motivated regarding this?

11. How is this recognised and rewarded?
12. How would you describe perceptions of these activities at your organisation?
13. What are the key factors that impact/have impacted upon implementing this?
14. What are the key factors that impact/ have impacted upon embedding this?
15. Can you describe barriers or challenges regarding this?
16. What are key factors to address these challenges?
17. What impact or difference has this initiative made:
    17a. To the organisation?
    17b. To its leaders?
    17c. To direct care nurses and midwives?
    17d. To patients and/or families?
18. What aspects of this initiative have been most beneficial:
    18a. To the organisation?
    18b. To its leaders?
    18c. To direct care nurses and midwives?
    18d. To patients and/or families?

If no, refer to questions 19-20:

19. Can you describe whether the organisation currently have any ambitions regarding this?
20. *(If yes to 19)* What are the anticipated facilitators and barriers to implementation?

21. Does your organisation employ the use of any other Excellence approaches? *(If yes, refer to questions 2-3 above)*

Transferability into non-acute settings

22. How would you describe perceptions of those working in non-acute settings of Nursing and Midwifery Excellence in general?
23. How would you describe perceptions of those working in non-acute settings of these Excellence approaches, namely: shared decision-making, local accreditation, meaningful recognition, distributed leadership, continuous quality improvement, and research and innovation?
24. Which of these Excellence approaches could be transferred into non-acute settings and why?

25. Can you describe what this would look like in non-acute settings?
26. How would this be implemented or improved?
27. What would be the key facilitators and barriers for implementation or improvement?
28. What are key factors to address these challenges?
29. In what approximate time frame could this be transferred into non-acute settings and why?
30. Can you describe the involvement and engagement it would require from leaders and direct care staff?
31. Can you describe how those working in non-acute settings could be supported to develop knowledge, skills, and/or capability regarding this?
32. Can you describe how those working in non-acute settings could be provided opportunities to become involved?
33. How could non-acute providers create environments supporting this?
34. Can you describe how those working in non-acute settings could be motivated?
35. How could this be recognised and rewarded?
36. What impact or difference would this initiative make:
    36a. To the organisation?
    36b. To its leaders?
    36c. To direct care nurses and midwives?
    36d. To patients and/or families?
37. What aspects of this initiative would be most beneficial:
    37a. To the organisation?
    37b. To its leaders?
    37c. To direct care nurses and midwives?
    37d. To patients and/or families?

Appendix 9. Consent forms

DEFiNe (Determining Excellence Factors in Nursing and Midwifery)
CONSENT FORM

Case studies via mini-interviews

Name of Researcher: Michelle Hartanto

Please tick the boxes.

1) I confirm that I have read and understand the Participant Information Sheet participating in interviews dated ***03/02/2024*** for the above study and have had the opportunity to consider the information. ☐
2) I confirm that I have had the opportunity to ask questions about the study and that these questions have been answered satisfactorily. ☐
3) I understand that my participation is completely voluntary and that I am free to withdraw at any time, without giving a reason, without any detriment to any future studies. ☐
4) I agree to the use of anonymised information, quotes, and results. ☐
5) I understand that the data collected may be published as part of a research project. My identity will not be revealed in any publication. ☐
6) If I choose to withdraw, I agree that the answers I supply can be withdrawn up to one week after submission. After this all information will have been analysed and cannot be removed. ☐
7) I agree to take part in the above study. ☐

Name of participant:

Date:

Signature:

DEFiNe (Determining Excellence Factors in Nursing and Midwifery)

CONSENT FORM

Semi-structured interviews

Name of Researcher: Michelle Hartanto

Participant ID:

Please tick the boxes.

8) I confirm that I have read and understand the Participant Information Sheet participating in interviews dated ***03/02/2024*** for the above study and have had the opportunity to consider the information. ☐

9) I confirm that I have had the opportunity to ask questions about the study and that these questions have been answered satisfactorily. ☐

10) I understand that my participation is completely voluntary and that I am free to withdraw at any time, without giving a reason, without any detriment to any future studies. ☐

11) I agree to the use of anonymised information, quotes, and results. ☐

12) I understand that the data collected may be published as part of a research project. My identity will not be revealed in any publication. ☐

13) If I choose to withdraw, I agree that the answers I supply can be withdrawn up to one week after submission. After this all information will have been analysed and cannot be removed. ☐

14) I agree to take part in the above study. ☐

Name of participant:

Date:

Signature:

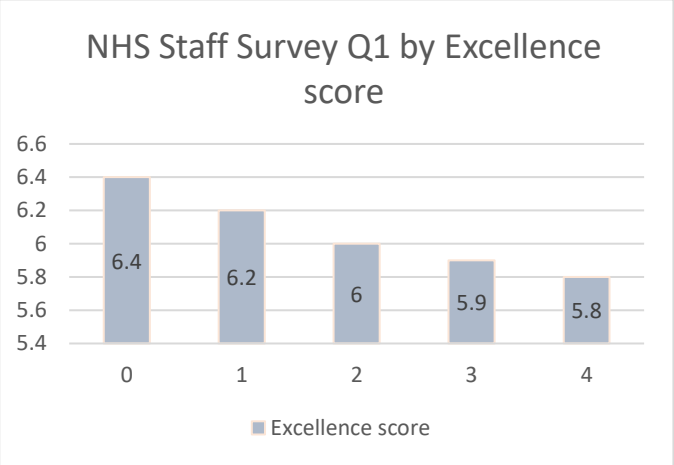
Appendix 10. Metrics (Work package 5) – Full report of findings

Summary of aims: To explore if a correlation exists between the presence of Excellence in nursing and midwifery (as defined in the literature review findings, section 7.1) and improved outcomes at organisations.

Data measures recorded by NHS and health care organisations have been reviewed against an Excellence score and maturity matrix created as part of this research. Full findings are described below.

Excellence scoring summary & NHS Staff Survey questionnaire

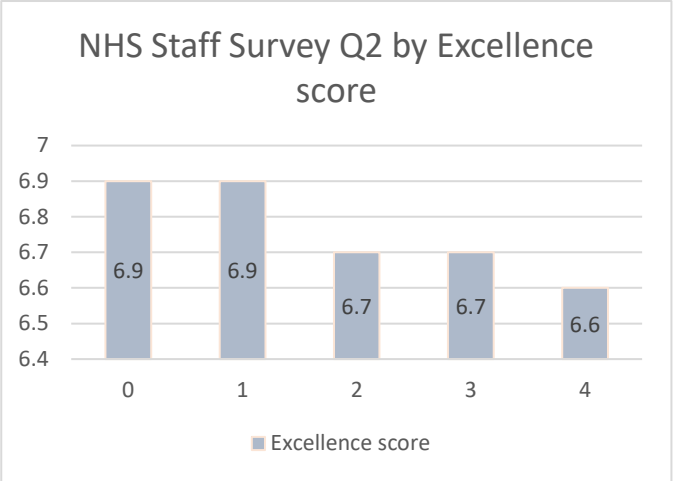
The following five graphs display the 5 elements of NHS staff survey results by Excellence scores assigned to the 20 participating organisations.



Graph 1. *Vertical axis shows the NHS staff survey question 1 "We are recognised and rewarded" score; horizontal axis shows organisations by Excellence score.* Organisations that were assigned a 0 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 1.

Table 1. Correlation between Excellence score and NHS staff survey question 1

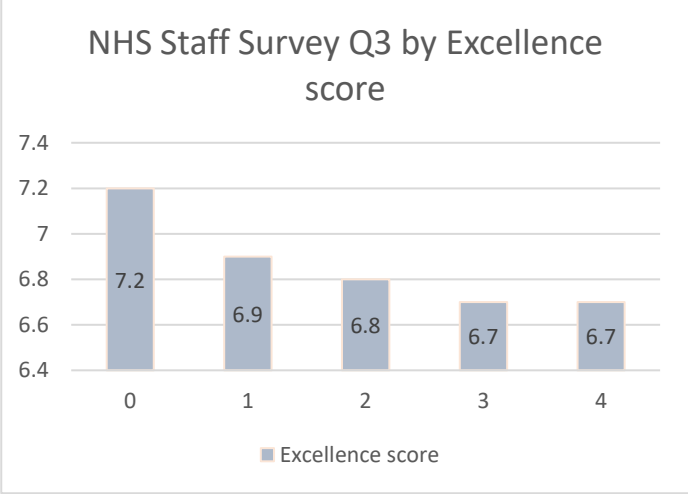
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We are recognised and rewarded	0.22	6	5.58-6.9	0



Graph 2. *Vertical axis shows NHS staff survey question 2 "We each have a voice that counts"; horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 0 and 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 2.

Table 2. Correlation between Excellence score and NHS Staff Survey question 2

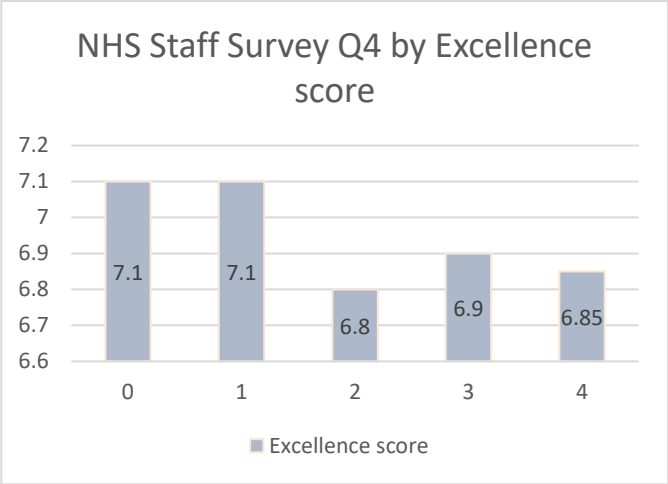
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We each have a voice that counts	0.11	6.7	6.32-7.29	0 & 1



Graph 3. *Vertical axis shows NHS Staff Survey question 3 "We are a team"; horizontal axis shows organisations by Excellence score.* Organisations that were assigned a 0 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 3.

Table 3. Correlation between Excellence score and NHS Staff Survey question 3

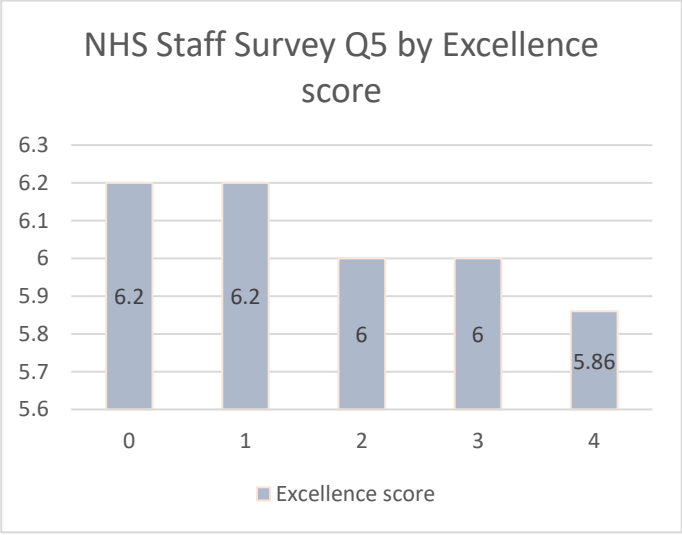
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We are a team	0.19	6.8	6.45-7.47	0



Graph 4. *Vertical axis shows NHS Staff Survey question 4 "Staff engagement"; horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 0 and 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 4.

Table 4. Correlation between Excellence score and NHS Staff Survey question 4

NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Staff engagement	0.12	6.9	6.48-7.41	0 & 1



Graph 5. *Vertical axis shows NHS Staff Survey question 5 "Morale"; horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 0 and 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 5.

Table 5. Correlation between Excellence score and NHS Staff Survey question 5

NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Morale	0.13	6	5.65-6.59	0 & 1

Summary of NHS Staff Survey findings:

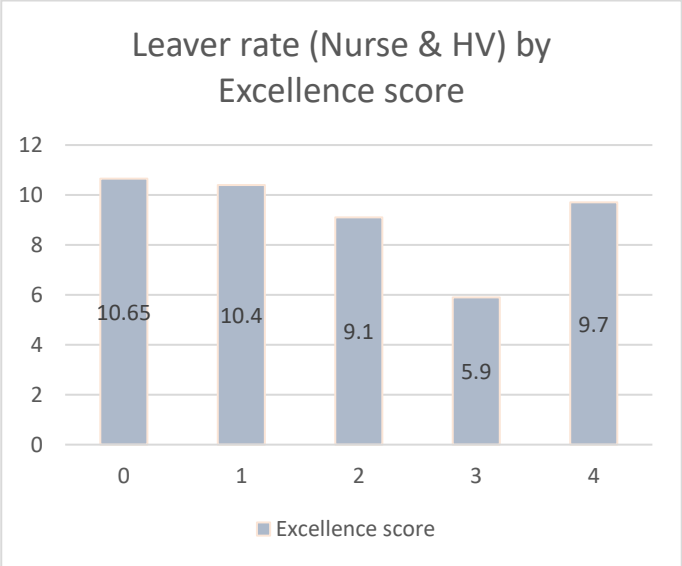
The graphs illustrate a consistent trend where organisations with lower Excellence scores tend to achieve higher scores in the NHS Staff Survey result questions: 1- We are recognised and rewarded, 2- We each have a voice that counts, 3- We are a team, 4- Staff engagement, 5- Morale.

The lower standard deviation is prevalent across all the above graphs, indicating that there was not a significant variation in staff sentiments regarding the five elements of the NHS Staff Survey, irrespective of whether the organisation achieved high Excellence scores or not.

Excellence scoring summary & Leaver rate and stability index

From the data reviewed it was possible to review specific outcomes from the workforces defined as nurse and health visitor (hv). The findings from this meant it was possible to compare leaver rate and stability index. The results can be seen below:

Leaver rate: The following graph displays leaver rate in relation to organisations with Excellence scores 0-4.



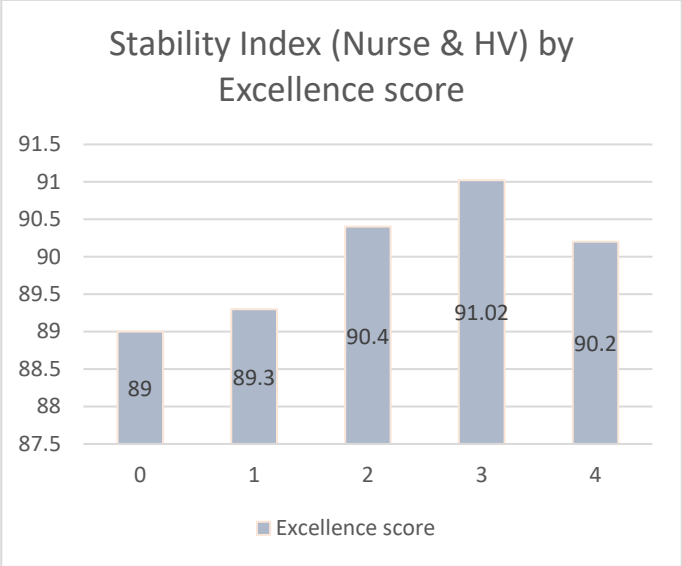
Graph 6. *Vertical axis shows the leaver rate (as reported by NHS); horizontal axis shows organisations by Excellence score.* Organisations that were assigned a 0 and 1 on the Excellence score had the highest leaver rate.

Table 6. Correlation between Excellence score and leaver rate

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Leaver rate for nurses and health visitors by Excellence score	1.71	9.7	7.3-12	0

The graph shows a relationship exists between Excellence score and leaver rate for nurses and health visitors. The median score is 9.7, with a standard deviation of 1.71; there is a significant difference in leaver rate of organisations depending on the Excellence score.

Stability index: The following graph displays stability index in relation to organisations with Excellence scores 0-4.



Graph 7. *Vertical axis shows the stability index (as reported by NHS); horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 3 on the Excellence score had the highest stability index.

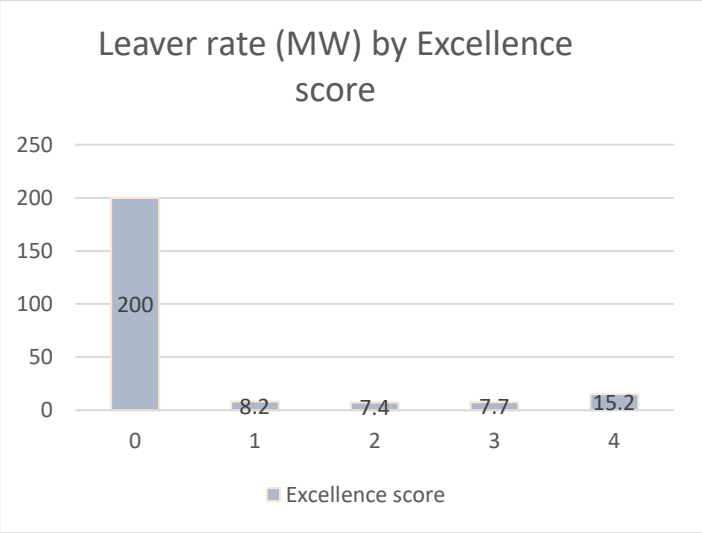
Table 7. Correlation between Excellence score and stability index

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Stability index for nurses and health visitors by Excellence score	0.74	90.20	87-92.6	3

A relationship can be seen between the Excellence score and stability index for nurses and health visitors. The standard deviation is 0.74 and median is 90.20.

From the data reviewed, it was possible to review specific outcomes from workforces defined as midwives. The findings from this meant it was possible to compare leaver rate and stability index; the results can be seen below.

The following graph displays leaver rate in relation to organisations with Excellence scores 0-4



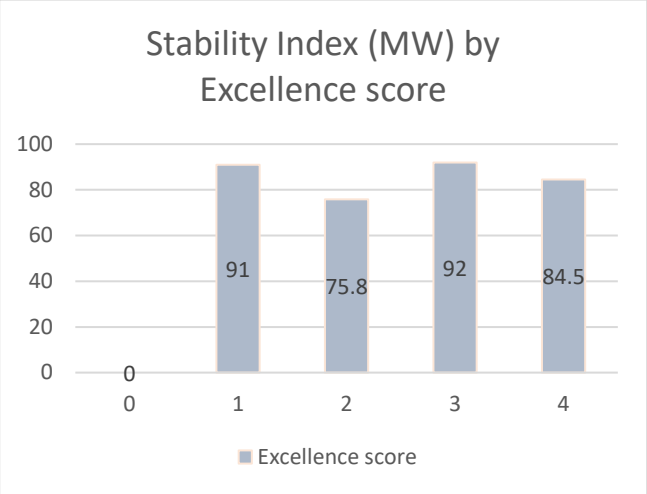
Graph 8. *Vertical axis shows the leaver rate (as reported by NHS); horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 0 on the Excellence score had the highest leavers rate.

Table 8. Correlation between Excellence score and leaver rate

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Leaver rate for midwives by Excellence score	76.2	8.2	0-200	0

A negative correlation between the Excellence score and the leaver rate can be seen. With a median score of 8.2 and a standard deviation of 76.2, the data highlights a significant impact on organisations' leaver rate based on the incorporation of Excellence designation marks and quality improvement approaches.

The following graph displays stability index rating in relation to organisations with Excellence scores 0-4.



Graph 9. *Vertical axis shows the stability index (as reported by NHS); horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 3 on the Excellence score had the highest stability index.

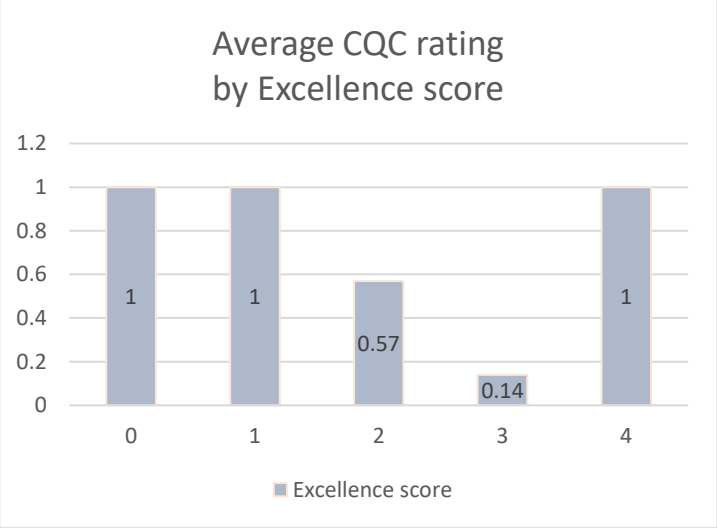
Table 9. Correlation between Excellence score and stability index

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Stability index by Excellence score	34.81	84.5	84.5-94.6	3

From the data reviewed, there is no clear trend or pattern for the stability index of midwives by Excellence score. Therefore, no significant relationship can be established between them. The median is 84.5 with a standard deviation of 34.81, indicating a substantial variability in the stability index of midwives by Excellence score of the organisations.

Excellence scoring summary & CQC rating

CQC rating: The following graph displays CQC rating in relation to organisations with Excellence scores 0-4.



Graph 10. *Vertical axis shows the CQC rating (as reported by NHS); horizontal axis shows organisations by Excellence score*. Organisations that were assigned a 0,1 or 4 on the Excellence score had the highest CQC score.

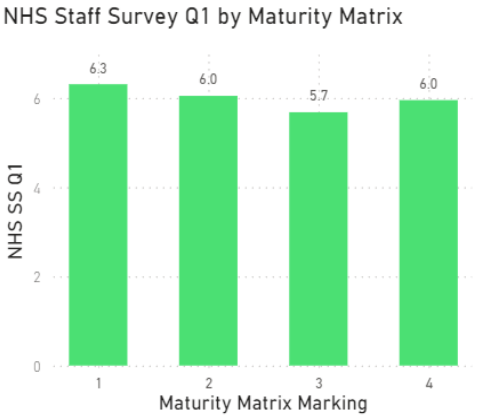
Table 10. Correlation between Excellence score and CQC score

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Average CQC score by Excellence score	0.344	1	0-2	0, 1& 4

As shown in the graph, there is no discernible trend or pattern for the average CQC rating by Excellence score. Therefore, no significant correspondence can be established between them. The median is 1 with a standard deviation of 0.344.

Maturity matrix scoring & NHS Staff Survey questionnaire

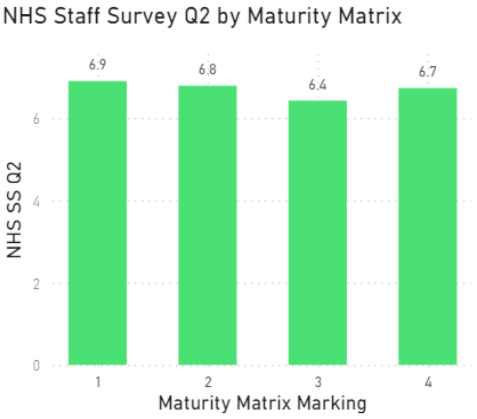
The following 5 graphs display the parameters of NHS staff survey results by maturity matrix scores.



Graph 11. *Vertical axis shows NHS Staff Survey question 1 "We are recognised and rewarded" score; horizontal axis shows organisations by maturity matrix*. Organisations that were assigned a 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 1.

Table 11. Correlation between maturity matrix score and NHS Staff Survey question 1

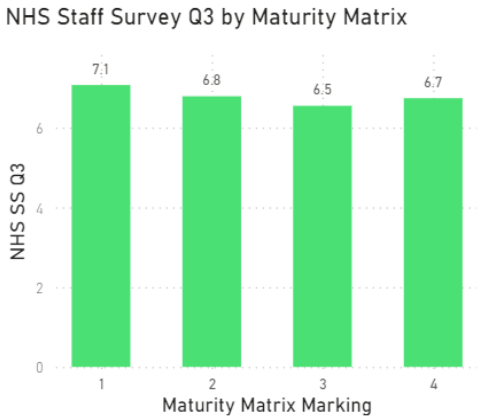
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We are recognised and rewarded	0.22	6.0	5.58-6.9	1



Graph 12. *Vertical axis shows NHS Staff Survey question 2 "We each have a voice that counts"; horizontal axis shows organisations by maturity matrix.* Organisations that were assigned a 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 2.

Table 12. Correlation between maturity matrix score and NHS Staff Survey question 2

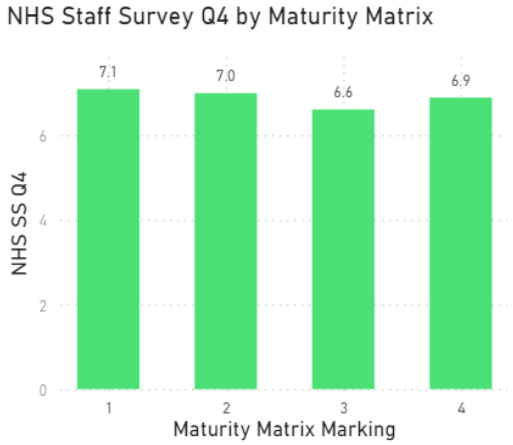
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We each have a voice that counts	0.17	6.75	6.32-7.29	1



Graph 13. *Vertical axis shows NHS Staff Survey question 3 "We are a team"; horizontal axis shows organisations by maturity matrix*. Organisations that were assigned a 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 3.

Table 13. Correlation between maturity matrix score and NHS Staff Survey question 3

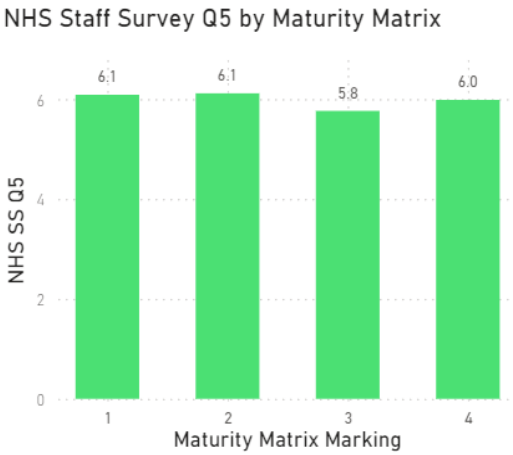
NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
We are a team	0.18	6.76	6.45-7.47	1



Graph 14. *Vertical axis shows NHS Staff Survey question 4 "Staff engagement"; horizontal axis shows organisations by maturity matrix.* Organisations that were assigned a 1 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 4.

Table 14. Correlation between maturity matrix score and NHS Staff Survey question 4

NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Staff engagement	0.14	0.17	6.48-7.41	1



Graph 15. *Vertical axis shows NHS Staff Survey question 5 "Morale"; horizontal axis shows organisations by maturity matrix*. Organisations that were assigned a 1 and 2 on the Excellence score had the highest (positive) response on the NHS Staff Survey question 5.

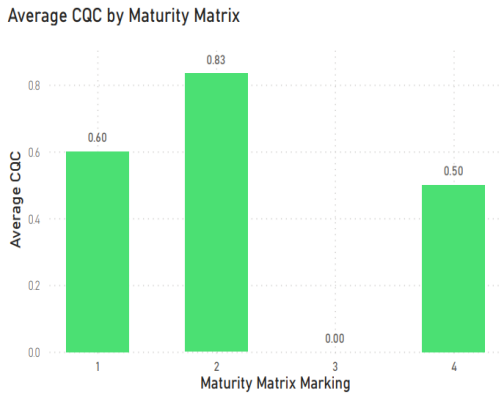
Table 15. Correlation between maturity matrix score and NHS Staff Survey question 5

NHS Staff Survey result	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Morale	0.14	6.03	5.65-6.59	1 & 2

Maturity matrix scoring and NHS staff survey findings summary:

The maturity matrix and NHS Staff Survey showed no significant correlation between maturity matrix scores and the responses to the following questions in the NHS Staff Survey: 1) We are recognised and rewarded, 2) We each have a voice that counts, 3) We are a team, 4) Staff engagement, 5) Morale. The consistently low standard deviation across the graphs indicates that there is little variation in staff survey responses based on the maturity matrix ratings of the organisations.

Maturity matrix scoring & CQC rating



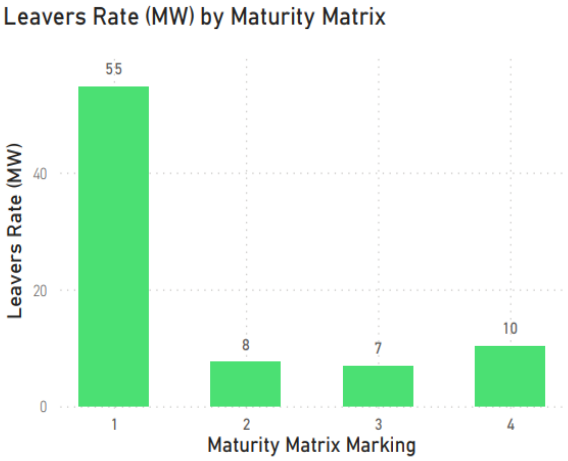
Graph 16. *Vertical axis shows CQC rating; horizontal axis shows organisations by maturity matrix.* Organisations that were assigned 2 on maturity matrix had the highest CQC rating.

Table 16. Correlation between maturity matrix score and CQC rating

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Average CQC score by maturity matrix	0.3041	0.55	0-2	2

There is no discernible trend or pattern for the average CQC rating by maturity matrix score; there is no reported significant relationship between them. The median is 0.55, and the standard deviation is 0.30.

Maturity matrix scoring & midwifery leavers rate

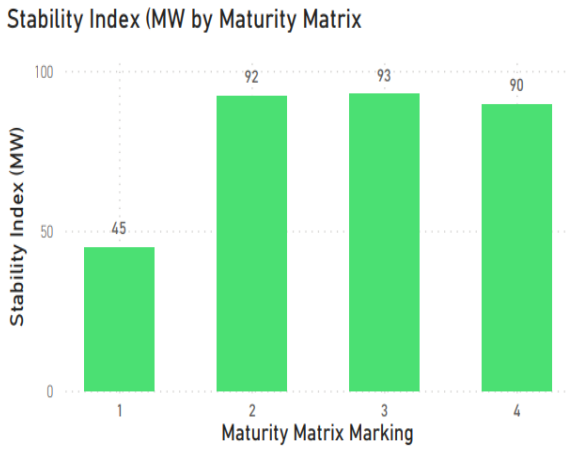


Graph 17. *Vertical axis shows leaver rate; horizontal axis shows organisations by maturity matrix.* Organisations with a maturity matrix score of 1 had the highest leaver rate.

Table 17. Correlation between maturity matrix score and midwifery leavers rate

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Leaver rate for midwives by maturity matrix	20.14	8.97	0-200	1

The graph indicates a higher rate of midwife turnover for organisations with a maturity matrix score of 1 compared to organisations with higher maturity matrix scores. The standard deviation is 20.14, with median of 8.97.



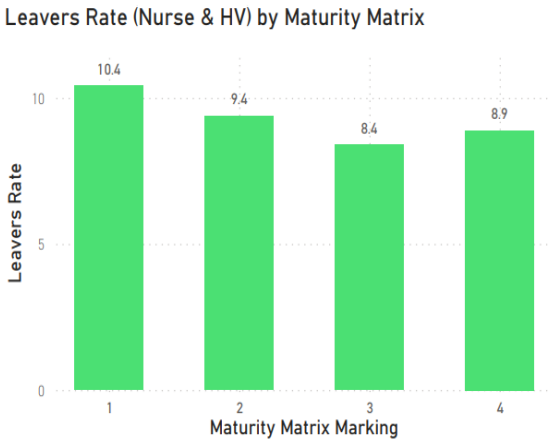
Graph 18. *Vertical axis shows stability index; horizontal axis shows organisations by maturity matrix.* Organisations with a maturity matrix score of 2 and 3 had the highest stability rate.

Table 18. Correlation between maturity matrix score and stability index

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Stability index for midwives by maturity matrix	20.20	90.90	84.5-94.6	3

The graph shows that organisations with a maturity matrix score of 1 have a lower stability index for midwives compared to organisations with higher scores. The standard deviation is 20.20 and the median is 90.90.

Maturity matrix and nurse (health visitor) leavers rate

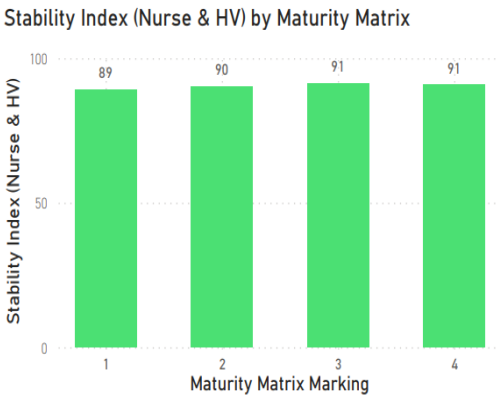


Graph 19. *Vertical axis shows leaver rate; horizontal axis shows organisations by maturity matrix.* Organisations with a maturity matrix score of 1 had the highest leaver rate.

Table 19. Correlation between maturity matrix score and leavers rate

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Leaver rate for nurses and health visitors by maturity matrix	0.74	9.13	7.3-12.6	1

The data shows a relationship between the maturity matrix score subject to the 7-lens marking derived from the survey responses to leaver rate for nurses and health visitors. A higher maturity matrix score corresponds to lower leaver rate. The median score is 9.13, with a standard deviation of 0.74, indicating a difference in the leaver rate of organisations based on the maturity matrix score.



Graph 20. *Vertical axis shows stability index; horizontal axis shows organisations by maturity matrix.* Organisations with a maturity matrix score of 3 and 4 had the highest stability rate.

Table 20. Correlation between maturity matrix score and stability index

Parameter	Standard deviation (sdev.p)	Median (med)	Range of scores	Highest outcome via Excellence score
Stability index for nurses and health visitors by maturity matrix	0.81	90.51	87-92.6	3 & 4

The graph illustrates a relationship between the maturity matrix score subject to the 7-lens marking derived from the survey responses to stability index of nurses and health visitors. The median score is 90.51, with a standard deviation of 0.81.

Summary of findings: Metrics

From creating an Excellence and Maturity Score for participating sites, it was possible to explore sites by score and the corresponding NHS outcome measures in the form of regression analysis to test hypotheses 1-3.

The following three key findings have been identified:

- Although not statistically significant, a correlation was found between nursing and midwifery Excellence and specific NHS nursing and midwifery workforce specific parameters.
- When the Excellence measure is applied to organisational outcomes rather than nursing or midwifery specific outcomes, a correlation cannot be seen.
- A trend can be seen that shows the following: Organisations that have higher Excellence scores (achieved through Excellence designation marks and QI approaches) and higher maturity scores demonstrate improved retention of nurses and midwives, evidenced through lower leaver rates and higher workforce stability.

Conclusion: Metrics

Excellence approaches targeting nurses and midwives improves the stability index and decreases leaver rates, demonstrating that Excellence where adopted has a positive impact on workforce retention.