Cambridge University Hospitals NHS Foundation Trust Nursing Midwifery and Allied Professional Research Strategy

A strategy to deliver research capability and capacity development 2022 – 2027

Foreword by the Chief Nurse and Director of Allied Health Professions

Cambridge University Hospitals NHS Foundation Trust strives to become a Nursing, Midwifery and Allied Professional research focussed hospital, driven to improve patient care and outcomes and attract and retain high calibre colleagues. Fostering and nurturing a culture of critical thinking and enquiry across our health system, supported by education and career development opportunities, and embedding research in every layer of the organisation. At CUH the vision is to build an academic healthcare system in which research and enquiry thrive and drive improvements throughout, bringing benefit to patients, their families, and staff.

This strategy outlines an ambitious plan for developing and sustaining a research literate Nursing, Midwifery and Allied Professional workforce confident and capable of delivering evidence-based practice which in turn enhances patient care and staff wellbeing and retention.

The strategy sets out the vision and the necessary steps to achieve the vision ensuring CUH is world renowned for health research driven by health care professionals through the growth of a research minded culture of enquiry, data, trials, and evidence-based practice.

Research Mission Statement

At CUH we will promote evidence-based practice, deliver world-leading Nursing, Midwifery and Allied Professional led research and support clinical academic careers to improve the care, experience, and outcomes for all our patients and service users.

Introduction

Cambridge University Hospitals (CUH) aspires to be a research-rich environment where high quality research is produced, and where person-centred, safe, and clinically effective care is delivered that is informed by evidence and innovation. This strategy seeks to highlight the essential contribution required by Nurses, Midwives and Allied Professionals (NMAPs) to realise this ambition.*

Whether undertaking research as a career or embarking on one of the many career pathways available to NMAPs, the application of evidence-based practice is an essential skill for all, to ensure that we provide the best possible care and treatment for our patients and service users. We aim to ensure that *all* NMAPs are equipped with the confidence and skills needed to make sure their practice is evidence-based and to support NMAPs who aspire to undertake clinically relevant research. NMAPs at CUH should develop, lead, and apply research that improves care and the health and well-being of our patients and workforce.

CUH aims to develop future research leaders and to be an organisation acclaimed for developing and supporting Clinical Academic Careers for NMAPs.

^{*}The abbreviation NMAP Nurses, Midwives and Allied Professionals had been adopted throughout this document as this strategy seeks to include not only the 14 Allied Health Professions as identified by NHS England https://www.england.nhs.uk/ahp/role/ but all other allied professions working at CUH.

Clinical Practice Informed by Research

A positive research culture which includes the promotion, conduct, and use of research in healthcare services is a crucial factor in achieving the highest standards of excellence in care.¹ Research-active organisations have been shown to improve patient outcomes, including mortality, compared to non-research active organisations.²⁻⁵ Furthermore, there is evidence that stimulating research rich, evidence-based practice can lead to increased staff retention.⁶

Situated at the heart of the Cambridge Biomedical Campus, CUH is already a recognised world-leading centre for biomedical research. Research at CUH drives improvements in patient care and outcomes and supports us in attracting and retaining high calibre colleagues. NMAP's contribution to developing and leading research at CUH enhances and extends the delivery of high-quality patient care. The aim of this strategy is to set out objectives for how we can further develop research capability and capacity in the NMAP workforce.

In the NMAP workforce we want to continue to foster and nurture a culture of critical thinking and enquiry, supported by education and career development opportunities. We want to embed research in every layer of the organisation to drive improvements which bring benefit to patients, their families, and staff.

Involvement in research spans the spectrum from being research aware and research literate, to being a research active leader. While few NMAPs will enter a Clinical Academic Career, as a research focused Trust, all NMAPs in CUH will be supported to develop the knowledge, skills, and confidence necessary to access and understand research evidence to inform their own practice and that of others in their clinical environments. Research should be seen as something that all staff, at whatever level, can become involved in.

This strategy outlines an ambitious plan for developing and sustaining a research literate workforce capable of delivering evidence-based practice to enhance patient benefit and staff wellbeing and retention. The strategy sets out the steps necessary to achieve the aim of CUH to become a world-renowned centre for NMAP research. It also describes how CUH will achieve research literacy for all health care professionals in order that they can use and contribute to the evidence base for clinical practice. Our ambition for increasing research capability and capacity is illustrated in Figure 1.

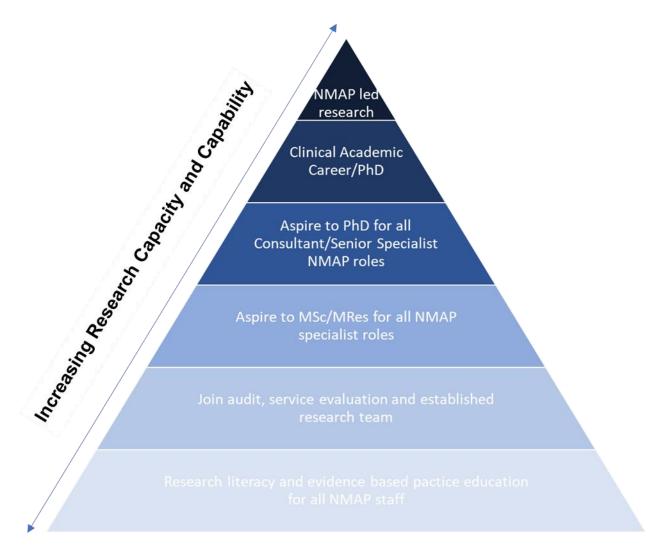


Figure 1: Increasing Research Capacity and Capability at CUH

Clinical Academic Careers- combining a clinical career with research activity

Clinical academic careers are well established in medicine but were not formally recognised for NMAPs until 2007, with the publication of the Finch Report (Finch 2007).7 This report proposed a formal structure of education from gaining a professional qualification to training at doctoral level, and how this linked to clinical practice. The NIHR fellowship scheme specifically for NMAPs started in 2009, initially called Clinical Academic Training or CAT. This programme included the MCLinRes. In 2013 this became the Integrated Clinical Academic (ICA) Health Education England (HEE)/NIHR programme.8 This scheme provides five levels of funding to support NMAPs from pre-master's level (HEE Internship scheme) through to senior postdoctoral researchers (clinical academic leaders) (Figure 2). Key to the ICA programme is that NMAPs should hold a substantive post in a clinical organisation and an honorary position with an academic host (or vice versa). This ensures clinical skills are maintained while developing research skills and with the postdoctoral schemes enhances the opportunity for evidence to inform practice. Locally support is provided for those wishing to develop a clinical academic career through Health Education England (HEE) funded internships and bridging fellowships, supported by UEA, Cambridge University and CLACEast[†].

CUH has developed a Framework for supporting Clinical Academic Careers within the Trust (See Appendix 1). This framework includes embedding Clinical Academic Careers in the organisation as a priority and outlines the criteria, structure, and expectations of these posts.

[†] https://www.claceast.net/

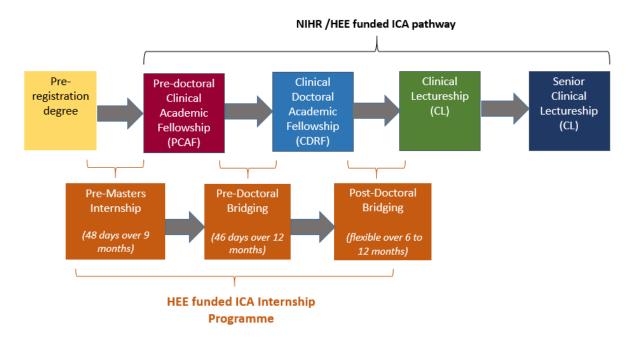


Figure 2: NIHR/HEE Funded Integrated Clinical Academic Pathway and HEE Funded Internship Program

Measuring our Impact

As a research focused organisation, we will support the capture of data relating to research capability and capacity development in a variety of ways. This will be achieved through regular audit cycles (biennial) and through the development of a research dashboard to enable regular real-time reporting of research activity. This will be maintained and monitored by the Lead for Research team. It will allow the provision of regular updates on research activity and for us to measure progress towards delivery of the strategy objectives. It will also allow us to contribute to national data gathering on research activity which we are currently unable to do. The dashboard will contain information regarding research contacts, conversations, grant applications, publications and other dissemination activity and research relevant education.

The dashboard will also serve as tool to drive up equity of research activity across the organisation as it will allow close analysis of activity by area and professional group, thus driving targeted approaches in areas of greater need.

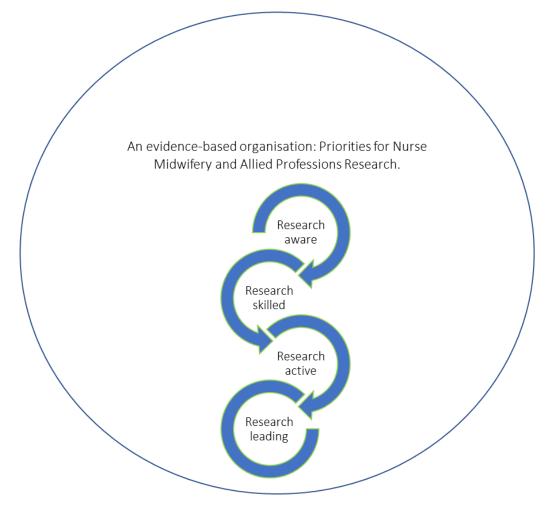
Strategic Priorities

Priority 1 Research Aware: To build confidence in our workforce to establish research and the application of evidence-based practice as a core activity for all NMAPs

Priority 2 Research Skilled: To provide access to research education and development opportunities for NMAPs

Priority 3 Research Active: To maximise the opportunities for active involvement in research for NMAPs

Priority 4 Research Leading: To ensure CUH as an organisation is a recognised leader in supporting and developing NMAP research and clinical academic careers.



Priority 1 Research Aware: To Build Confidence in our Workforce to Establish Research and the Application of Evidence-Based Practice as a Core Activity for all Nurses Midwives and Allied Professionals.

Objective	How we will Achieve our Objectives	Delivery Year 1-5
Communicate the value of research to improve patient care and experience	Develop research ambassador roles which will provide a link between the research community/research leaders and clinical areas	2
	Provide a regular 'research message of the month' to support evidence-based improvements in practice	1
	Include an introduction to research and evidence-based practice in the Trust induction for all qualified staff	2
	Include a research and evidence-based practice update in core mandatory training for all NMAPs	3
	Ensure staff can signpost patients and service users to research studies by providing a database of research studies being conducted in each Division and developing website resources for frontline staff to understand the process of recruiting patients into research	3
	Include research awareness and the application of evidence-based practice in job descriptions and appraisals for all staff.	5
Increase the visibility and dissemination of	Deliver an annual research conference to showcase NMAP research	1
NMAP research at CUH	Develop a Research Hub website hosted on the external CUH website to provide a single point of access for research resources and information	2

	Increase the social media presence of NMAP research across the Trust by active engagement with social media platforms (Twitter @CUH_NMAResearch/Instagram/LinkedIn +)	1
	Develop a database of publications accessible via the Research Hub website	2
	Provide regular updates on NMAP research to the Trust Research Board, Nursing Midwifery and AHP Committee (NMAAC) and other relevant forums	1
	Provide an annual written report on research activity for the Chief Nurse	1
	Publish a quarterly research highlights bulletin for internal and external stakeholders	1
	Ensure NMAP research presence at Trust recruitment open days.	2
Support access to published research and research resources	Develop and provide access to Evidence Based Practice education packages including the Research for Frontline Staff Education programme (see Appendix 2) accessed via the Research Hub website and DOT system.	2
	Promote access to NHS Athens and library resources and training for all staff	1
	Provide resource packages to support development of virtual and face to face journal clubs	2
	Establish a regular NMAP research seminar series	2

Create an inspiring research environment for qualified and student NMAPs at CUH	Celebrate the success of NMAP colleagues in the development or application of research or evidence-based practice that has improved patient care via internal and external communications	1
	Implement a student workshop series highlighting research opportunities and careers in research including clinical academic pathways	2
	Ensure all students have access to opportunities to actively engage with research while on clinical placements in the Trust (research delivery and/or academic research)	3
Ensure the best available evidence and up to date research is used in the development, review and revision of Trust policies, procedures, quality metrics and transformation and improvement projects.	Lead Nurse for Research Capability and Capacity Development to sit on Policy and Practice Group along with representative from the Clinical School Library to ensure policies and procedures being reviewed or developed are evidence based	1
transformation and improvement projects.	Promote the use of the Marsden Manual of Clinical Procedures which provides up to date, evidence-based policies, and procedures.	1

Priority 2: Research Skilled: To Provide Access to Research Education Opportunities for NMAPs

Objective	How we will Achieve our Objectives	Delivery Year 1-5
Develop a research skills education programme for NMAPs and increase opportunities for staff to learn about research	Establish and deliver a hybrid face-to-face and virtual research education programme to sit alongside the Evidence-Based Practice courses (Please see Appendix 2 for details of proposed EBP and research modules)	3
	Respond to needs within the Trust and deliver bespoke research /EBP workshops and learning sessions	2
	Ensure external research education opportunities are disseminated widely via communication networks and resources on the Research Hub website	1
	Run twice yearly Writing for Publication courses	2
	Establish an 'in-house' Research Skills for Clinicians course.	2
Create and support opportunities for NMAPs to develop research skills through	Ensure that undertaking research activity and research education is included in job plans, appraisals, and career pathways for all staff	5
practical research experience.	Provide 'off the shelf' projects for staff, based on the identified research priorities which staff can undertake as stand-alone projects or as part of post-registration courses	2
	Develop opportunities for staff and students to work with established research teams to gain research experience	3
	Establish a research internship programme to expose junior staff to research	1

Priority 3: Research Active: To Maximise the Opportunities for Active Involvement in Research for NMAPs

Objective	How we will Achieve our Objectives	Delivery Year 1-5
Develop NMAP research priorities and themes.	Establish a priority setting partnership following James Lind methods for research priority setting	3
Develop research programmes, led by NMAP research leaders in the Trust, which focus on the NMAP research priorities and themes.	Use priorities established by the priority setting partnership to provide focus for NMAP research in the Trust	4
Support NMAPs in developing and maintaining their research profile and activities.	Implement a Research Dashboard to record NMAP research activity, including education, research funding applications, successful applications for research funding, fellowships, and research outputs	2
	Encourage NMAPS to obtain ORCID identity numbers and establish ResearchGate profiles	1
Build research capacity through dissemination of local and regional funding opportunities for protected research time.	Continue to circulate and promote opportunities via existing networks and the Research Hub	1
Support applications for research funding both local, regional, and national.	Encourage early engagement with the Research Design Service and CUH research infrastructure	1
	Establish an internal peer review panel to advise on grant applications prior to submission to strengthen likelihood of success	3

Provide individualised support for all	Implement a research mentorship network underpinned by	2
research curious and active NMAPs	mentorship education and associated policies.	

Strategic Priority 4: Research Leading: To ensure CUH as an Organisation is a Recognised Leader in Supporting and Developing NMAP Research and Clinical Academic Careers.

Objective	How we will Achieve our Objectives	Delivery Year 1-5
Participate in national and regional collaborative initiatives to	Continue CUH participation in national networks to develop clinical academic careers.	1
promote Clinical Academic Careers	Advocate NMAP clinical academic careers opportunities and pathways from pre to post-doctoral level, throughout the organisation	1
	Ensure CUH NMAP leadership involvement within external organisations such as Health Education England, Cambridge BRC, and Eastern ARC.	1
Promote an organisational culture and structures which support Clinical Academic Careers	Implement a framework for Clinical Academic Careers with accompanying human resources policies and procedures to provide guidance for aspiring clinical academics and for managers on supporting Clinical Academic roles in their service at pre-doctoral, doctoral and post-doctoral level.	1
Identify CUH NMAPs with ambition and potential to fulfil clinical academic role and support career progression	Implement a Research Dashboard so that NMAP research activity (including NMAP research outputs) can be recorded and evaluated	2
	Establish 'research development clinics' to capture interest and advise on research careers	1
Develop the foundations for a CUH NMAP Centre for Research and Innovation.	Prepare a business case for a CUH NMAP Centre for Research and Innovation	5

activity is recorded to enable	Implement a Research Dashboard to record NMAP research activity, including education, research funding applications, successful applications for research funding, Fellowships, and research outputs	
	Conduct a biennial evaluation of NMAP research activity in the Trust to assess research capacity and capability development	1

References

- 1. Clarke, M. and Loudon, K., 2011. Effects on patients of their healthcare practitioner's or institution's participation in clinical trials: a systematic review. Trials, 12(1), pp.1-10.
- 2. Ozdemir, B.A., Karthikesalingam, A., Sinha, S., Poloniecki, J.D., Hinchliffe, R.J., Thompson, M.M., Gower, J.D., Boaz, A., and Holt, P.J., 2015. Research activity and the association with mortality. PloS one, 10(2), p.e0118253.
- 3. Boaz A, Hanney S, Jones T, Soper B. Does the engagement of clinicians and organisations in research improve healthcare performance: a three-stage review. BMJ Open. 2015;5(12): e009415. https://doi.org/10.1136/bmjopen-2015-009415.
- 4. Jonker, L. and Fisher, S.J., 2018. The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study. Public Health, 157, pp.1-6.
- 5. Jonker L, Fisher SJ, Dagnan D. Patients admitted to more research active hospitals have more confidence in staff and are better informed about their condition and medication: results from a retrospective cross-sectional study. J Eval Clin Pract 2020; 26:203–8.
- Aarons GA, Sommerfeld DH, Hecht DB, Silovsky JF, Chaffin MJ. The impact of evidence-based practice implementation and fidelity monitoring on staff turnover: evidence for a protective effect. Journal of consulting and clinical psychology. 2009 Apr;77(2):270.
- 7. UK Clinical Research Collaboration (2007) Developing the best research professionals. Qualified graduate nurses: Recommendations for preparing and supporting clinical academic nurses of the future. Report of the UKCRC Subcommittee for Nurses in Clinical Research (Workforce), August. London: UKCRC.
- 8. Health Education England (2015) ICA HEE/NIHR Integrated Clinical Academic (ICA) Programme for Non-Medical Health Care Professions, London: HEE.

Appendix 1- Clinical Academic Framework

Framework for Clinical Academic Leadership Posts Approved by NMAAC December 2021

Introduction

This framework aims to support the development and maintenance of Clinical Academic Leadership Posts for nurses, midwives, and allied health professionals (NMAHPs) at Cambridge University Hospitals NHS Foundation Trust (CUH). The framework is not a job description but instead sets out principles, role expectations and policies to guide CUH in facilitating and supporting clinical academic careers. The document is complementary to the overall NMAHP Research Strategy, educational initiatives, and Cambridge Biomedical Research Centre capacity building.

Principles

Clinical Academic NMAHPs are a valued resource to the Trust combining clinical expertise and research skills to improve patient care and outcomes, while contributing to the body of evidence within their specific specialty areas. Clinical Academic Leader Posts should be developed throughout CUH as a component of workforce planning.

General Guidance

Clinical Academic Leader Posts

- I. Clinical Academic Leaders (CAL) are Senior Positions banded 8a and above for NMAHP staff who meet the following criteria:
 - Relevant expert clinical experience
 - Completion of a PhD
 - Have begun a clinical programme of research with a plan for further development
 - Demonstrated the ability to attract research funding, e.g.
 - Fellowship
 - Grant income
 - Strong peer-reviewed publication record
- II. Clinical Academic Leaders have a minimum of 50% academic time, which is primarily focused on the post-holder's own research programme III. Clinical Academic Leaders may have a variety of clinical roles depending on their expertise and needs of service. The scope of the clinical role will be defined within the Job Description, examples include:
 - Consultant
 - Note a consultant post is not a Clinical Academic Leader post unless they meet the criteria and have 50% academic time
 - Clinical Lead
 - Manager
 - Specialist clinical role delivering patient facing care and serving as a role model, teacher, and mentor to other staff

 Lead for quality improvement, service evaluation/audit or other activities to improve care

Funding

- I. Funding for the clinical time of the Clinical Academic Leader is paid by the CUH Service or Division in which the post-holder works.
- II. Funding for the academic time could be paid through a variety of mechanisms, including:
 - Joint appointment or secondment/partnership with a University, e.g.
 - o Clinical Lecturer
 - Research Associate/post-doctoral researcher in research team
 - Grant Income (post-holder or Senior Academic)
 - Funding through Health Education England East (Clinical Lecturer)
 - Funding through Divisional Research funds
 - HEE/NIHR, NIHR or Charity Post-doctoral/Advanced Fellowship Awards
 - CUH internal funding for specific projects or quality improvement initiatives
 - CUH funding
 - Bridging or short-term funding (≤ 1 year)
 - o Funding through the Cambridge Biomedical Research Centre
 - o Funding through ACT/BRC post-doctoral fellowships
- III. Funding arrangements will be agreed through discussion with the post-holder, line manager and relevant others. This may include the Deputy Chief Nurse or Lead for AHPs, academic funder, Line Manager and Divisional Research Lead.
- IV. Sustainability of funding for the academic component of the post must be planned.

Expectations of Role

- I. The clinical remit of the CAL post may vary however core to every post is clinical leadership and evidence-based practice. Activities may include:
 - Promoting evidence-based practice and clinical excellence
 - Supporting audits and service evaluations
 - Contributing to strategic planning
 - Supporting the development of critical thinking and research skills among staff
 - Serving as a role model
 - Direct patient care
- II. The academic remit of the post may also vary, but in general is focused on the post-holder's own programme of research:
 - Building a programme of research that addresses areas of clinical need
 - Seeking funding for research and own academic development
 - Advanced fellowships through NIHR or Charities
 - Internal and external grant funding
 - Publishing research in peer-reviewed journals
 - Presentations at national and international conferences
 - Developing research collaborations
- III. Additional academic activities may include:

- Contribution to other research studies as co-investigator or co-PI
- Teaching (research and/or clinical classes)
- Supervising masters' theses or co-supervising PhDs
- Supporting research conducted by other members of staff
- IV. CAL Posts must have academic mentor(s) and established links to Senior Researchers and research teams
- V. CAL post-holders will develop objectives and a plan for research development and funding

Appraisal

- I. The clinical role will be appraised by the clinical line manager
- II. The academic component will be appraised by at least one academic senior to the post-holder and familiar with the general expectations of a post-doctoral researcher.
 - A University appraisal form can be used for the academic component.
- III. The appraisal can be conducted together.

Appendix 2 - Evidence-Based Practice and Research Skills Education

Evidence Based Practice for Frontline Staff

A six module Evidence Based Practice for Frontline Staff education programme has been developed with the support of the Medical Librarians. These modules can be delivered face to face or virtually.

Module 1- Asking good questions	How to take an area of interest or uncertainty from your practice and turn it into an answerable question using PICO (Participant, Intervention, Comparison and Outcome)
Module 2- Identifying good evidence	How to find good-quality evidence to answer a practice question. This module will explore the hierarchy of research evidence.
Module 3- Searching for Evidence	An introduction to the methodical approach to conducting an effective search for relevant literature from core healthcare databases.
Module 4- Assessing the Evidence	How to assess the quality of available evidence; using critiquing tools to assess robustness, validity, clarity, and bias in published evidence.
Module 5- Communicating the Evidence to others	How to effectively communicate evidence to others, including how you can communicate evidence to patients or service users.
Module 6- Evidence, reflective practice, and revalidation	How to use research evidence as part of reflective practice. For Nurses and Midwives this will focus on the Revalidation.

Research Skills Education Programme

Writing for Publication	How to	create, sub	mit a	and revise yo	our
	paper.	Identifying	the	challenges	of

	writing for publication, choosing the right journal, and responding to reviewer comments. Maximising the impact of your paper.
Writing a conference abstract and preparing a conference poster or conference presentation.	How to write a successful conference abstract and how to turn your abstract into conference poster presentation or impactful conference presentation.
Grant writing	How to develop a grant application; understanding the remit, needs and expectations of your target funder, developing a succinct writing style and making a strong case for support
Critical Appraisal and randomised Control Trial (RCT) Design	Understanding the core components of RCT design, and exploring the process and practice of critical appraisal
How to undertake a literature review	Understanding the purpose of the literature review; how to extract and analyse findings across several studies; writing up the review. A useful follow-up to Searching the Evidence and Assessing the Evidence EBP modules.
Introduction to Quantitative Research and Design	Exploring the rationale for, and components of quantitative research, and the core methods for recruiting participants, collecting, and analysing data, and reporting findings
Introduction to Qualitative Research and Design	Exploring the rationale for, and components of qualitative research, and the core methods for recruiting participants, collecting, and analysing data, and reporting findings

Understanding descriptive and inferential statistics	Understanding the role and purpose of statistics, cleaning, preparing, and analysing numerical data, computer aided analysis and reporting findings.
Qualitative data analysis introduction	Understanding the purpose of analysis and how it links to study design; core techniques in managing, analysing, and reporting qualitative research.