Institution: Buckinghamshire New University

Unit of Assessment: 3- Allied Health Professions, Dentistry, Nursing and Pharmacy

1. Unit context and structure, research and impact strategy

UoA 3 is an established unit at Buckinghamshire New University (BNU), with previous submissions dating to RAE 2008. BNU is one of the leading providers of professional-practice education in the South East. The University has a vibrant academic nursing and health-related community with an excellent track record in educating novitiate and experienced health and social care practitioners from pre-registration to doctoral studies. Due to institutional structural changes and subsequent staff changes in the latest assessment period, BNU has experienced a significant change in strategic direction for research aligned to nursing and allied health compared to REF 2014. This has resulted in a smaller submission for REF2021 with four staff (4.0 FTE) who have not previously been submitted to REF and a strategic change in research focus for the next REF period. In addition, successful incubation of research in the area of public health and social inclusion led by Greenfields and previously submitted in this UoA, has resulted in a new submission in UoA 20, Social Work and Social Policy.

All staff previously submitted in REF2014 have since left BNU, or are being submitted under UoA 20 (Greenfields, Ansbro). Professors Procter and Martin maintain continued working relationships with the University as visiting professors, along with emeritus Professor Brodie. Projects from Griffin, Coggrave and Schaub are reported as completed during the REF period. Strategic institutional transformation and the recent launch of the Institute of Health and Social Care (IHSC) is enabling recruitment of new staff and continued development of existing new and developing researchers aligned to this UoA (eg Rioga, Williams, Hayward, Crouchman, Nathoo). Sixteen Doctoral students enrolled within the UoA during the REF period, with 8 completing during this time.

Formalised in the institutional strategy 2016-21 and Impact2022, strategic priorities for research and knowledge exchange for the REF period were to:

- a) increase research and enterprise income to enable growth and investment
- b) improve the volume and quality of research outputs to grow international profile for excellence in fields of professional, creative and translational research and enterprise practice
- c) ensure that Research & Enterprise activity enriches and enhances the student experience
- d) secure improved external recognition of the contribution and impact of research and enterprise work.

As part of the future strategy for research in this UoA, the university has recently launched the Institute for Health and Social Care (IHSC) which aims to provide strategic oversight for all health and social care activities across the University and to serve as the focal point for all external partners and stakeholders related to health and social care. The IHSC will serve as a "front door" to all our health provision at BNU and will shape and support the health and social care agenda in the region and across the UK. The Director, Professor Karen Buckwell-Nutt, will play a key role in developing and enabling the future research strategy for this UoA.

Progress against these priorities is organised under three themes:

- 1. Developing the health and social care workforce (Addis, Harrison-White)
- 2. Evaluating and innovating healthcare practice (Addis, Trout)
- 3. Public health and social inclusion (Henderson)

REF2021

1. Developing the health and social care workforce

This theme continues as a longstanding areas of focus for Bucks. During the REF period, research in this area has been led by Procter, Martin and Addis and led to significant increases in income through NHS and Health Education England funding and has significantly enhanced the learning experience of the health and social care workforce. For example, funded by CWHHE CCG collaborative, BNU was commissioned to develop training for providers in North West (NW) London in relation to the Mental Capacity Act (MCA) and Deprivation of Liberty safeguards (DoLS). Training needs analyses were also conducted for the out of hospital workforce across Thames Valley (Addis) and to support integration of services and urgent care practices in NW London (Addis), funded by Health Education NW London.

Working towards enhancing the learning experience of pre-registration nursing students, research has been undertaken to develop the role of nurse link lecturers through examining challenges facing student nurses in clinical learning environments (Harrison-White).

Research aligned to this theme is expanding over the next REF period. The nursing and allied health expertise has grown to include specialisms such as operating theatre department practice and physician associate, with further expansion in progress to offer clinical training in physiotherapy, paramedic science, midwifery and occupational therapy. New academic staff recruited within these disciplines is enabling new research expertise in these areas. Research already in progress is investigating innovative training in physiotherapy and advanced professional practice in Oncology.

2. Evaluating and innovating healthcare practice

This theme emerged from the original broader nursing theme from REF2014, through partnerships developed across NW London and the South East through the former Institute of Nursing Research. A number of research streams have involved evaluation to enable innovation in healthcare practice. For example, the "Delivering Dignity through Empowered Leadership" project (Procter, Addis) was led by Imperial College Healthcare NHS Trust with Kings College London and was funded by the Burdett Trust for Nursing as part of a study to improve dignity for older people in hospitals. Additional research has focussed on health and social care knowledge and management of pressure ulcers (Procter), end of life care (Procter, in partnership with South Bucks hospice), and an evaluation of the whole system integrated care model "My Care My Way" for a more coordinated and consistent care for adults aged 65 and over. An examination of the sexual experiences of women after spinal injury (Coggrave) was able to inform occupational therapy practices to support these women.

A key achievement during the REF period was the development and validation of the 10-item Birth-Satisfaction-Scale-Revised (BSS-R) scale as a psychometrically valid and reliable birth satisfaction measure (Martin). It has become the 'gold standard' measure of birth experience, evidenced by expert consensus selection of the measure as the key index of birth experience in the International Consortium for Health Outcome Measures (ICHOM) Pregnancy and Childbirth Standard Set. Widely translated and in use in over 30 countries, the BSS-R has been utilised by both researchers and clinicians alike. Currently, over 100 investigations are underway using the BSS-R with 18 studies thus far reporting findings.

Expertise in health care evaluation and innovation has led to development of a successful Diploma course for clinicians in health care innovation led by Procter, supported and funded by Imperial College health partners and Oxford Academic Health Science Network.

Through partnership with the Universities of Ulster and Salford, Trout has explored nurses' experiences of applying painful stimuli when assessing components of the Glasgow Coma Scale.



Research aligned to this theme is expanding over the next REF period. In partnership with the research and innovation department of Buckinghamshire Healthcare NHS Trust, BNU is exploring areas related to ageing-well in older people and digital healthcare. As a result of the current pandemic there is a significant shift to digital enhanced healthcare service delivery. The impact and development of digital health and use of adaptive technologies will be a key area of research for academics in health-related and computing disciplines.

3. Public health and social inclusion

Research investigating health and social inclusion for marginalised communities is being reported within UOA 20 social policy and social work for REF 2021. In addition to this, research impacting public health has been completed by Henderson, building on work from Brodie's former cardiovascular research team, in partnership with exercise science colleagues. The research has examined isometric exercise in pre-hypertensive and hypertensive participants.

Public health and social inclusion remains a key area of focus within allied health for the future. As part of Bucks commitment as an institutional strategic priority focusing on widening participation, equality and inclusion, new initiatives are planned and developing aligned with this theme. As part of our partnership with Central and NW London NHS Trust, we are exploring new projects to evaluate healthcare provision for homeless people, recovery based projects for service users diagnosed with a mental health condition, the factors influencing Black and Ethnic Minority groups higher representation under the Mental Health Act (1983) within inpatient units and leadership programmes for BAME individuals (Rioga). Additionally, as part of developing innovative professional physiotherapy training, research is planned to examine access to such training by BAME students.

Building on growth during the REF period, our 5 key future strategic objectives within these three themes are to:

- 1. Achieve success in REF2021 by optimising performance across disciplines.
- 2. Build capacity in distinctive engaged, research through increased and widened public and stakeholder engagement.
- 3. Develop the number and significance of external research and enterprise partnerships to maximise access to funding, support knowledge exchange and research working towards attaining Research Degree Awarding Powers.
- 4. Maximise the synergies between research, curriculum and teaching, contributing to future TEF submissions by ensuring that academics are able to exploit the two-way interplay between research and the development of new and existing curriculum and teaching.
- 5. Increase the sustainability of research through defined research groupings with critical mass aligned with local, national and global priorities.

The goals for enabling impact are aligned with the University key priorities of;

- applied research activity organised around the needs of users, building excellence aligned to key areas of distinction and strength;
- impactful research strengthens strategic relationships with key partners through collaboration and knowledge exchange;
- research impact is built into the curriculum;
- performance in REF 2021 successfully builds reputation;
- staff are encouraged and incentivised to engage in knowledge exchange activity, including consultancy, on behalf of the University.



In 2020 the University co-founded the Bucks Health and Social Care Academy (BHSCA) which includes membership from Buckinghamshire Council, Bucks College Group, Bucks Healthcare NHS Trust, Health Education England, Buckinghamshire LEP, the GP Federation and the Universities of Bedfordshire and Buckingham. BNU's involvement in this Academy has led to the introduction of health and social care pathways aimed at increasing the nursing workforce and supporting members of the community from low social economic backgrounds to be enrolled in higher education programmes. Through the Academy, positive networks have been created and the Research and Knowledge Faculty Institute has been formed which aims to:

- Develop research priorities in collaboration with local stakeholders
- Pool the research capability and capacity across the Universities in the geographical area
- Access research funding to deliver an evidence-base for high quality services
- Deliver ongoing programme of knowledge exchange activities to engender a culture of continuous service improvement
- Raise the profile of health and social care research and evidence based practice through knowledge exchange and research

The Institute and the Academy will both help to ensure that our work in primary, social, intermediate and secondary health care is further developed and set in the context of national, regional and local workforce requirements and is supported by education frameworks developed in partnership with local colleagues and businesses. The frameworks will ensure stakeholder engagement is embedded within the research undertaken, and enable maximisation of impact.

Open Access

As outlined in the institutional environment statement, BNU has held a research repository since 2006, and our open access policy (2015) outlines our commitment to:

- Provide greater visibility for BNU research, benefitting audiences of researchers, practitioners, and the public;
- Ensure long term preservation of outputs;
- Stimulate new research opportunities and collaborations;
- Enable compliance with funders' requirements; and
- Enable the University to submit to future REFs.

The University has adopted the Green route to open access as a sustainable approach. Staff are encouraged to upload all outputs including conference presentations, videos and original performance pieces to the repository to enhance public access for their research and improve impact. Bucks participated in the JISC open-data pilot project through GuildHE Research and will explore options to enable sustainable open data sharing through this affiliation. Staff are actively encouraged to publish and disseminate their research and are supported to present at national and international conferences, and to professional practice networks, and with practice partners eg: NHS Trusts). The university culture also encourages supervisors and students to publish jointly (e.g. McKenzie and Addis 2018, Haroune V. and King, 2020)

Research Integrity

The University is committed to upholding the highest standards in its research and to being fully compliant with UK Policy Framework for Health and Social Care Research from the Health Research Authority (HRA). In addition to institutional infrastructure, research requiring HRA ethics /R&D approvals is routed through the Research Unit where arrangements are made for proposals to be scrutinised to ensure they meet University requirements before they are considered for sponsorship.

As outlined in the institutional statement, the University's Research and Enterprise committee, a Senate sub-committee, has oversight of all institutional research activity, including research degrees. Membership includes Rioga, able to influence the University research agenda as a



developing researcher. The Committee has responsibility for ensuring adherence with our Code of Good Research Practice and Research Ethics policies, both revised and updated in 2019. The Committee collates data annually for our compliance statement on the Concordat to Support Research Integrity and investigates any reports of research misconduct. The University Research Ethics Panel has a wide membership from across the university, with oversight of school sub-committees which review student research. Henderson and Addis are longstanding experienced members of this Committee, providing expert review of applications for approval and support for developing researchers seeking ethical approval. BNU subscribes to the UK Research Integrity Office and has completed the UKRIO self-assessment exercise during the REF period. Any new research staff are actively encouraged to observe the ethics committee meetings, both as part of their development and to engage new panel members.

Support for interdisciplinary research

BNU's structure naturally supports synergies between different disciplinary research areas, which is then facilitated by centralised research support services. Staff undertaking research aligned to this UoA are in two schools, divided according to educational provision for pre and post registration healthcare. The IHSC is well positioned to 'funnel' external healthcare research opportunities and support cross-school engagement. Collaborations for research and scholarly activity are supported by cross-university events, benefitting specifically from cross working with sport and exercise science and psychology.

BNU is a partner in the Bucks Academy research and knowledge exchange faculty, which provides opportunities for collaboration across professional groups, and disciplines. Early developments indicate strong partnership working and highlight an emerging area related to interdisciplinary safeguarding practices.

Activities undertaken during the period have also included cross-disciplinary innovative teaching initiatives between performing arts and nursing, using BNU's extensive nursing simulation facilities.

2. People

The Bucks Academic Framework (BAF) was introduced in 2019 which includes academic staff roles with research:

- Education with Research
- Research with Education
- Education with Professional Practice
- Professional Practice with Education

The BAF provides a structure for staff recruitment and progression to the education with research track from lecturer through to professor, which enables the growth and development of research capacity within allied health. New Professorial appointments were made in 2020 in line with the BAF and policy for Career Development and Promotions for Academic Staff. In the initial round of appointments, Professors and Associate Professors were appointed in Nursing and Allied Health relating to Education and Professional Practice with the aim of appointing research-related associate professor and research professor roles over the coming 5 years.

In 2020, the University introduced the Professoriate which comprises Professors and Associate Professors employed within the university and externally. The Professoriate has a leading role in the intellectual life of the university and has contributed to engagement with the public and community. A key objective of the Professoriate is supporting knowledge transfer through public lectures. Professor Karen Buckwell-Nutt facilitated, in collaborative with BHSCA Research and



Knowledge Faculty, a virtual lectures series. Several Associate Professors and early career researchers from the health-related schools have contributed to these public lectures on subjects such as, 'Social Media in Pre-Registration Nursing Education', 'Men in Nursing' and Leadership Within BAME Context presented by Visiting Professor Yvonne Coghill OBE.

We grow our postgraduate, doctoral and postdoctoral community by actively supporting students and academics to pursue further study and to engage in their programmes as researchers seeking to contribute to knowledge in their field of study. The expansion of the nursing and allied health educational provision has led to the recruitment of new staff and new opportunities to expand research in these areas which include: Operating Theatre Practice, Physiotherapy, Midwifery, Paramedicine and Occupational Therapy.

Staffing strategy

The University has a scholarship culture that underpins evidence-based teaching and translational research. The University requires that all job descriptions and person specifications for new appointments include research and publications and this now forms a key part of our promotion criteria. We actively employ and seek to recruit staff with MSc and doctorate level qualifications in nursing and allied health specialist areas. Additionally each school has been given an annual target for increasing staff engagement with research to promote scholarship activity ranging from developing early career academics to engage in research projects to supporting more experienced staff to pursue PhD and other relevant studies.

The Bucks Academic Framework (BAF) used in the appraisal process clearly identifies academic staff on a research track and associated developmental support. Aligned with this UoA, 9 academics are on the Education with Research track, including the 4 academics with significant responsibility for research in this submission. Recent appointments to Head of School and Associate Head of School both have doctoral qualifications and the Head of School experience as a Principal Investigator. The staffing strategy for the School of Nursing and Allied Health includes the future appointment of a research professor for nursing and an associate professor of research and innovation to support the growth of research and scholarly activity. The IHSC will implement a research strategy to include honorary appointments with research active clinical staff. In addition, processes to support healthcare professional's engagement in the Academic Career Framework will be developed.

Research in this UOA and access to sources of funding is supported and enabled through honorary contracts with NHS Trusts, for both educational and research activity. For example, Crouchman has a contract with Hillingdon Hospital 2020 (COVID activity) and Northwick Park Hospital; Addis has an honorary contract with Imperial College Healthcare NHS Trust). Such roles enable staff engagement in clinical research with the partner institutes, such as Addis' involvement in the study to improve dignity for older people in hospitals.

Developing researchers

As many academic staff join BNU directly from clinical practice, they are new to academic careers and research. Academic staff in this unit have been supported to undertake research degrees, either with a fee waiver within BNU or contribution to external fees and sabbatical periods to support writing up.

As outlined in the institutional statement (paras 3.5 onwards) BNU uses the principles of the Concordat to Support the Career Development of Researchers to underpin staff development for all academic staff. Our commitment to staff development is reflected in our Learning and Development Policy and supported by centralised funding. University career break and sabbatical policies are in place, for staff to manage personal circumstances or for dedicated



scholarly activity. Scholarly time is also agreed at a local level with line managers, according to expected outcome for the researcher such as publications. All researcher development opportunities available to research students (see below) are available to staff. Additional ECR-focused activities include research funding, grant camps, project management, getting published and being an entrepreneurial academic. Staff are supported to attend external sector events (eg UKRIO). Staff have access to research supervisor training through Staffordshire University and Epigeum's online suite, and workshops led by the UK Council for Graduate Education. Staff on fixed-term, research-only contracts are eligible for all development opportunities open to other staff and PGR students, including funding for professional development and conference attendance.

During the REF period, specific support mechanisms within this UOA have included a monthly writing support group and dedicated mentorship from Professors Procter and Martin. New seminar programmes and support groups are being implemented within the new Institute for Health and Social Care and through the Bucks Health and Social Care Academy.

Staff who completed PhD or professional doctorate qualifications in this REF period are as follows:

- **Dibley, L.** (2015) A hermeneutic phenomenology study of the experience of stigma in people with Inflammatory Bowel Disease. BNU
- Williams, J. (2016) A qualitative exploration of the transmission of knowledge and skills by specialist stoma care nurses to facilitate the needs of patients adapting to a newly formed stoma. Kings College London
- Nathoo, S. (2017) An exploration of the concepts of compassion in the care of older people amongst key stakeholders in Nursing Education: pre-qualifying nursing students, nurse educators and clinical mentors a Qualitative study. University of Portsmouth.
- Crouchman, C (2019) An Exploration Of The Views, Beliefs And Experiences Of UK Nurses And Midwives About Responding At Out Of Work Situations Where First Aid May Be Required. BNU
- Harrision-White, K. (2020) An investigation of student nurses experience of learning within the clinical learning environment. Kings College London
- Wright, J (2017) Alcohol, transitions and the university 'bubble': an ethnographic case study. BNU

Support for Postgraduate research students

As outlined in the institutional statement (paras 3.15 onwards), support for postgraduate research students and staff researcher development is delivered centrally. All students have access to a range of online learning. This includes Epigeum's online research toolkit (with modules on methods, transferable skills, ethics and integrity) and from 2019, the UEA PGR online programme, covering methods, academic writing, teaching skills and completing a Doctorate. Monthly newssheets are disseminated, summarising local and external events and opportunities. GuildHE Research provides additional development and networking opportunities for both students and staff, including a 2-day annual summer school, academic writing month and a virtual doctoral training network.

All PGR students are required to use the Vitae Researcher Development framework planner, with individual support for their researcher development plan. As most of Bucks' PGR students are mature and part-time they are supported with a range of flexible opportunities. They also have access to resources provided by their validating partner who awards their degree. Enhanced researcher development and research culture for PGR students has been a key focus during the period, with success evidenced in PRES2020 overall satisfaction scores, with 85% of Bucks students being satisfied with their programme, 5% higher than the global benchmark and



substantially higher than the previous 2 years (67%, 58%). All research students can access postgraduate taught modules, in addition to dedicated workshops such as Quirkos, NVivo and academic writing.

Students are encouraged to disseminate their research with dedicated PGR conferences held two or three times per year. University funding is available to support dissemination at national and international conferences during the REF period. They are also encouraged to publish their work through conference proceedings and in journals and our biannual newsletter, "Research Notes". PGR students aligned to this UOA were supported to disseminate outcomes at conferences and professional practice events. Crouchman was supported to attend the International Nursing Research Conference in 2018 and Nathoo to attend World Nursing Congress 2019. Morrin was supported to present at the European College of Sports Science (2017). Sirpath was funded to present at the International Intraeptihelial Neoplasia Society conference in Georgia (2015).

Potential research students are encouraged and supported to apply for external funding sources to support their studies. In addition, during the REF period, one full university-funded research studentship was offered to a student aligned to this UoA as a cross-disciplinary project between public health and exercise science. The project examined the development of a self-regulated isometric handgrip training protocol and its effects on blood pressure in pre-hypertensive and hypertensive adults (Morrin). A newly created Vice-Chancellor's studentship scheme will fully fund up to two studentships per year from 2020-21 to encourage recruitment of full-time students and enhance PGR research culture.

Eight doctoral students completed during the REF period within this UoA. These included the three staff with details given above (Dibley, Crouchman, Wright), three PhD students (Matthew, Guo and Leah) and two Professional Doctorate students (Sirpath, Seraj) as follows:

- **Matthew, D** (2014) The relationship between HRV (rMSSD) and other cardiovascular risks in healthy participants with chronic heart failure using novel instruments.
- **Guo, L**. (2015) Analysis of cardiovascular risk factors and effectiveness of interventions in UK health services.
- Leah, V. (2019) Maintaining my relative's personhood: A mixed method design.
- Sirpath, A. (2020) Perceptions and Experiences of Patients and Clinicians in Anal Cytology Screening and High Resolution Anoscopy: A Hermeneutic Phenomenological Study.
- **Seraj, A.** (2019) *Pedagogic strategies to support practice learning in specialised clinical learning environments: A Grounded Theory Approach.*

Equality and diversity

BNU strives to create a work and study environment which is not only free from any form of discrimination but actively celebrates and values diversity. We are committed to equal opportunity across all the 'protected characteristics' defined in the Equality Act 2010. Equality, Diversity and Inclusion (EDI) underpins our values and influences everything we do. All staff recruitment and to research posts are undertaken in line with these values and with adherence to the BNU policies on equity and diversity.

All existing and new staff are required to undertake training on equality and diversity as well as unconscious bias training. Bucks commitments and accreditations are outlined in the institutional statement. Bucks has the following accreditations and commitments:

- 'Disability Confident Employer' accreditation from Jobcentre Plus
- Mindful Employer charter signatory
- Time to Change pledge
- Member of Advance HE, running the Aurora programme for women's leadership development in HE



- Commitment to Race Equality Charter, working towards application for the award in 2020.
- HR Excellence in Research working towards application
- Leading development of a HE sector pledge to support access to HE for Gypsy, Roma and Traveller communities.

All processes and procedures outlined in the Bucks REF Code of Practice adhere to and follow guidelines and best practice recommendations in the following institutional policies and guides:

- Staff Disability policy
- Transgender policy
- Maternity / Paternity / Shared parental leave policies
- Equality analysis guide
- Special leave policy
- Dignity at work bullying and harassment

All research support facilities, resources and internal funding are open to all staff, irrespective of circumstances, contract hours and periods of absence. As with development activities for PGR students, our focus on providing a range of flexible development resources accessible on-site, remotely and as recorded/ self-paced online learning widens access to part-time staff and staff who are not always able to be on site. Access to such resources, both internally and in the sector, has increased during COVID-19.

There is a diverse and vibrant team across nursing and allied health, and research is undertaken in collaboration with under-represented groups. We pride ourselves in being an institution that promotes widening participation supporting first generation graduates and growing early career academics and clinical colleagues to pursue research studies. For example, the team are working with one of the partner NHS Trusts to explore the disproportionate representation of people of black African and Caribbean heritage in crisis pathways and under Mental Health Act.

BNU established the Black, Asian and Minority Ethnic (BAME) Staff Network in 2020. The aim of our network is to provide a platform where members can learn about diversity in an inclusive and open environment, which promotes connectivity and personal growth. We believe in celebrating difference, raising awareness and promoting opportunities for attracting a diverse group of staff and students. The BAME Staff Network has a dedicated work stream for research. The aim of this workstream is to promote and signpost members to research opportunities, funding and training to empower more BAME staff to undertake research interests within and outside the organisation. This is to be achieved by:

- Dedicated time and space for members to gain knowledge and skills on writing for publication
- Providing support for writing proposals for funding streams
- Opportunities for shared research projects across teams and communities
- Conference opportunities, seminars and forums for sharing good practice and learning
- The establishment of a research mentoring scheme

3. Income, infrastructure and facilities

Income

Much of our research income is derived from undertaking work locally for the NHS, social services, local authorities and charities. Examples of income generated include:

• Mental Capacity Act and Deprivation of Liberties (CWHHE, Martin/Procter) £191k



- Dignity in Health and Social Care (Burdett Trust, Procter / Addis, total £176k led by Imperial with Kings College London).
- Managing pressure ulcers (Health Education NW London CEPN, Procter £118k; Florence Nightingale Foundation, Newham; Imperial College Health Partners, Procter £47k)
- Sexual experiences post spinal injury (Stoke Mandeville Masson Research, Coggrave) (£61k). Funded by Stoke Mandeville Masson Research awards, this study investigated the sexual experiences of women with spinal cord injury to inform future advice and therapy given to patients.
- Future Care Training Needs Analysis of the Out of Hospital Workforce across Thames Valley (Schaub, Smith, Addis, Bridges, and Griffiths L. (50K) This project was commissioned by the Oxford Academic Health Sciences Network (OAHSN) and Health Education Thames Valley (HETV). They sought further clarity about the training needs of the community and primary care workforce as they move towards providing more integrated care, and more care in the community.
- Scoping of Training Needs to support Integration of Services & Urgent Care Practices in North West London (Griffiths/Addis; Health Education NWL, £66k). The overall aim of the scoping exercise was to establish the education and training needs of the interdisciplinary team to support the integration of services. The integration was to deliver the 'Shaping a healthier future' programme in order to improve NHS services for the population of North West London. This programme was a key priority for the eight CCGs, which comprise of GPs from NW London's eight boroughs.

Infrastructure

Bucks QR funding to support research was in the region of £225k per year during the REF period. This is utilised to supplement staff allocated time to undertake research activity, a central administrative research unit and development and dissemination initiatives. All staff have dedicated time to undertake research, scholarly, enterprise or professional practice activity of 550 hours per year. The activities undertaken and expected depend on selected BAF track as outlined above and School priorities.

The strong legacy left behind from the researchers that have left BNU since REF2014 underpins the research culture and has attracted new early career researchers to the University. In addition, the ongoing alliances with NHS organisations and collaborative partnerships provide a firm foundation to support research activities.

A research forum has been established for nursing, midwifery and allied health to provide peer support and advice for early career researchers, with opportunities to share their ideas, gain support and present their research for feedback. This has enabled staff to engage in projects at different levels and develop their research careers. The current projects include;

- A study exploring the experiences of final year pre-registration nursing students working on the frontline during the first wave of the covid-19 pandemic
- Effects of a short-term teaching intervention to improve first year nursing students' engagement with medical terminology.
- An evaluation of the Peer Enhanced E-Portfolio (PEEP) in a Mental Health Pre-Registration Nursing Programme in Higher Educations. This is a funded project by Health Education England.
- Westminster learning Review into the experiences of rough sleepers and access to mental health services. This is funded by one of the School's partner NHS Trusts – Central and NW London NHS Foundation Trust.



- Exploration of the disproportionate representation of people of black African and Caribbean heritage in crisis pathways & under MHA [1/2]. This is funded by Central NW London NHS Foundation Trust.
- Strengthening skills to protect health in care homes by use of RESTORE2 physical health screening tool. This project has led to a funded PhD opportunity for staff through partnership working with The University of Oxford, the NIHR Oxford and Thames Valley Applied Research Collaboration, Institute of Health and Social Care and Buckinghamshire Health and Social Care Academy

Additional resources and facilities are available through Bucks affiliation with GuildHE Research, the research consortium for smaller and specialist universities and colleges. This affiliation greatly enhances Bucks research environment, through access to a range of training opportunities, sector support, networking and partnerships. In addition, it enables access to a range of resources through framework agreements which would not otherwise be financially viable, including e-prints repository, Vitae, the Vitae Researcher Development Framework licence, UEA PGR programme and Vertigo Ventures Impact tracker.

Additional sector support is achieved through professional memberships, such as the UK Council for Graduate Education providing support for research supervisors. As a member of UK Research Integrity Office, staff regularly attend the UKRIO annual conferences and webinars.

During the REF period, staff were able to competitively apply for internal funding, as seed project funding or to support completion of a research degree. Four staff received seed funding to support research activities aligned to this UoA, representing a total investment of over £90,000 for research and staff PGR studies related to this unit. Studies completed included: a systematic review of compassion and its implications for professional practice in healthcare; an examination of the impact of innovation on community health professionals clinical practice; and a study undertaken in collaboration with Imperial College Healthcare NHS Trust exploring nursing practice for patients at risk of falls.

Facilities

Researchers and students have access to world-class fully equipped clinical skills labs/specialist equipment with state of the art video simulation facilities. In addition to the existing nursing-dedicated facilities at the Uxbridge campus, facilities have been expanded during the REF period, with the addition of operating department practice and physician associate simulation suites in High Wycombe. Investment over £1.7m in Aylesbury campus facilities for nursing training includes high-fidelity simulation suites and enhanced teaching and learning technologies.

4. Collaboration and contribution to the research base, economy and society

Collaborations, networks and partnerships

We have an extensive range of productive collaborations and partnerships. We have had a professorial partnership with Imperial College Healthcare NHS Trust since 2009, held by Procter from 2013. This has been successful in initiating research into improving the patient experience of hospital care and in supporting nursing staff in the Trust to apply for fellowships from the National Institute for Health Research (NIHR). Procter was working with the Biomedical Research Centre at the Trust to establish a funded career pathway for nurses, allied health professionals and pharmacists to support promising academic clinicians from qualification through to post-doctoral research. Continuing this partnership, Addis has an honorary post at the Trust, in addition to links with Kings College London for completion of the Dignity in care research.



Addis is networking with several Turkish Universities (e.g. Erasmus staff exchange with Koç University Istanbul as well as key speaker on several international nursing conferences that hosted by different universities (Koç University, Mugla University, Sakarya University) on evidence based practice, mentorship.

In addition to her role at Imperial College Healthcare NHS Trust, Procter was clinical research network lead NW London for health services research (CRN NIHR). She is also a member of the board of trustees for the General Nursing Council Trust for England and Wales. GNCT seeks to promote the development of nursing for the benefit of society. This is achieved by funding research into nursing policy and practice. The Trustees are also committed to advancing the education of student nurses and further education of Registered Nurses.

Martin had a joint post with the West London Mental Health NHS Trust. He also worked with the National Perinatal Epidemiology Unit (NPEU) at Oxford University. This multidisciplinary group comprises statisticians, epidemiologists, psychologists, psychiatrists, and health economists. His work with this group has contributed to the development of a number of health measures. His outputs are defined by interdisciplinary working, with a focus on the interface between physical and mental health requiring interdisciplinary collaboration.

Martin has extensive international collaborations in relation to integrative physical-mental health care. Supported by an EU grant, he was involved in establishing a collaborative centre for a Family Health Nursing project comprising 14 European partners. He also has extensive collaborations in Hamburg and Hanover including PhD students and University partners. His academic network has extended worldwide through translation, validation and use of the Birth Satisfaction scale (see impact case study), with new collaborators in the US, Australia, Greece and Iran.

Trout works with colleagues at the Universities of Ulster and Salford looking at nurses' use of the Glasgow Coma scale. As part of Brodie's team, from 2014 Henderson worked with the Cardiology Unit at Wycombe General Hospital investigating the effects of concurrent exercise training on exercise tolerance, muscle architecture and metaboreflex activity in patients with heart failure.

Wider activities and contributions to the research base, economy and society

Trout was a member of the British Association of Neuroscience Nurses Board from 2010-2017, attending meetings and conferences representing BANN and UK neuroscience nurses. She has also been lead organiser for the 2017 BANN conference in Oxford attended by over 400 delegates and represented BANN at the European and Worldwide umbrella networks. In her BANN role, she has been part of working parties authoring policy documents such as safe staffing guidelines for neuroscience patients. She was a member of the working party for the international group which developed an evidence-based policy document for healthcare professionals and policy makers on the need to prioritise brain health published in 2019. (Time matters: A call to publicize brain health). The report presented an expert, evidence-based position for policy recommendations that encourage individuals to participate actively in prioritising their own brain health. It also challenges policymakers, researchers, funding bodies and healthcare professionals to collaborate in planning for the healthcare structures of the future.

Williams is a member of the Association of Stoma care nurses (ASCN UK) and is involved in the development and evaluation of a risk assessment tool in order to prevent parastomal hernia formation.

Addis was invited to lead a workshop for `assessment in practice` and give a presentation about good practices in nursing education in the UK at the International Nursing Conference in Turkey, 2019. In 2018, she was invited to talk about the changing and enhancing nurses' role in the UK



at the Eastern Mediterranean University, Northern Cyprus. She was invited to speak at the 5th International Congress of Current Approaches in Nursing, Turkey on evidence-based practice and Nursing in 2018.

Harrison-White was the account manager with Bucks Healthcare Trust, working with them at a strategic level, embedding current business and identifying and developing new areas of collaboration between the Trust and the University, including development of the Bucks Health and Social Care Academy.

Editorial boards

British Journal of School Nursing - Editorial board member (until 2019; Hayward) British Journal of Child Health – Editorial Board Member (since 2019 and current; Hayward) Gastrointestinal Nursing Journal, consultant editor (Williams) British Journal of Nursing and Gastrointestinal supplement (Williams)

Journal reviewers

Mark Allen journals reviewer (Hayward; Williams) Comprehensive Child and Adolescent Nursing journal (Hayward) Nurse Education Today (Addis) International Nursing Review (Addis)