

Institution: Coventry University
Unit of Assessment: 3
<p>a. Context Improving health and care across the lifespan The researchers within this Unit are multi-disciplinary, and form three research groups: A: Health and Wellbeing, B: Studies in Sexual Health and C: Biomolecular Therapeutics (see REF5 for further details). The main forms of impact, and associated beneficiaries, of the Unit's research are:</p> <ul style="list-style-type: none"> • health and welfare, with improved clinical outcomes and wellbeing for service users, • society and culture, with increased uptake of scientific training by members of the public, • practitioners and service providers, with adoption of best practice. <p>The Unit's research also has impact on:</p> <ul style="list-style-type: none"> • public policy and service commissioners, with evidence of changes to guidelines and commissioning arising from interventions, • commerce, through commercial exploitation of evidence-based research.
<p>b. Approach to impact The development and recording of impact is inbuilt within the Unit's rigorous, structured intervention mapping approach, which incorporates stakeholder participation to develop and evaluate theory-based health interventions.</p> <p>Building relationships with key user groups to develop impact from research Research in this Unit is driven through partnership working with end-users, service providers and commissioners, in the design and management of research. We focus on co-creation of health behaviour interventions, co-research and co-delivery with service users and practitioners as partners (see REF5). Strong relationships throughout the research process improve the impact of our research with key user groups, including:</p> <p><u>Service Users</u>: Our longstanding patient and public involvement group (the Research Support Volunteer Programme) receives training in research methods and governance, so increasing public uptake of scientific training. The group is involved in all aspects of our research, from defining the research question through to implementation, so as to maintain the service user perspective as core. Service user input is key in the development of our successful self-management interventions, which improve quality of life and positive mental wellbeing (AT1,2,3; GF1,4; case study 3.3).</p> <p>Coad and colleagues work with parents, children and young people, using arts-based inquiry, to improve care of infants and children with complex care needs. The impact of this work is demonstrated by testimonials from charities, and is highlighted through local newspapers and radio.</p> <p><u>Service Providers</u>: The Studies in Sexual Health group has ensured that their interventions are included in service provision (e.g. parenting programmes across Coventry and Warwickshire) by building on existing links within Public Health teams (case study 3.1).</p> <p>Close working with UK-wide NHS Trusts, and health providers abroad, has supported the uptake of our research into clinical and professional practice, for example the adoption of the incremental shuttle walking test in the Pulmonary Rehabilitation Toolkit of the Australian Lung Foundation (SS1,4; case study 3.2).</p> <p><u>Service Commissioners</u>: Turner has worked closely with Macmillan Cancer Support to influence the planning and delivery of their services across the UK (case study 3.3). The Help to Overcome Problems Effectively [HOPE] programme is included in the updated vision (2012) for the National Cancer Survivorship Initiative.</p> <p><u>Public Policy and Services</u>: Williams' research (SW1), as part of the team developing the taxonomy of behaviour change techniques, was included in the House of Lords Science and Technology Select Committee inquiry into behaviour change. This taxonomy is improving the specification and replicability of behavioural interventions. Coad's (JC3) study with practitioners, parents and their children who had complex care needs informed policy and practice for children's nursing services (http://tinyurl.com/pyf3hnm).</p>

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Commerce: The incremental shuttle walking test (**SS1, case study 3.2**) has been included as an endpoint in clinical trials undertaken internationally by five pharmaceutical companies. Over 350 people have been trained to conduct the test.

Evidence of follow-through from these activities to identify resulting impacts

With JISC funding (£15,000) we developed a new research information management system, Embedding Research Impact at Coventry (ERIC), which uses a structured tool to support the identification of impact measures and evidence collection. ERIC was piloted in this Unit and is now integral to our research information management system. For example, ERIC supported the strategy for the evaluation and roll out of the HOPE intervention (**case study 3.3**), ensuring the capture of service user benefits and other impacts, such as influence on policy. ERIC has now been extended to all parts of the University.

Support to enable staff to achieve impact from their research

Larger research projects are given **marketing and communications support**, including media training for researchers. In addition, media scanning services and an external PR company detect where the Unit is being cited, and identify opportunities to contribute expertise for news articles, interviews or thought pieces. We have a dedicated Social Media and Web Content Editor who supports the Unit in the active dissemination of research, commentary and thought leadership through blogging and Twitter. One example was at the launch of the serious game from the **Studies in Sexual Health group (KB3)**, PR:EPARe (Positive Relationships: Eliminating coercion and Pressure in Adolescent Relationships) <http://covresearch.wordpress.com/tag/sash/>.

We have supported staff to present evidence to Select Committees and other bodies addressing issues relevant to our research expertise, so increasing the visibility of the Unit's research. For example, **Maddock** was invited to join a working group of the Medicines and Healthcare Products Regulatory Agency (MHRA) and the National Centre for the Replacement, Refinement and Reduction of Animals in Research (NC3R). The Centre evaluated human tissue-based approaches, to reduce the use of animals in safety assessment.

We use these resources in a multi-faceted strategy to raise the profile of our research with our key partners. This includes encouraging the internationalisation of findings by supporting international exchange. For example, we funded visits by International Visiting Professor Qiu (Zhejiang University) which has resulted in a joint study to embed **Wallace's** research on extending duration of breastfeeding into Zhejiang province in China.

Staff and Partner Development: Our extensive researcher development programme includes workshops on: project management, working with industry, effective networking, impact identification, and consortium formation. Researchers are actively encouraged to join practitioner and professional groups or networks which improve the visibility and uptake of research. For example, **Singh** was an Assembly Member of the European Respiratory Society, which has led to international research collaborations and dissemination, including citation of her research in professional guidelines for best practice.

Internal Funding Support: The Unit funds schemes to support the development of relationships with end-users with the aim of increasing impact (see **REF5**). These include Applied Research Fellowships which provide up to £10,000 to fund secondments to establish internationally excellent long-term partnerships. For example, **Duncan** was supported to collaborate with Professor Mota (Porto) and their research findings have been used to improve activity and reduce obesity in school children in Porto.

Project Management and Impact Support: The University's Business Development Group provides project and financial management support for all research and knowledge transfer activities. For large scale projects, dedicated project management support is provided to manage the activity and make use of ERIC to collect the impact post-project. For smaller projects, the Business Development Group monitors deliverables and deadlines and supports the PI in using ERIC to identify, collect, record and evaluate the impact of their project.

Use of institutional facilities, expertise or resources in undertaking these activities

HEIF 4/5 Support: The University is one of only 23 institutions that receives the maximum funding in recognition of its R&D work with external organisations. The University's use of HEIF supports one of the largest and most successful University-Business partnership units in the UK (supporting 9,000+ SMEs and 500+ larger enterprises nationally and internationally). Additionally, there is full

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support for the identification and retention of Intellectual Property Rights (IPR) from our research. This is shown within this Unit by support to licence **Turner's HOPE** programme to Macmillan Cancer Support.

Entrepreneurial Support: The University uses some of its HEIF funding to contribute to regional Venture Capital consortia which fund academic spin-outs from universities, for example, Health Behaviour Research Limited (<https://www.healthbehaviourresearch.co.uk/>) commercialises breastfeeding support and education interventions developed by **Wallace** and colleagues. The company has been successfully trading since 2006. More recently, support has been given to **Maddock** to file priority patents to support the formation of a new university spin-out company - InoCardia (Company No. 08573417).

Co-location of End-user and Researchers: The University has co-invested £12 million over the last six years with external funders such as HEFCE, Advantage West Midlands, ERDF and others to build facilities on our Technology Park for researchers and companies to be co-located. Examples include: the Health Design and Technology Institute (HDTI), which brings together health service users and providers with designers and manufacturers to assess acceptability and feasibility of new products and services for people with long term conditions and the elderly; and the Serious Games Institute (SGI), an internationally renowned leader in new media technologies that can be used for novel health interventions. For example, SGI worked closely with the **Studies in Sexual Health** group on a game-based learning intervention (**case study 3.1**).

c. Strategy and plans

Our strategy for impact involves the systematic planning, promotion and recording of impact by embedding ERIC within Faculty and University research approval systems. This ensures all researchers automatically embed impact throughout the lifespan of their research projects. Building on our approach to impact, and in order to increase the impact of current and future research, the Unit proposes to:

- Strengthen current and develop new partnerships with external organisations to embed research findings within practice. This goal will have both an internal and external strategy: 1) to continue to support staff to work within NHS settings and to take on roles within professional associations; 2) increase links with research networks to support allied health clinicians to undertake research with us – so improving partnerships and raising the potential for the embedding of research into practice, while increasing research capacity in the NHS.
- Double the number of service users to the Research Support Volunteer Programme and provide training for them to support a wider range of research (e.g. for the Biomolecular Therapeutics team).
- Strengthen international links to improve the culturally specific uptake of our tools and interventions in international health systems for increased impact. For example: funding for international visits and visitors to collaborate on embedding **Wallace's** breastfeeding research in Zhejiang Province, China. It is recognised that impact may not occur immediately, so we will implement a review annually to capture impact from these funded collaborations.
- Encourage researchers to use social media, web and mobile interfaces to increase the uptake and impact of our research. For example, researchers will be encouraged to upload research web-applications onto systems such as NHS Local (a website of freely available resources for both service users and NHS care providers) to raise the profile of our research, e.g. Coventry University Depression and Anxiety Support (CUDAS: <http://learning.nhslocal.nhs.uk/courses/careers/allied-health-professionals/cudas-decision-support-tool>).

d. Relationship to case studies

Examples of the relationship between the case studies, and our approach to achieving impact, are highlighted throughout this document. Briefly, both **case study 3.1** and **case study 3.3** used a structured methodology in the intervention development, which ensured that impact was considered early. In her **case study 3.2**, **Singh** makes full use of her active membership of clinical networks and professional associations to promote uptake of the outcome measures for which she has developed the evidence base. These case studies also exemplify the Unit's approach to partnership working with stakeholders to enable future impact.