

Institution: University of Bedfordshire**Unit of Assessment: 3 - Allied Health Professions, Dentistry, Nursing and Pharmacy****a. Overview**

The submission to UoA3 incorporates researchers from three main groups (health, health psychology and biomedicine) over three research institutes (IHR, IDOP and iBEST). It brings together a team of researchers who are committed to real-world health research, providing information which has influenced policy and practice at national and international level. Overall, we form part of a network of ten research institutes across the university.

Institute for Health Research (IHR) (www.beds.ac.uk/research/ihr)

IHR was launched in 1994 and is committed to carrying out real world research, providing information which can influence policy and practice.

The primary aims of the IHR are:

- To engage in collaborative research locally, regionally, nationally and internationally.
- To create research partnerships with purchasers and providers of health care, with the professions, industry and the independent sector.
- To promote and co-ordinate health-related research across the University.
- To enhance research skills in the community through the provision of quality educational programmes.

The IHR has 3 main research groupings: Inequalities in Health; Public Health / Chronic Disease Management; and Healthcare Commissioning Research. IHR is also a partner of the National Institute for Health Research (NIHR) East of England Research Design Service providing advice and support to NHS and social care staff in developing research grant applications. The IHR is an accredited Training Centre for the Royal Society of Public Health.

Institute of Diabetes for Older People (IDOP) (www.instituteofdiabetes.org)

IDOP is a non-profit making, research and academic institution, dedicated to enhancing the health and well-being of all older people with diabetes and related metabolic illness.

IDOP's status, profile and programme of work have grown significantly since its formal recognition as a Research Institute in 2011. The Institute is now the leading voice in the UK in the field of diabetes and older people, and leads two major international initiatives.

Strategic partnerships have been established with a host of high-profile organisations, including the Department of Health, NHS Diabetes and Diabetes UK. The Institute is now actively forming links and partnerships with other key individuals and international organisations worldwide.

IDOP is a natural development in diabetes care following nearly two decades of dedicated diabetes research and policy making by key individuals led by Professor Alan Sinclair within the British Diabetic Association (now Diabetes UK), the Special Interest Group of the British Geriatrics Society, the St Vincent Declaration Diabetes Primary Care Group (the Older People's Group), and the European Diabetes Working Party for Older People.

IDOP's mission is two-fold:

- To enhance the quality of diabetes care for older people through new initiatives in clinical practice, audit, and research;
- To provide a forum for active discussion and debate between health professionals and scientists, and involve people with diabetes and their carers and families, in educational programmes which directly promote their health and well-being.

The Institute for Biomedical and Environmental Science and Technology (iBEST)

(www.beds.ac.uk/research/ibest)

iBEST is an interdisciplinary institute with two major research areas – Biomedical science and Environmental science. All academic staff in the Department of Life Sciences are affiliated to the research institute along with staff from other areas of the University with complementary research expertise and interests. Prior to 2011 the institute was known as Luton Institute of Applied Natural Sciences (LIRANS). In the RAE2008 all LIRANS staff were submitted to UoA17. Thematic research areas were restructured in line with the research expertise and ambition of newly recruited staff.

Researchers affiliated to the Institute have expertise in a range of areas that span cell biology,

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biochemistry, molecular biology and genetics, proteomics, and bioinformatics that are predominantly laboratory based.

Under the Biomedical Sciences theme researchers aim to improve our understanding of human physiology and to improve the diagnosis and outcome of patients suffering with chronic disease. The insights we gain will in turn be translated to develop new technologies and therapeutic strategies to improve preventative medicine and patient care.

iBEST's research efforts align to 2 thematic areas :

- (i) health and wellbeing, and
- (ii) disease and aging.

In this way, iBEST has a closely synergistic relationship to the research activity in its sister research institutes IHR and IDOP.

b. Research strategy

Although there was no submission to the corresponding health-related UoAs in RAE2008, the University's subsequent strategic review of research identified professions aligned to health as an opportunity for development. This plan included a number of significant elements:

- a) Strengthening the main health research group under IHR which included the growth of a research informed postgraduate curricula. .
- b) Launching the Bedfordshire / Hertfordshire Postgraduate Medical School with partner institutions as a means of supporting the further development of a high quality teaching and research environment.
- c) Recruiting research expertise in biomedical science to our campuses at Park Square Luton and Butterfield Park.

As can be seen in the rest of this submission, significant progress has been made as a result of this strategy within the current review period and three coherent and sustainable research groups have emerged.

Significant changes over the assessment period include a growth of the portfolio of externally funded research in areas of the research groupings. We have continued to develop recruitment, expand laboratory and simulation facilities and space for research students. We have secured funding from a spectrum of sources (NIHR, Pharma, DH, NHSBT, NHS Direct, POhWER, Kidney Research UK, Big Lottery Fund, etc). Our reorganisation of interdisciplinary research has created new collaborations, and grown our number of clinical research collaborations with the health service. International collaborations (section B2) have been stimulated by the provision of internal funding for staff travel. IHR staff are responsible for MSc Public Health/MRes teaching ensuring that research underpins teaching. The quality of the research informed international curricula for the MSc Public Health has been recognised by the Association of Commonwealth Universities who have awarded the IHR Commonwealth Shared Scholarships for the period 2012-2015. Since 2008, 2 additional Research Institutes – IDOP and iBEST – have been established to reflect the increase in research active staff. Research has continued in the existing IHR core themes, with collaborative developments created between the three research institutes in areas of Diabetes/Older People/Ethnicity; Patient Safety in Care Homes (funded via a NIHR RfPB Grant). These developments will be further embedded by the recent appointment of a new member of staff, Wilkinson, whose jointly funded post between IHR and IDOP establishes even greater synergy in research related to Diabetes/Older People/Ethnicity. Wilkinson was previously employed as a Research Fellow on the Diabetes/Renal Care Pathway Study (PI- Randhawa, funded by Kidney Research UK & Big Lottery Fund) and on the End of Life Care for South Asian Patients with Kidney Failure Study (PI- Randhawa, funded by Kidney Research UK & Big Lottery Fund).

Health's Psychology Consultancy and Training Unit (PCTU) was launched in February 2011 and is now well established. The PCTU advertises its consultancy and training opportunities via www.beds.ac.uk/ctu and 'Twitter'. Over the review period, the PCTU has provided specialist consultancy and training to several local authorities, Bedfordshire Probation Trust, Child and Adult Social Care Services, researchers, academics, and local businesses. The PCTU also makes a substantial contribution to the Making Research Count initiative which offers knowledge-based practice training in social work and social care to staff from 15 Borough Councils in the surrounding counties and extending to Borough Councils in London.

Our Generic Research Strategy for the next 5 years has 4 main elements:

i) Further increase postgraduate research student numbers.

Focused bursary schemes have helped to develop this strand in recent years (e.g. the University's Jubilee Scholarship scheme). Evidence of this can be found in PGR registrations across the groups which have risen from 12 in 2008 to over 50 in 2013. The development of high quality postgraduate taught programmes has also assisted in providing feeder routes for many of the current students. External funding has been secured to support Research Studentships that impact directly upon policy and practice – NHS Direct, POhWER, Steel Trust and NHS Blood & Transplant.

ii) Enhance our profile as centres of international research.

We continue to develop our research staff within these institutes and to stimulate local, national and international awareness of our output and expertise. One area of focus is research into diabetes and its complications in the elderly. Our research is supported by (a) selected audits of clinical practice; (b) national and international committee work including clinical guideline developments; (c) laboratory research to create model systems of human disease. Funding is ring-fenced to develop a PhD/Professional Doctorate programme in the area of diabetes and older people. Pump-priming initiatives are created in aspects of diabetes care including dementia, end of life, foot care, and care homes diabetes. A proportion of these funds are used to collaborate with major pharmaceutical companies and to train healthcare staff by the production of on-line and other educational tools. The programme of work is leading the field of diabetes and older people and includes:

- The first-ever National Care Home Diabetes Audit
- The MID-Frail study – major EU-research into interventions on older people with type 2 diabetes
- The pioneering health professionals attitude survey
- Joint partnership with NHS Diabetes in the Older People Diabetes Network (OPDN), which brings together best practice, research priorities and news.

IDOP has planned a series of 5 international seminars in 2013 in areas such as patient safety in diabetes, frailty; medical technology, care home diabetes, and an upcoming national seminar on diabetes and deafness have been organised (instituteofdiabetes.org/news/sign-up-for-latest-event-in-international-seminar-series).

iii) Stimulate external income streams

The significant success of IHR in research grant acquisition over the period has been joined by significant success within IDOP. The staff within iBEST have begun to add to this success and will be supported to develop this base further. External funding success within the Psychology centre will also be a focus for support as part of the strategy moving forward. Grant income has emanated from a range of prestigious sources – EU, Department of Health, NIHR, Big Lottery Fund, Diabetes UK, Kidney Research UK, etc. The IHR are currently co-hosts of the NIHR East of England Research Design Service and are also hosting a Research Fellow post for the Royal National Orthopaedic Hospital.

iv) Further expansion of the research groups and increased collaboration

The coherence of the groups has been developed. An emphasis will continue to be placed on recruiting research active to each institute and to expand the scope of our research outputs. A significant feature of the development strategy will be to further develop inter-group research programmes such as our recent programme to identify biomarkers of stress resilience.

In this way, the research strategy of IHR, IDOP and iBEST is firmly aligned with the University's strategic plan to achieve new levels of impact through research, innovation and enterprise building on our strengths in collaboration and partnership-working. In delivering these strategic objectives, our Research Institute Directors closely engage with a number of support mechanisms developed by the University such as our Business Development Managers, the Research Office, the Research Graduate School and our Innovation Director. Similarly, staff receive seed-funds at the Institute (e.g. for Research Travel and Exchange work), Faculty (e.g. Enterprise Activity) and University (e.g. Research Investment Programme) levels to develop and promote new ideas.

In summary, the University's strategic investment has enabled the research groupings within UoA3 to develop significant growth in staff and research student numbers. By increasing grant income,

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PhD completions, recruiting high-calibre research-active and investing in continuous professional development, the research environment has been considerably strengthened. This has enabled the University to establish vibrant nationally and internationally recognised Research Institutes that are at the forefront of research impacting upon policy and practice.

c. People, including:

i. Staffing strategy and staff development

The research groups within this submission continue to attract and retain top researchers. Since 2008 IHR has recruited six full-time and two part-time academic staff, a full-time research administrator, and two Research Fellows.

IDOP has a growing number of contracted Visiting Professorial and Senior Lecturer staff most of whom are engaged in research activity with IDOP (>6 research active). Several are national leaders in their field. IDOP also has a prestigious national Advisory Board which meets twice yearly and an International Advisory Board is being planned.

Considerable investment has been made to increase the academic staffing level in life sciences (e.g. from 5.2 FTE academic/research staff at the end of 2009 to 20 FTE academic staff to date). Academics with research expertise in environmental science are submitting to UoA3. All iBEST principal investigators are PhD qualified. In addition we currently have two post-doctoral staff and fractional administrative support.

Within the University, the faculties and the research institutes there is a thriving programme of staff development. In May 2013, UoB's institution-wide Concordat implementation plan was awarded the European Commission's HR Excellence in Research Award, which will be rolled out in the coming period. The Award is given to organisations which have a robust and public implementation strategy. There is a series of staff development events organised in liaison with the UoB Organisational Development and Training Unit (ODTU). Within each individual research group there is a forum for the discussion of staff research papers, book proposals, research projects, forthcoming conference presentations and other activities, and is designed specifically to develop the research competence of all staff in the team, and also of early career researchers. Staff regularly take part in the Research Seminar Programmes and the Postgraduate Research Forum described below.

All Health-related research staff and students have access to the NIHR East of England Research Design Services Training Workshops on bid writing, writing for publication, etc. Early career researchers have benefitted from awards of up to £10k as part of the University's "Rising Stars" initiative. More established projects can be considered for "Research Initiatives" awards of up to £20k.

Support for early career researchers – In addition to the ODTU Staff Development programme, early career researchers are supported and assisted in a variety of ways, for example:

Dr Erica Cook completed her UoB MSc Health Psychology in 2009 and took up a PhD studentship jointly funded by NHS Direct. Upon completion of the PhD, she was appointed as a Lecturer in September 2012. With support from other experienced members within the research groups, she presented a paper in Nigeria last year and 5 other conferences during her doctoral studies. She has been supported in submitting 4 journal articles as well as submitting bids for research funding to NIHR. Cook is currently Project Manager of an Evaluation of Tele-health and Tele-care services funded by Cambridgeshire Community Services.

Dr Chloe Sharp completed her UoB MSc Health Psychology in 2008 and took up a PhD studentship jointly funded by NHS Blood & Transplant. Upon submission of her PhD, she was appointed as a Post-Doctoral Research Fellow. With support from her Director of Studies (Professor Randhawa), she has secured funding from Cambridge University Hospitals Foundation NHS Trust to undertake a qualitative study of staff views towards Deceased Cardiac Death (DCD) Donors.

Dr Ali Tomlin completed a MSc in Neuroscience at the Institute of Psychiatry and took up a PhD at IDOP. Upon submission of her PhD, she was appointed as a Research Fellow in IDOP to work on the EU-funded MID-Frail study.

Equal opportunities – The University of Bedfordshire adheres to an Equality and Diversity Policy which covers all areas of employment, as well as an Equality and Diversity advisor. All research groups recruit, employ and promote staff strictly on the basis of their suitability for the work to be

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performed. To this end, we ensure that no applicant or employee receives less favourable treatment on the grounds of gender, transgender, marital status, disability, creed, colour, race or ethnic origin, age, sexual orientation, religion, faith or belief. All job applicants are asked voluntarily to provide the above information, which is not used for selection, treated confidentially and used only for monitoring the effectiveness of our Equality and Diversity Policy.

Staff links with external partners – The groups within this submission have a strong and productive policy of liaising with healthcare provider organizations, business, industry and the public sector to ensure maximum impact upon policy and practice. Examples of these are: NHS Direct, Kidney Research UK, Department of Health, NHS Blood & Transplant, Big Lottery Fund, Diabetes UK, NIHR, and Royal National Orthopaedic Hospital.

ii. Research students

PhD Recruitment – Since 2008 our recruitment of PhD students has been substantial, and stands at 50 in total over the current REF period, 10 of whom have completed, which has enhanced our developing national and international profile. In terms of funding, many of these students are funded by a range of international or national funding bodies. For example, IHR has been successful in securing matched-funding to support research studentships – NHS Direct, POhWER, Steel Trust, and NHS Blood & Transplant.

Research Culture – In line with our increased staff and PhD student numbers, the research culture within the groups has expanded its range and scope. Since 2008 IHR and Psychology have run an active Research Seminar Programme which meets regularly in term time and includes research-focussed talks and workshops from internationally renowned visitors, faculty and PhD students; see www.beds.ac.uk/research/ihr. More recently special joint research events have been held to further develop cross group research activity.

IDOP has delivered a series of 5 international seminars in 2013 in areas such as patient safety in diabetes, frailty, medical technology, care home diabetes. In July 2013 IDOP organised a national seminar on diabetes and deafness. (iBEST hosts an active series of staff presentations and host invited guest speakers. In 2014, we will host Professor Lord Robert Winston and Baroness Sally Greenfield.

In addition, our PhD students hold regular journal clubs and research forums in which they can practice presenting their latest research findings. Our PhD students are issued with a laptop from the Research Graduate School. Specialist courses on advanced areas of data analysis and research methods (e.g. systematic reviewing and meta-analysis, Structural Equation Modelling, Interpretive Phenomenological Analysis) are provided for all postgraduate research students. All research students receive specialist in-house tailor-made training workshops on SPSS and statistical analysis, and on other specialist software. Where necessary students that deal with animal studies receive training and hold personal project licences issued by the Home Office.

Central to the research environment for postgraduate students and staff is the Summer University Research Conference held in July of each year. This event encourages all research students to present posters and papers and provides an excellent environment within which research groups can share ideas and expertise.

Equal opportunities – Our student body is highly diverse, demonstrating our commitment to equal opportunities. Completed PhD students (2008 to present) consist of 6 full-time and 3 part-time students from 8 different countries (Malaysia, Greece, UK, Thailand and Japan). The ratio of male to female in this group was 2:7. Our current overseas PhD students originate from countries that include Georgia, Saudi Arabia, Australia, America, Poland, Jordan, Pakistan, Netherlands, Greece, Sri Lanka, Thailand, and Hong Kong. The male:female ratio is almost 1:1.

Research student links with external bodies – As mentioned, IHR has been successful in securing matched-funding to support research studentships – NHS Direct, POhWER and NHS Blood & Transplant respectively. More recently, IHR has secured funding for a full-time PhD Studentship from the Steel Trust to examine low birth weight and high rates of infant mortality among Pakistani women in Luton (commencing October 2013). In addition several recent students have sat on professional body committees such as the British Psychological Society's Postgraduate Forum.

Monitoring and support mechanisms – Supervisors meet PhD students regularly. Each PhD has a second supervisor who joins the supervisory meeting at least once a term. The Research

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Graduate School facilitates and ensures regular contact between supervisors and students through an online tool which stores records of learning and in addition provides a platform for regular interaction between supervisors, supervisees and the Graduate School. Research projects and transfers to PhD are approved by a formal process of academic review organised by the Graduate School. All students are encouraged to submit their thesis at 3 years and no later than 4 years.

Preparing research students for future careers – Postgraduate research students are recruited by research groups and institutes in cooperation with the Research Graduate School. They each receive a full induction at the Graduate School, over two days, covering all aspects of research practice, ethics, progression, the full research training programme, and so on. They then receive an individual briefing and induction at their home institute or group, and at the same time are inducted onto the University and institute's BREQ sites, which are Virtual Learning Environments acting as a central forum for communication and dissemination. As part of our efforts to develop research students' profiles and experience, staff encourage them to publish their research and present at conferences. Staff actively work with students in the preparation and publication of research articles. Examples of students who have published jointly with staff from this research period include Sharp, Clements and Cook.

d. Income, infrastructure and facilities

Research income – Across the groups within this submission research income has risen dramatically in the last few years. IHR (including IDOP) and iBEST have accrued over £2 million in research funding in total over the reporting period. In just the last 2 years, the research funding received has exceeded £800,000 indicating acceleration in this stream of activity. This demonstrates in financial terms the success of the research activity and recognition in national and international spheres. This income is used to further the groups' research aims so as to ensure greater impact and sustainability, investing for example in new staff as well as in staff and student development. Funding is competitively secured from a range of sources – NHS Direct, Kidney Research UK, Department of Health, NHS Blood & Transplant, Big Lottery Fund, Diabetes UK, NIHR, EU, Royal National Orthopaedic Hospital, etc.

Scholarly infrastructure – In the period 2008-14, the university increased its investment in learning resources for post-graduate studies in Health by 20%, with an investment in research in 2013 of £1.5 million. This figure includes strengthening access to and use of ICT in research. The university has invested an additional £1 million in each Faculty for 2012/13 and £1 million in research. IHR and IDOP have used this investment to appoint new senior and early career research researchers. For example, Dr Pappas joined IHR in 2013 to become Head of the IHR PhD School to strengthen the research training and skills support to research students, as well as strengthen the IHR's work on integrated care.

Organisational and operational infrastructure supporting research – Across IHR, IDOP, and iBEST there are dedicated and hot-desk workspaces for our PhD students. Since 2010 the University has committed over £1.5 million to improving laboratory facilities at the Park Square campus and developing state-of-the-art simulation facilities at Butterfield Park campus.

In 2013 the new £30 million postgraduate and research centre was completed providing state of the art teaching and seminar spaces, as well as creating a hub for postgraduate activities. Organisational support for PGR students is also provided by the RGS.

Specialist facilities – The University has made significant investment in developing both the infrastructure and core facilities required to develop and sustain research in biomedical science and healthcare practice. Recent capital equipment purchases include:

- a. Leica SP5 confocal microscope system
- b. Olympus BX65 fluorescence microscope system
- c. real-time PCR systems
- d. GE healthcare IN cell analyzer
- e. several HPLC systems
- f. flow cytometer
- g. 80°C freezers and cryostorage tanks
- h. Healthcare simulation centre.

Such core items of equipment enable research staff and students to embed a range of current and emerging research technologies within their research strategy. In addition, we are currently in

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discussion with local bioscience parks (Stevenage Bioscience Catalyst Open Innovations Campus and the Colworth Science Park, Bedford) to secure research laboratory space for projects that show commercial promise and could attract start-up capital funding. Within Health Psychology there are extensive laboratory facilities supporting teaching and research. There are 9 individual research cubicles as well as 7 large laboratories including a biological and cognitive laboratory with Powerlab facilities. In addition to these there is a TV Studio and Multimedia Editing Suite and a human interaction laboratory with 2 way mirror. Specialist research equipment includes a static Eyelink 1000 plus eyetracker, as well as mobile lviewETG eye tracking glasses.

e. Collaboration or contribution to the discipline or research base

Wider influence or contributions to the discipline – The IHR hosts the Bedfordshire hub of the East of England Research Design Service (RDS) which receives core funding from the NHS National Institute for Health Research (NIHR) to enhance research and development in primary care and NHS Trusts in Bedfordshire, from helping those just beginning to take an interest to supporting those who regularly undertake research, to apply for NHS research funding. The Royal National Orthopaedic Hospital have also awarded the IHR funding to host a 3-year 0.5 FTE Research Fellow in Health Services Research post (commenced October 2013) to develop collaborative externally funded research bids.

IDOP is founded on nearly two decades of dedicated diabetes research and policy making by key individuals led by Professor Alan Sinclair within the British Diabetic Association (now Diabetes UK), the Special Interest Group of the British Geriatrics Society, the St Vincent Declaration Diabetes Primary Care Group (the Older People's Group), and the European Diabetes Working Party for Older People.

IDOP has developed significant partnerships and collaborations with all the key institutions and organisations involved in UK diabetes care including NHS Diabetes, Diabetes UK, European Diabetes Working Group for Older People, Age UK, Royal College of General Practitioners, Royal College of Nursing, and the European Commission.

IDOP has also been involved in several major national and international collaborations:

- National Guidance on care Home Diabetes
- National End of Life Diabetes Care Strategy
- National Diabetes & Dementia Best Clinical Practice
- National Guidance on Management of Hypoglycaemia
- National Guidance on Enteral feeding in Diabetes
- National Guidance on Hyperosmolar Hyperglycaemic State
- European Diabetes Working Party for Older People (EDWPOP) – international guidelines for type 2 diabetes
- IAGG-EDWPOP- International Expert Group – Position Statement.

In iBEST, our academics co-ordinate and contribute to collaborative research projects that focus on areas of kidney disease, cancer and infection. Expertise in cell biology, biochemistry, computational biology and proteomics underpins all projects.

Participation in peer-review process and editorships – Staff across the research groups are significantly involved in all aspects of this element, for example:

Kinman Editorial board member of the APA Journal the International Journal of Stress Management. Editorial board member of the International Journal of Coaching. Book review editor for the journal of the European Academy of Occupational Health Psychology. Member of the ESRC Review College. Advisor to the MS Trust and the MS Society

Randhawa Vice-Chair of the NIHR East of England Research for Patient Benefit Funding Committee.

Collaboration with external bodies and responsiveness to national & international priorities initiatives – Randhawa's work in IHR has informed both policy and practice and has also led to his appointment to key national working groups reflecting both the research impact and collaborative approach to his work:

- Chairman, Transplant 2020 Stakeholder Group (Current)
- Authority Member, Human Tissue Authority Board (Current)
- National member, UK Donation Ethics Committee (Current)

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- Co-Chairman, European Working Party on Public Issues in Organ Donation (Current)
- National Member, Black and Minority Ethnic Transplant Alliance (Current)
- NICE Evidence Update Advisory Group – Organ Donation, National Institute for Health and Care (current)
- Chairman, End-of-life care for Advanced Kidney Disease Project Board, Department of Health
- National advisory member, Minister of State for Health Services' Commissioned - Organ Donation Taskforce, Department of Health
- National advisory Chair, Minister of State for Health Services' Commissioned - Organ Donation Taskforce, Department of Health, sub-group – Cultural issues and consent models
- National Member, NICE Guidelines Development Group – Organ Donation
- Non-Executive Director, UK Transplant.

Professor Randhawa is regularly invited to comment on organ donation policy issues by the media and has appeared on a range of media such as BBC Newsnight, Radio 4, BBC Radio 5 Live, Islam TV Channel, Bangla TV Channel, Sangat TV (Sikh Channel), Hope TV (Black Christian Channel).

The creation of the Older People's Diabetes Network in England by IDOP/NHS Diabetes (DH) led by Prof Alan Sinclair as National Clinical Lead for Diabetes in Older People has stimulated regional activity in multiple areas such as care home educational strategies, hypoglycaemia avoidance, enhanced medication reviews in the community, and audits of diabetes care. The work around the mini-cog assessment tools may lead to national implementation of this in routine diabetes care and the work around hypoglycaemia avoidance may lead to a national recommendation in this area. (2010 – ongoing). The beneficiaries of these research outputs have been patients and carers with diabetes, medical and other charities such as Diabetes UK and Age UK, government departments such as the DH—linked NHS Diabetes, professional organisations such as the Association of British Clinical Diabetologists (ABCD) and the British Geriatrics Society (BGS), and Royal Colleges – General Practitioners, Royal College of Nurses (RCN). International organisations that have benefited include the IAGG and IDF. The range of benefits include: highlighting special and often neglected clinical issues including lack of equity, emphasising the need for reviewing patient-related goals in varied clinical settings, and raising the awareness of the need for a greater investment/focus in care homes diabetes in order to enhance diabetes care. Key collaborations have involved the University of Warwick (Prof R Gadsby), Royal Holloway College, London (Prof Clare Bradley), University of Cardiff (Prof A J Bayer), and University of Toulouse (Prof B Vellas). The indicators of our impact have been the development and emergence of national and international clinical guidance and guidelines which have been multiple stakeholder collaborations and include DH publications. Dissemination of key findings with recommendations has been through the NHS and social care organisations, via medical charities (e.g. DiabetesUK) and professional societies/Royal Colleges (ABCD, RCN, BGS). The recent award by the IAGG (International Association of Geriatrics and Gerontology) to Prof Alan Sinclair/IDOP) to lead an international initiative to enhance diabetes care through a combination of educational/training resources provides clear evidence of us being identified as top in this field of endeavour. This work was presented in Seoul, Korea in 2013.

Kinman's research was also quoted extensively in a report commissioned by Universities UK on the extent and impact of the changes experienced in the academic profession in recent years. The findings have also been used by the Universities and Colleges Union over the last 15 years to campaign to improve terms and conditions for members and cited in international working papers for international reform in the sector. The findings of her research were also instrumental in the UK Health and Safety Executive targeting the HE sector in the UK as an area of high risk and a campaign to implement their management standards for work-related wellbeing. Since 2008, her research has monitored the extent to which the UK HE sector is complying with the HSE management standards on a biennial basis. In terms of academic outputs, the research findings have been published widely in academic journals and featured in a leader in the *Times Higher Education Supplement* and in other newspapers. Member of the research funding panel for the Academy of Health of Finland (since 2012, chaired the committee in 2013). Elected Executive Committee member of the European Academy of Occupational Health Psychology.