

<b>Institution: University of Glasgow</b>
<b>Unit of Assessment: Unit 2; Public Health, Health Services and Primary Care</b>
<b>a. Context</b>

This submission is from the Institute of Health and Wellbeing, developed in 2011 from the former Division of Community-Based Sciences. The Institute's groups include Public Health, Health Economics and Health Technology Assessment, General Practice and Primary Care, Mental Health and Wellbeing, Robertson Centre for Biostatistics and Clinical Trials unit (RCB), MRC/CSO Social and Public Health Sciences Unit (SPHSU), and Social Scientists Working in Health and Wellbeing. The Institute's **vision** is to produce excellent research to improve population health and wellbeing, and reduce inequalities. Its **mission** is to provide robust and timely evidence to inform relevant policies and practices. **Goals** include 'to develop, implement, and evaluate effectiveness of policies, interventions and practices in improving health and wellbeing' and 'to engage and collaborate with policymakers and practitioners to ensure policies and practices are evidence informed'. Thus the aim of 'making a difference', i.e. impact, is deeply embedded, capitalising on our research portfolio strengths to accelerate generation of economic and societal impacts in the UK and internationally. The Institute's knowledge exchange strategy (<http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/>) provides context for our activities and translates the University's impact and knowledge exchange strategy to our research area (<http://www.gla.ac.uk/services/rsio/knowledgeexchange/>). Given our focus and expertise, we have built partnerships with a wide range of beneficiaries.

**The public and patients:**

- MRC awarded **Macintyre** £172k to create a website, "Understanding Health Research", to help public, practitioners and policymakers distinguish good from bad population health science.
- **Williams'** website, "Living Life to the Full", helps people overcome depression (as do his self-help books and DVDs). It has 208,604 member registrations since 2008, and gets in excess of 2.5 million hits each month.

**Public policymakers:**

- **Pell's** research on the impact of Scotland's smoke-free legislation on asthma and acute coronary syndrome has influenced policies worldwide, and is cited in the next Surgeon General's report.
- **Macintyre's** evidence to the House of Commons select committee on inequalities in health influenced its report's emphasis on the need for rigorous evaluation of public policies, 2009.
- **Cooper's** health check research for learning disabled adults led to their introduction in the English GP contract, 2008. Her health check RCT report has influenced Scottish policy, 2013.

**Health care decision makers:**

- **Wu's** venous thromboembolism research quantified its probability in at-risk women, informing guidelines e.g. NICE, 2009-12, and influencing NHS Scotland's policy, 2008. Haute Autorité de Santé (France's NICE) is using this economic model in the French healthcare system.
- **Fenwick's** concept of 'cost-effectiveness acceptability frontiers,' was adopted by NICE and forms part of its revised "Guide to the methods of technology appraisal" published in 2008.
- **O'Connor's** research on longer term management of self-harm and suicide risk informed NICE guidelines, and also Royal College of Psychiatrist clinical guidelines.

**Health care professionals and professional organisations:**

- **Mercer's** 'Consultation and Relational Empathy' measure of patient views on consultation quality is used in 21 countries for research, education, or service evaluations. It is GMC revalidation accredited for all doctors, and a compulsory part of the MRCGP for all GPs in training.
- **Watt's** Deep End project with socio-economically deprived practices is recommended for roll-out across Scotland in the Government's 2020 Vision for Integrated Health and Social Care.
- **Gumley's** cognitive behaviour therapy (CBT) research to improve recovery and prevent psychosis relapse was used by NICE to show it saves money/reduces hospitalisation. This led to its adoption via the "Improving Access to Psychological Therapies" initiative across England.

**NHS organisations:**

- **McDaid**, with 3 Health Boards, evaluated a campaign to reduce sexual risk-taking by gay men.

## Impact template (REF3a)

- **Minnis**, with the local Health Board, embedded routine collection of “Strengths and Difficulties Questionnaire” data at 30 months and 5 year health visitor contacts with all children; to date, 40,000 have been completed. This approach is now being adopted by other Health Boards.

### Voluntary and third sector organisations:

- **Harding** collaborated with places of worship in London to develop health promotion programmes for ethnic minority children.
- **Smith’s** regular column on Bipolar Scotland’s website receives around 73,000 hits/year.
- Lifeline Australia adopted **O’Connor’s** suicide model giving 24hr crisis support across Australia; the UK Samaritans used his research to inform their public education campaign for mid-life men.

### Industry:

- **RCB’s** clinical trials for prevention of first cardiovascular events, treatment of stable cardiovascular disease, myocardial infarction, heart failure, and sleep problems, have improved health-care world-wide, impacting on Bristol-Myers Squibb, GSK, Aventis/Merck, Neurim, and Servier.
- To evaluate immunosuppressive therapies for renal disease, Roche funded **Wu/Briggs** to design their economic model for NICE submission. They showed the previously used acute rejection is unreliable in economic models as a surrogate outcome for long-term graft failure.

### Schools:

- **Harding** translated her research on evolution of ethnic differences in adolescent health into the Personal, Social, Health and Economic curriculum and science lessons in 51 London schools.
- **Minnis** worked with Glasgow City Council Education Services to routinely annually collect “Strengths and Difficulties Questionnaire” data on all primary 3 and 6 school children in Glasgow, creating a substantial research resource; the first round (10,600 questionnaires) was completed in 2013.

## b. Approach to impact

The Institute has a formalised approach, with a public engagement and knowledge exchange committee, and knowledge exchange champions in each research group to support academics in delivering our strategy. Key to our approach is targeting appropriate end users, and customising methods of knowledge exchange for each type of user, rather than assuming one-size-fits all. We emphasise the importance of identifying at the outset whom the appropriate partners and beneficiaries are likely to be, and the measures required to ensure early engagement with them to maximise research impact i.e. not only planning the project and academic dissemination, but also the impact and knowledge exchange activities. Regarding key audiences/beneficiaries, we encourage a wide range of approaches as appropriate to the particular research and likely users, including:

1. Interacting with **policymakers** to ensure they are aware of our research and its potential impact on healthcare delivery and the wider public, e.g.:
  - inviting members of the Scottish Parliament to the University to hear about Institute research,
  - MRC/CSO SPHSU’s annual meetings with NHS Health Scotland and the Scottish Collaboration for Public Health Research and Policy,
  - **Macintyre, Watt** giving evidence to the Scottish Parliament’s Health and Sport committee and ministerial task force on health inequalities,
  - **O’Connor’s** suicide research has informed Scottish Parliament and Northern Ireland Assembly debates, influenced recent Scottish policy, and led to its toolkit on suicide in rural areas, 2013,
  - membership of Governmental **strategy** groups e.g. **Cooper**.
2. Interacting with the **media** to promote public and policymakers’ awareness of research, e.g.:
  - **Pell** promoted her research showing the Scottish smoking ban “improved health” ([www.bbc.co.uk/1/hi/scotland/edinburgh\\_and\\_east/6986554.stm](http://www.bbc.co.uk/1/hi/scotland/edinburgh_and_east/6986554.stm)),
  - **Hunt, Wyke** (UoA 22) and **Fenwick**, collaborated with the BBC to produce a programme on the Football Fans in Training (FFIT) project and a set of videos about the experience of FFIT <http://www.spl-ffit.co.uk/page/ffit-videos/>,
  - **Lewsey’s** work demonstrating the drop in alcohol sales since the introduction of Scotland’s Alcohol Strategy (multi-buy promotions) <http://news.stv.tv/scotland/226180-drop-in-alcohol-sales-in-scotland-linked-to-multi-buy-promotions-ban/>.

## Impact template (REF3a)

3. Taking advantage of information and communication technologies, **websites, online tools, and social media** (twitter, facebook, blogs) to ensure wide reach, provide resources and opportunities for interaction for policymakers, health professionals and the public e.g.:
  - **Mair's** Minimally Disruptive Medicine website promotes an international research collaboration (<http://minimallydisruptivemedicine.org/>), twitter (@FrancesMair), podcasts, facebook, and YouTube video ([www.facebook.com/gppcglasgow](http://www.facebook.com/gppcglasgow) and [www.youtube.com/watch?v=FfQkJYt89s](http://www.youtube.com/watch?v=FfQkJYt89s)),
  - **Smith's** psycho-educational intervention for bipolar disorder ([www.beatingbipolar.org/](http://www.beatingbipolar.org/)),
  - **Mair, O'Donnell's** (UoA 22) EU funded project website focusing on migrant health in primary care ([www.fp7restore.eu](http://www.fp7restore.eu)), with materials for service users internationally,
  - all **9** research programmes in MRC/CSO SPHSU have active twitter accounts.
4. Developing **apps** for use by the public and practitioners e.g. **Smith** developed a mood monitoring app (Bipol-App) for people with bipolar disorder.
5. Collaborative work with **charities** e.g. the Health and Social Care Alliance Scotland, Asthma UK, Bipolar Scotland, ASH Scotland, Healthtalkonline. Such partnerships have contributed to a range of outputs e.g. an **online self help** tool for people with asthma.
6. Collaboration with **public or private sector institutions**, e.g. Scottish Premier League to develop an award-winning weight management programme for overweight men; industry e.g. Oncimmune for a 10,000 participant lung cancer screening trial (<http://www.eclsstudy.org/>).
7. Partnership with **NHS** to translate research into practice e.g.:
  - **Williams'** Structured Psychosocial Interventions in Teams courses in NHS Greater Glasgow and Clyde increase use of guided self-help CBT,
  - building data collection into routine NHS work with children (**Minnis**),
  - building data collection into routine NHS work with people with psychosis (**Gumley**).
8. Interacting with **Health Professionals**, to address workforce skills by providing CPD, e.g. ([www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/cpd/](http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/cpd/)); Deep End work ([www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/](http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/generalpractice/deepend/)).
9. Collaborating with **institutions** providing our research settings, and who are likely ultimately to implement its findings such as schools, general practices, gay bars, football clubs, prisons e.g. **Mercer's** Mindfulness for Young Offenders study in collaboration with the prison service.
10. Commercialisation and interactions with **industry**. We encourage outreach activities to industry, e.g. participating in college wide Industry Days, and building partnerships with major companies (such as Igneus) as part of the MRC's healthy working lives initiative.
11. Using targeted **public engagement** activities as a means of communicating research, e.g. **McDaid's** dissemination activities at Gay Pride marches; MRC/CSO SPHSU's MRC centenary activities, 2013 targeted at children and adults at Glasgow Science Centre to explain units of alcohol and a balanced food plate, and to inspire thinking about how to make cities healthier.

<b>c. Strategy and plans</b>
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Our public engagement and knowledge exchange strategy is continually updated (<http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/>). Developed in 2011, the most recent update was in 2013. Key activities have included:

- establishment of a Public Engagement and Knowledge Exchange (PEKE) **Committee**, and appointment of PEKE "**champions**" in each group,
- MRC/CSO SPHSU's appointment of a **knowledge broker** who will be guided by **Moore** to act as a conduit between researchers and policymakers and advise on most effective methods of knowledge exchange,
- **audits** of our public engagement/knowledge exchange activities to identify "best practice" and provide illustrative case studies for staff ([www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/casestudies/](http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/casestudies/)),
- providing **resources** for staff to help them "get started" ([www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/resources/#d.en.242446](http://www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publicengagementandknowledgeexchange/resources/#d.en.242446)),
- **seminars** and **workshops** about public engagement and maximising impact ,
- **outreach public engagement** activities e.g. attendance at the Great Govan Science Reshuffle where MRC/CSO SPHSU showcased their interactive Health and the City game, to help children think about social and environmental influences on health,

## Impact template (REF3a)

- **embedding** PEKE activities as core business of every staff member, assessed on application for promotion or Professorial re-zoning, and at annual performance and development reviews,
- knowledge exchange **training** offered to all post graduate research students, early career researchers and undergraduate students through the Enterprise Club, including opportunities for researchers to work alongside industry partners to solve commercial problems,
- running a **grant writing group** for early career researchers, which provides advice on how to plan pathways to impact from the very conception and subsequent inception of studies,
- interdisciplinary research **network** participation e.g. ASH Scotland, Scottish Tobacco Control Alliance Research Group, chair: **Sweeting**; Glasgow Refugee Asylum and Migration Network,
- benefiting from having an MRC funded research group which undertakes **research on public understandings** of public health research, and how best to get evidence into policy ([www.sphsu.mrc.ac.uk/research-programmes/pe](http://www.sphsu.mrc.ac.uk/research-programmes/pe)).

<b>d. Relationship to case studies</b>
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Here we describe 3 case studies exemplifying targeted use of project specific pathways to impact:

1. **Lean** proposed the public might find it easier to meet nutritional guidelines if whole meals meeting such guidelines were more easily accessible. He developed a nutritionally balanced pizza providing 30% of the recommended daily energy intake, and all 27 essential nutrients in the correct amounts, approached a start-up **company** (Eat Balanced), and then a catering **company** (Cosmo) which supplies fresh and frozen pizzas to local authorities in Scotland. They helped with the prototype development and subsequent manufacture of the “eat balanced” pizza range. The pizzas were launched at the **Food & Drink exhibition** (Birmingham), winning best new idea award. Further negotiations with the **retail industry** led to uptake by Sainsbury's, Asda, and Ocado. To maximise demand, Lean successfully sought widespread international **media** coverage ([www.bbc.co.uk/news/uk-scotland-18663969](http://www.bbc.co.uk/news/uk-scotland-18663969)). He followed a very focused approach targeting **food manufacturing**, **food retailing**, a national **trade exhibition** and **mass media** in order to impact on the public's diet.
2. **Pell** used NHS data to show the ban on indoor smoking in Scotland, 2006 led to a 17% reduction in admissions for acute coronary syndrome, and 18% reduction in childhood asthma admissions. This has impacted substantially on other jurisdictions considering similar bans, aided by **Pell's** strategy of ensuring widespread publicity via complementary routes:
  - publishing in major international **journals**, particularly the NEJM,
  - collaborating on a **dissemination strategy** with NHS Health Scotland, and the National Scottish public health agency which commissioned her research,
  - arranging for substantial UK and international **media coverage** and agreeing to interviews (e.g. Wall Street Journal),
  - speaking at major international **conferences** on her findings and their implications in countries considering a similar ban (e.g. Mumbai, India - 14th World Conference on Tobacco and Health, 2009; Europrevent, Stockholm, 2009). Greece introduced legislation (September 2010) as a direct result of her talk in Athens (2008),
  - collaborating with **third sector groups** such as Ash Scotland (Chief Executive Duffy), to lobby government.
3. **Williams'** undertook the largest RCT of guided book-based CBT to date, using his “Overcoming Depression” book. He used 3 complementary approaches to promote impact:
  - following publication, he actively fostered mass media **press** coverage, and received significant media attention. He was the top-featured website on the BBC health section, with articles in the Guardian and Daily Mail. He also had a question and answer interview with Women's Own,
  - in collaboration with **NHS health boards** and a **national charity** (Action on Depression), he designed training courses for healthcare practitioners to use the “Overcoming Depression” materials, so ensuring increased capacity of self help treatments in existing clinical settings,
  - he developed and implemented an **online CBT portal**, Living Life to the Full, which provides rapid and wide access to adult life skills courses and has received over 31 million hits in the last 12 months alone.

**Williams'** research has had substantial international impact because of his effective interaction with **mass media**, **health service providers**, **web-based technologies**, and **charities**.

These examples differ in their approaches and illustrate the diversity of routes to impact used by Institute members to maximise our knowledge exchange and ensure broadest impact.