The Institute of Health and Wellbeing was established in 2011. We now have 374 staff and an annual research income of £30 million, with a diverse, resilient, funding portfolio (25% Research Council, 18% Charity, and 29% Government). Following a successful quinquennial review, our MRC/CSO Social and Public Health Sciences Unit has been awarded £19 million core funding over the next five years.

The three large, multidisciplinary research themes around which we organise our work is now well established, and we have successfully increased our portfolio of multidisciplinary, multiagency research. Our research income has increased 43% and we have productive partnerships with a wide range of external stakeholders from the public, private and voluntary sectors. We have also strengthened our global networks, especially in Africa and South America, and seen a 66% increase in our international research income. We work effectively with, and celebrate, the large number of collaborators from outside of the Institute who contribute to our research and our teaching. We are grateful to the world-leading academics who kindly visited our Institute to deliver the 66 external lectures, seminars, and workshops run since our last report.

Congratulations also to the 82 doctoral students who have graduated since our last report; last year saw a 9% increase in our number of doctoral students registered. In addition to our seven ongoing postgraduate taught programmes, we have established two completely new Masters programmes, in Population Health Sciences and Developing and Evaluating Interventions, and a third on Digital Health Interventions is due to start next year.

We are very proud of our Athena Swan Gold Award, which recognises the way we advance equality in terms of representation, progression and success for all staff. We continue to promote a culture that is inclusive and supportive of all our staff and students. Forty four percent of our professors are now female, compared to a national average of 26%, our gender pay gap has decreased, we support flexible working, and we provide maternity, paternity and carer support. Our mentoring scheme and other support interventions are producing results, with a 10% increase in the percentage of staff holding research grants and a high success rate with fellowship applications.

At the time of writing this, we find ourselves in unchartered waters following the emergence of COVID-19. I am extremely grateful to all the Institute’s staff and students for their hard work, resilience, and camaraderie during these difficult times. Many have had to take on additional work as a result of COVID-19 related research, clinical duties or advisory roles, and many have had to cope with additional child and carer duties, personal or family health concerns, and the stress of work and financial uncertainties. The enthusiasm and ingenuity of staff and students in finding ways of supporting each other has been heart-warming and makes it a pleasure to direct our Institute.

Professor Jill Pell
Director of the Institute of Health and Wellbeing
Dr Sara MacDonald  
Senior Lecturer in Primary Care  
Lead of Knowledge Exchange, Public Engagement and Impact

Professor Daniel Mackay  
Professor of Public Health Informatics  
Head of Public Health

Dr Debbi MacMillan  
Senior Project Coordinator  
Research Management Team

Professor Frances Mair  
Professor of Primary Care Research  
Head of General Practice & Primary Care  
Research Excellence Framework Champion

Professor Emma McIntosh  
Professor of Health Economics  
Convenor of Postgraduate Research Students

Professor Laurence Moore  
Director of the MRC/CSO Social & Public Health Sciences Unit

Professor Rory O’Connor  
Professor of Health Psychology  
Head of Mental Health and Wellbeing  
Lead for Marketing

Dr Katie Robb  
Reader  
Co-Lead for Early Career Researchers

Professor Sharon Simpson  
Professor of Behavioural Sciences and Health  
Lead of Solutions Focussed Research

Professor Danny Smith  
Professor of Psychiatry  
Lead of Determinants of Health and Health Inequalities

Professor Oliva Wu  
William R Lindsay Professor of Health Economics  
Head of Health Economics and Health Technology Assessment Unit
1. Organisational structure

2. Organisational culture
   a. Inclusive and supportive working environment
   b. Research integrity
   c. Multidisciplinary team science
   d. Partnership working and co-production

3. Goals and strategy

4. Performance metrics
   a. Income and contributions
   b. Postgraduate research students
   c. Postgraduate taught students
   d. Publications

5. Strategic priorities
   a. Upstream and cross-sectoral interventions
   b. Global health research
   c. Multimorbidity
   d. Maximising use of routine data

6. Examples of impact

7. Events

8. New developments

9. Other sources of information

Appendix 1 Awarded Doctorates
Appendix 2 Active Research Grants and Contracts
The Institute of Health and Wellbeing (IHW) is a **multidisciplinary, cross-College** Research Institute established in 2011. It spans the College of Medical, Veterinary and Life Sciences (MVLS) and the College of Social Sciences (CoSS) bringing together complementary expertise in **population health sciences** and **social sciences**.
IHW comprises:

- The Medical Research Council/Chief Scientist Office (MRC/CSO) Social and Public Health Sciences Unit (SPHSU),
- The Robertson Centre for Biostatistics (RCB) & Glasgow Clinical Trials Unit (CTU)
- Five research groups:
  - Health Economics and Health Technology Assessment (HEHTA)
  - General Practice and Primary Care (GPPC)
  - Mental Health and Wellbeing (MHW)
  - Public Health (PH)
  - Social Scientists in Health (SSH)

The MRC/CSO Social and Public Health Sciences Unit has an international reputation for research on the causal mechanisms, and their interdependence in systems, through which social determinants influence health and health inequalities over the life course. SPHSU works with decision makers, practitioners and the public to identify interventions and policies that can have an effective and sustained impact on health and wellbeing, particularly among those most in need. SPHSU places great value on developing and applying new methods to support ambitious, complex research. SPHSU was recently awarded £19m core funding by MRC and CSO for the period 2020-25 and attracts c.£2m additional grant income per annum.

The Robertson Centre for Biostatistics Clinical Trials Unit has an international reputation for conducting multicentre randomised trials at scale. Recent examples include the PIVOTAL (NEJM 2019), WAKE-UP (NEJM 201) and DiRECT (Lancet 2018) trials. The CTU currently has more than £12 million in charity and commercial research contracts and 150 active clinical trials.

Overall, IHW employs 374 staff (32 clinical, 205 research and teaching, and 137 professional and technical services) of whom 149 are early career researchers.
In 2015, we undertook an organisational review, in consultation with our International Scientific Advisory Board, with the strategic aim of increasing research impact. This resulted in:

- IHW restructuring around three, pan-IHW multidisciplinary research themes:
  - Determinants of health and health inequalities
  - Solutions focused research
  - Data science
- inclusion of a theme focused specifically on interventions (‘Solutions’) that has a strong emphasis on cross-sectoral, upstream interventions; believed to be more likely to reduce health inequalities as well as improving overall health
- a focus on improving translation of our research into policy and practice through
  - partnerships with public, patients, practitioners, policy-makers, industry and third sector organisations; and
  - making better use of real world, routine data

The three themes were chosen because they reflected: existing strengths, a critical mass of expertise, wide-reaching networks, priority areas for funders, and potential for impact.
DETERMINANTS OF HEALTH AND HEALTH INEQUALITIES

This theme aims to further our understanding of the factors that affect health and contribute to health inequalities, building on Glasgow’s world-leading reputation in the latter.

The research conducted by this theme covers a range of biological, lifestyle, social and environmental factors, but with a strong focus on:

- the wider social and environmental determinants of health
- understanding risk factor clustering and effect modification,
- and factors predisposing to
  - multimorbidity, ageing and frailty, and
  - global health

The findings of this theme inform the work of the Solutions theme by identifying modifiable factors that can become the subject of interventions and non-modifiable factors that can inform the targeting of interventions (precision public health).

SOLUTIONS FOCUSED RESEARCH

This theme develops and evaluates evidence-based interventions; working across the spectrum of theoretical frameworks, feasibility and pilot studies, complex intervention studies, randomised trials and natural experiments. Our approach emphasises co-production with all stakeholders in interventions and evaluations including members of the public and patients. This approach also supports implementation and generalisability of our findings in policy and practice.
Areas of focus include chronic physical and mental health conditions and multimorbidity. The interventions we research include preventive and salutogenic (health/wellbeing promoting) interventions, as well as disease management. Whilst continuing to develop individual and community level interventions, we have strived to enhance our understanding of upstream, environmental and policy interventions, consistent with the focus of our Determinants theme on the wider determinants of health.

DATA SCIENCE

This theme uses routine administrative and clinical data to underpin the work of the other two themes. In keeping with the foci of the other two themes on wider determinants of health and cross-sectoral upstream interventions, the Data theme has a strong focus on developing cross-sectoral record linkage.
a. INCLUSIVE AND SUPPORTIVE WORKING ENVIRONMENT

Equality and diversity are embedded in our organisational culture and IHW holds one of only 12 Athena SWAN Gold awards across the UK. The Equality Challenge Unit’s Athena SWAN award is a national charter mark that recognises the advancement of gender equality in higher education, encompassing representation, progression and success for all.

Our inclusive culture extends beyond women, encompassing LGBTQ+, disability (physical, learning and hidden) and age-related issues. Our initiatives are available to all staff – they cover professional and technical services staff as well as academic staff - and recognise carer duties as well as parental responsibilities.

We have gender-balanced seminar series, committee membership and interview panels. We have reduced our vertical gender inequality. In 2014, women accounted for 8 (32%) of our 25 professors. In 2018, they accounted for 14 (44%) of our 32 professors; the national average is 26%. We have the only black, female professor in Scotland. Over the same period, our gender pay gap has fallen from 28% to 22%, and we are continuing to work to reduce it further.

We support flexible working for those with parental or carer responsibilities. We have established a maternity and paternity buddy scheme, and plan to run a carer workshop. We have revised our parental leave and maternity pay policies to eliminate inequalities relating to tenure and funding source. We are developing an older workers’ support network and toolkit. We have run an invisible disabilities workshop (followed by an awareness-raising poster campaign [www.gla.ac.uk/unseenconditions](http://www.gla.ac.uk/unseenconditions)), provided British Sign Language (BSL) training and run monthly BSL cafes.
ORGANISATIONAL CULTURE

We provide support for promotion and career development via promotion workshops, grant application workshops, our mentoring scheme (available to staff from all job families and doctoral students), and work shadowing. We use annual appraisals to devise personal development plans and we fund training (e.g. leadership courses) as required. IHW championed the retention of the Job Seekers’ Register which identifies early career researchers coming to the end of a fixed term contract and attempts to match them to job opportunities. Our early career researchers have their own forum and representation on our Institute Management Group. IHW’s Suicidal Behaviour Research Lab (www.suicideresearch.info) hosts an annual Early and Mid-Career Researchers’ Forum on Suicide and Self-harm. We monitor unconscious bias on our appointment panels. Equality and diversity training and unconscious bias training are mandatory, and completion is audited.
b. RESEARCH INTEGRITY

As part of our commitment to research integrity, we promote open access and embrace the Open Researcher and Contributor ID (ORCID) vision of a world where all who participate in research, scholarship, and innovation are uniquely identified and connected to their contributions across disciplines, borders, and time. 100% of our Research Excellence Framework (REF) eligible staff have an ORCID unique identifier. The percentage of our outputs that are open-access compliant has been consistently high at 96.5%.

We are also committed to sharing coding. For example, as major users of UK Biobank we send all our code back to UK Biobank to share with other investigators. McAllister and colleagues linked the Scottish Diabetes Register to hospitalisations to study the risk of heart failure following types 1 and 2 diabetes and, in addition to publishing their code, they published an interactive figure (Circulation 2018).

c. MULTIDISCIPLINARY TEAM SCIENCE

Our strategy of promoting multidisciplinary research is reflected in our diverse funding portfolio which also provides financial resilience:

Figure. Breakdown of award funding by source (*excludes SPHSU core funding)
We have successfully targeted grants that support the development of multidisciplinary, multiagency collaborations and consortia. Some UK examples are listed below. Global Health Research examples are included in Section 5b.

The MRC-funded **Mental Health Data Pathfinder Award** (£1.4M) (PI Smith, Co-Is Pell, Cooper, Moore, Inchley, McCowan) has established SHINE - a Scottish Schools Health and Wellbeing Improvement Network ([gla.ac.uk/shine](http://gla.ac.uk/shine)) - which is collecting large-scale data on adolescent mental health and using it to co-produce novel, school-based health interventions.

The Economic and Social Research Council (ESRC)-funded **TRIUMPH (Transdisciplinary Research Network for the Improvement of Youth Mental Public Health)** (£1M) (PI Inchley, Co-Is Simpson, O’Connor, Lewis, McCann, Moore) is a UK network including multi-sectoral public and third sector partners (Young Edinburgh Action, Voices of Young People in Care (VOYPIC), Advice Leading to Public Health Advancement (ALPHA) and Free2B Alliance) that is co-producing effective and sustainable interventions to improve public mental health.

**LIFETIME** (Co-Directors Simpson, Gray) is a multidisciplinary network of academics interested in lifestyle behaviours that has already led to successful external grant funding of £1.4M and PhD studentships (Merchant, Bonello, McGinlay, Alfeheid Manyara).

IHW won two of four network grants awarded by the **UK Prevention Research Partnership (UKPRP)** to support interdisciplinary approaches to primary prevention of non-communicable diseases.

The Maternal and Child Health Network (MatCHNet) (£400k; PI Dundas, Co-Is Leyland, Pearce) is evaluating the impact of national policies on maternal, infant and child health. MatCHNet engages with stakeholders from various Government departments and third sector organisations across the UK including NHS Health Scotland, Public Health England, The Children’s Commissioner and the Maternal and Child Health Directorate at Scottish Government.
The Population Health Agent-Based Simulation Network (PHASE) (£400k; PI Moore, Co-Is Mitchell, McCann, Silverman) includes different academic disciplines, decision makers and industry who will use agent-based models to develop insights into the interdependent and interacting processes that result in non-communicable diseases and health inequalities.

**Figure.** Mean value per grant awarded by year (*2020 is a part year and excludes SPHSU core funding)

We have undertaken social network analyses of authorship of our manuscripts and investigators on our successful grant applications. These examined the extent to which the collaborations between our discipline-specific research groups have changed since the research themes were established.

All metrics improved for co-authorship: there were increases in the absolute number of collaborations, the proportion of potential collaborations that were realised in practice, and the mean number of collaborations per academic, and there was a decrease in the extent to which the total number of collaborations were due to a small number of individuals. For grant applications, improvements were observed in all metrics bar one. The absolute number of collaborations increased, but because the number of academics increased, there was a fall in the proportion of potential collaborations achieved in practice.
The overall results suggest that we are succeeding in our aim of increasing the multidisciplinary nature of our research. The intention is to repeat the exercise after we move into a single building so that we can determine if co-location achieves further gains.

<table>
<thead>
<tr>
<th></th>
<th>Actual/Potential collaborations</th>
<th>Mean number of collaborations per academic</th>
<th>% centralisation (extent to which total collaborations are driven by small number of individuals)</th>
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</thead>
<tbody>
<tr>
<td>Co-authorship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>0.039</td>
<td>4.08</td>
<td>1.6</td>
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<tr>
<td>2016</td>
<td>0.044</td>
<td>5.41</td>
<td>1.8</td>
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<tr>
<td>Co-funding</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2014</td>
<td>0.098</td>
<td>7.34</td>
<td>11.9</td>
</tr>
<tr>
<td>2016</td>
<td>0.083</td>
<td>8.25</td>
<td>5.54</td>
</tr>
</tbody>
</table>

Co-authorship

Co-funding
New Honorary and Visiting Professors

9 appointed in 2018
- General Practice and Primary Care, Honorary Professor, Dr Paul Bowie
- General Practice and Primary Care, Honorary Professor, Dr Moya Kelly
- MRC/CSO SPHSU Honorary Professor, Professor Kathryn Hunt
- Mental Health & Wellbeing, Honorary Professor, Professor Angus Mackay
- Robertson Centre for Biostatistics, Honorary Professor, Professor Colin McCowan
- Health Economics and Health Technology Assessment, Visiting Professor, Professor Julie Ratcliffe
- Mental Health & Wellbeing, Honorary Clinical Associate Professor, Dr Elita Smiley
- Public Health, Honorary Professor, Professor Mahmood Adil
- Public Health, Honorary Professor, Dr Carol Tannahill

4 appointed in 2019
- Mental Health & Wellbeing, Honorary Professor, Mr Roger Halliday
- Public Health, Visiting Professor, Dr Emily Jefferson
- Mental Health & Wellbeing, Honorary Professor, Dr Liam Dorris
- Mental Health & Wellbeing, Honorary Clinical Associate Professor, Dr Michael Smith

d. PARTNERSHIP WORKING AND CO-PRODUCTION

Patients and the public

IHW leads the College of MVLS Patient and Public Involvement and Engagement (PPIe) Steering Group. The group provides strategic oversight to PPIe across all grants. It established a hub-and-spoke model with links to a large network of patient groups and third sector organisations across the West of Scotland. Current membership includes The Alliance (an umbrella organisation for those living with long-term conditions), the Mental Health Foundation, Queens Cross Housing Association (the largest in Glasgow) and NHS Glasgow. Patient and public representatives discuss early research ideas, and review research proposals in development. Often, PPIe representatives have limited research training or background and, therefore, may feel intimidated. Macdonald and Nicholl undertook a pilot project delivering a bespoke introductory research training package to members of The Alliance. This successful initiative was subsequently rolled out to all members of the PPIe Steering Group.
Policy-makers

IHW has representation on a number of Scottish Government Cross-Party Working Groups including: Improving Scotland’s Health, Mental Health, Disability, Drug & Alcohol Abuse, Health Inequalities, and Sexual Health & Blood Borne Viruses. IHW researchers contribute to the New Scots Integration Strategy Group convened by the Scottish Government and O’Donnell chairs the Scottish Migration and Ethnicity Research Strategy Group and is part of the Doctors of the World Expert Advisory Group.

O’Donnell and Macdonald contributed to work commissioned by the Scottish Government to inform their re-design of primary care services. O’Donnell was commissioned by the Scottish Out-of-Hours Review Group to provide academic input to the redesign on primary care out-of-hours services in Scotland www.gov.scot/publications/main-report-national-review-primary-care-out-hours-services/. O’Donnell was also a member of the Review Group, which advised the Cabinet Secretary for Health, Wellbeing and Sport. Wu and McIntosh led the Monklands Hospital review commissioned by Scottish Government. Pell is a member of the Scottish Government’ COVID-19 Advisor Group.

Gumley is Director of the NHS Research Scotland Mental Health Network and chairs the Scottish Government COVID-19 Mental Health Advisory Group (formerly the Mental Health Policy and Research Forum). O’Connor is a member of the latter, co-chairs the Academic Advisory Group to Scottish Government’s National Suicide Prevention Leadership Group and is Vice President of the International Association for Suicide Prevention. O’Connor co-led the Academy of Medical Sciences and MQ Transforming Mental Health Position Paper published in Lancet Psychiatry on setting the mental health science research priorities for the COVID-19 pandemic. O’Connor was also part of the COVID-19 International Suicide Prevention Research Collaboration which highlighted the strategic response for suicide prevention, also published in Lancet Psychiatry.
In January 2015, Scotland moved from a targeted system of Free School Meals (FSM) to a universal service for children in Primary 1 to Primary 3 in order to reduce health inequalities. Chambers and Moore led the initial evaluation. This is a major Scottish Government (SG) policy and researchers from IHW are working in partnership with NHS Health Scotland to evaluate this programme and provide recommendations on where schools and local authorities could make improvements in delivering the policy.

Macdonald led a partnership with the Department of Work and Pensions aimed at developing evidence-based interventions to assist the over 50’s return to work. The Supporting Older People Into Employment (SOPIE) programme was funded by the MRC (£750k) as part of the Extending Working Lives Partnership award. Macdonald was also appointed by the Minister for Social Security as a member of the Ministerial Expert Advisory Group.

O’Connor and Melson are working closely with the Scottish Government on its flagship Distress Brief Intervention (DBI; dbi.gov) Programme. They have developed all of the intervention and training materials (with Wetherall). The DBI programme won the Scottish Health Award in 2019. As announced by the First Minister, the DBI programme will be scaled up nationally in light of COVID-19.
## ORGANISATIONAL CULTURE

Current collaborations and partnerships

<table>
<thead>
<tr>
<th>Industry</th>
<th>NHS / Health sector</th>
<th>3rd sector/NFP</th>
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</thead>
<tbody>
<tr>
<td>Abbott Industries</td>
<td>British Medical Association</td>
<td>Confederation of Service Charities</td>
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<tr>
<td>Amgem</td>
<td>Glasgow Centre for Population Health</td>
<td>Doctors of the World</td>
</tr>
<tr>
<td>ARC Medical Devices</td>
<td>Greater Glasgow and Clyde Health Board</td>
<td>Gillberg Foundation</td>
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<td>AstraZeneca</td>
<td>Greater Glasgow Mental Health Network</td>
<td>Girl Guides Association</td>
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<td>Aurum Biosciences Ltd</td>
<td>Health Protection Scotland (now Public Health Scotland)</td>
<td>Mental Health Foundation</td>
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<td>BAE Systems</td>
<td>Healthcare Improvement Scotland</td>
<td>Paths for All</td>
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<td>Bayer</td>
<td>National Institute of Academic Anaesthesia</td>
<td>Pears Foundation</td>
</tr>
<tr>
<td>Biogen</td>
<td>Public Health Agency</td>
<td>SUSTRANS</td>
</tr>
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<td>Bristol Meyers Squibb</td>
<td>Scottish School of Primary Care</td>
<td>The Alliance</td>
</tr>
<tr>
<td>CVRx</td>
<td>NHS Research Scotland</td>
<td>The Samaritans</td>
</tr>
<tr>
<td>Draeger Medical Solutions</td>
<td>Mental Health Network</td>
<td>The Scouts</td>
</tr>
<tr>
<td>Gilead Sciences</td>
<td>Scottish Bowel Screening Programme</td>
<td>Scottish Association for Mental Health</td>
</tr>
<tr>
<td>GlaxoSmithKline</td>
<td></td>
<td>Scottish Recovery Network</td>
</tr>
<tr>
<td>Eisai</td>
<td></td>
<td>Glasgow Mental Health Network</td>
</tr>
<tr>
<td>HSBC Bank</td>
<td></td>
<td>Barnardo’s Scotland</td>
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<tr>
<td>Menarini Pharma</td>
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<td>Early Years Scotland</td>
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<tr>
<td>NAMSA</td>
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<tr>
<td>Novartis</td>
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<td>Novo Nordisk</td>
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<td>Oncimmune</td>
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<tr>
<td>Pharmacosmos</td>
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<td>PharmaNord</td>
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<td>Servier</td>
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<tr>
<td>Stealth Biotherapeutics</td>
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<td>SQ Innovations</td>
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<td>Terumo Aortic</td>
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<td>Viscardia Inc</td>
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<tr>
<td>Novartis</td>
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<tr>
<td>SQ Innovations</td>
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<thead>
<tr>
<th>Sports</th>
<th>SME</th>
<th>Governmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Cycling</td>
<td>NEWCO</td>
<td>Army Medical Directorate</td>
</tr>
<tr>
<td>Football Association</td>
<td>OxfordVR</td>
<td>Cross Party Group</td>
</tr>
<tr>
<td>Professional Footballers’ Association</td>
<td>Pal Technologies</td>
<td>Cross Party Group on Improving Scotland’s Health</td>
</tr>
<tr>
<td>Scottish Professional Football League Trust</td>
<td>The Bug Farm</td>
<td>Glasgow City Council</td>
</tr>
<tr>
<td>Healthy Stadia</td>
<td>Trade Expansion</td>
<td>Ministry of Defence</td>
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<td></td>
<td></td>
<td>NES Education for Scotland</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scottish Government</td>
</tr>
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<td></td>
<td></td>
<td>The Scottish Prison Service</td>
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</table>
Our overall aim is to improve population health and wellbeing and reduce inequalities in health: locally, nationally and globally.

Our strategy for achieving this includes:

1. restructuring to encourage **multidisciplinary research** that emphasises wider determinants of health
2. having a research portfolio that balances ‘understanding’ with ‘doing’
3. a stronger focus on **intervention studies** with an increasing emphasis on **cross-sectoral, upstream interventions**
4. expanding our **global health research**
5. **partnership-working** and **co-production** with external stakeholders including practitioners, policy makers, the public and patients (See section 2d), and
6. maximising the use of **real-world routine data**
a. INCOME AND CONTRIBUTIONS

Over the past two years, the Institute's overall income has increased by 27%; due largely to a 43% increase in research income. The 66% increase in our international research income reflects our strategy of targeting global challenges research funds (GCRF).

A full list of awards can be found in Appendix 2.

<table>
<thead>
<tr>
<th>Income (£,000)</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>13,796</td>
<td>14,076</td>
<td>19,791</td>
</tr>
<tr>
<td>Commercial</td>
<td>3,458</td>
<td>4,133</td>
<td>3,878</td>
</tr>
<tr>
<td>General</td>
<td>6,117</td>
<td>5,748</td>
<td>5,919</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23,371</td>
<td>23,957</td>
<td>29,588</td>
</tr>
<tr>
<td>Research international</td>
<td>1,528</td>
<td>1,563</td>
<td>2,534</td>
</tr>
</tbody>
</table>

In spite of an increase in the number of academic staff, we have successfully increased both the percentage of staff who hold grants and the research income per full-time equivalent (FTE) staff member. We targeted increases in project funding through various initiatives including: a grant writing support group; a grant application workshop; and getting IHW representatives appointed onto the funding panels of major relevant funders. Our current strategy is to improve fellowship funding. We have high success rates in relation to submitted fellowship applications; but we wish to increase our submission rates. Our initiatives include publication of a fellowship resource document; identifying and mapping relevant candidates to relevant schemes; organising bespoke small-group workshops, internal peer review and mock interviews.

<table>
<thead>
<tr>
<th>Academic staff holding grants (%)</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>77.6</td>
<td>78.9</td>
<td>89.3</td>
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</table>

<table>
<thead>
<tr>
<th>Research income (£,000 / FTE staff)</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>262</td>
<td>274</td>
<td>393</td>
</tr>
</tbody>
</table>
There has been a 22% increase in our absolute research contribution to the university. However, research contribution as a percentage of our research income has fallen from 10% to 8%, and our total contribution has fallen by 12%. The fall in percentage research contribution in part reflects the increasing number of multi-funder initiatives, including charities as well Research Councils, that do not pay overheads/full economic costs (e.g. HDR-UK, UKPRP).

<table>
<thead>
<tr>
<th>Contributions (£,000)</th>
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<tr>
<td></td>
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<tr>
<td>Research</td>
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<td>1,359</td>
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<td>1,232</td>
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<tr>
<td>1,661</td>
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<tr>
<td>Commercial</td>
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<tr>
<td>2,534</td>
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<tr>
<td>2,206</td>
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<tr>
<td>1,649</td>
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<tr>
<td>General</td>
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<tr>
<td>4,352</td>
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<tr>
<td>4,096</td>
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<td>3,910</td>
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b. POSTGRADUATE RESEARCH STUDENTS

Our FTE number of PhD, MD and DClinPsy students has increased by 12.2 (9%) over two years. This has exceeded the increase in academic staff. Therefore, the ratio of students to staff has also increased.

<table>
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<th>Postgraduate Research Students (FTE)</th>
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<td>17/18</td>
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<tr>
<td>18/19</td>
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<tr>
<td>Home/EU</td>
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<tr>
<td>118.7</td>
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<tr>
<td>123.5</td>
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<tr>
<td>125.8</td>
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<tr>
<td>International</td>
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<tr>
<td>14.8</td>
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<td>18.3</td>
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<tr>
<td>19.9</td>
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<tr>
<td>Total</td>
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<tr>
<td>133.5</td>
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<tr>
<td>141.8</td>
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<tr>
<td>145.7</td>
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<tr>
<td>Per FTE staff</td>
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<tr>
<td>2.5</td>
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<td>2.8</td>
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<td>2.9</td>
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</table>

A list of awarded doctorates can be found in Appendix 1.
c. POSTGRADUATE TAUGHT STUDENTS

We have continued to run the following seven taught postgraduate programmes:

- Applied Neuropsychology (on campus MSc, PgDip)
- Clinical Neuropsychology (on campus MSc, PgDip)
- Global Mental Health (on campus MSc, ODL MSc, PgDip, PgCert)
- Health Technology Assessment (ODL MSc, PgDip, PgCert)
- Primary Health Care (on campus converted to ODL MSc, PgDip, PgCert)
- Public Health (on campus MSc, ODL MSc, PgDip, PgCert)
- Global Health (on campus MSc, PGDip, PgCert)

In 2019, we introduced specialism options for two existing programmes:

- Global Mental Health (Health Promotion; Health Technology Assessment; Research Methods)
- Public Health (Data Science; Epidemiology; Health Economics; Health Promotion)

expanded Clinical Neuropsychology to include a practice module and PgCert option

established two additional programmes:

- Population Health Sciences (ODL MSc, PgDip, PgCert)
- Developing and Evaluating Interventions (on campus MSc, PgDip, PgCert)

In 2020, we developed three additional programmes:

- Digital Health Interventions (on campus MSc, PgCert, PgDip)
- Positive Behaviour Change (PgCert)
- Global Health (on campus, MRes)
PERFORMANCE METRICS

<table>
<thead>
<tr>
<th>Postgraduate Taught Students (FTE)</th>
<th>16/17</th>
<th>17/18</th>
<th>18/19</th>
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</thead>
<tbody>
<tr>
<td>Home/EU</td>
<td>69.3</td>
<td>48.0</td>
<td>47.4</td>
</tr>
<tr>
<td>International</td>
<td>34.0</td>
<td>19.8</td>
<td>27.3</td>
</tr>
<tr>
<td>Online</td>
<td>14.3</td>
<td>15.7</td>
<td>15.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>117.6</strong></td>
<td><strong>83.5</strong></td>
<td><strong>89.8</strong></td>
</tr>
</tbody>
</table>

The fall in online distance learning (ODL) numbers, in spite of the Masters in HTA and Primary Care, converting to ODL-only formats, reflects marketing and conversion failures on the part of the university’s sub-contractor. This has since been resolved and 2020 is already demonstrating growth in spite of COVID-19.

d. PUBLICATIONS

In 2018, IHW published 659 journal articles and published, or contributed to, 23 books. In 2019, the figures were 632 and 13 respectively. So far in 2020 (January-May), we have published 198 journal articles and published, or contributed to, 7 books.

A full list of publications is found here
www.gla.ac.uk/researchinstitutes/healthwellbeing/research/publications/
a. UPSTREAM AND CROSS-SECTORAL INTERVENTIONS

IHW has evaluated a range of **upstream policy interventions** including:

- smoke-free prisons (Semple, Tob Control, 2020)
- drink-drive legislation (Haghpanahan, Lancet, 2019)
- smoke-free public places legislation (Mackay, Circ Cardiovasc Qual Outcomes, 2019)
- social security reforms (Katikireddi, Lancet Public Health, 2018).

We have successfully obtained funding to continue policy evaluations including:

- *Evaluating possible intended and unintended consequences of the implementation of Minimum Unit Pricing (MUP) of Alcohol in Scotland: a natural experiment.* (NIHR, PHR/11/3005/40, Leyland, £1.1M)
- *Harnessing cross-country administrative data to evaluate national policy impacts on maternal, infant and child health and health inequalities-MatCHNet.* (MRC UK Prevention Research Partnership, MR/S037608/1, Dundas, £400k)

IHW is developing and evaluating highly novel, cross-sectoral interventions including:

- **SAFETEL Study** (MQ Research, O’Connor, £300k). Currently there are no evidence-based effective interventions that can be administered in hospital settings following a general hospital admission after a suicide attempt. SAFETEL is an innovative and theoretically driven Safety Planning Intervention (SPI) with follow-up telephone support which was developed in the US and aims to reduce suicide attempts. A randomised feasibility study was completed testing this intervention in patients from 4 NHS hospitals across Scotland.

- **STASH Trial: Peer-led sex education** (NIHR, Scottish Government, Edinburgh and Lothian Health Foundation, Mitchell, Moore £451k). We have completed an NIHR-funded feasibility trial of STASH, a peer-led sexual health intervention in secondary schools, based on an earlier trial, ASSIST which had found influential peer supporters to be effective in preventing smoking uptake. STASH included significant adaptation and new content focused on sexual health, including a significant novel online component to the intervention. We have also recently won an MRC award to test the feasibility of translating ASSIST to three lower- and middle-income countries (LMICs).
• **The Best Services Trial (BeST 2): Effectiveness and cost-effectiveness of the New Orleans Intervention Model for Infant Mental Health.** (NIHR Public Health Research Programme, Minnis, £2.8M). In partnership with the judicial system and social services, IHW is evaluating whether placing at-risk children into care or supporting and monitoring their retention at home is better for their development and more cost-effective at the societal level.

• **European Fans in Training (EuroFIT)** (European Commission FP7, Wyke, £5.0M). This EU-funded, international, multicentre randomised trial builds on IHW’s Scottish Football Fans in Training (FFIT) study. It uses loyalty to football clubs to achieve health-promoting lifestyle change, and has led to improvements in physical activity, diet, body weight, and cardiometabolic biomarkers at 12 months follow-up (Wyke, PLoS Medicine, 2019).

• Few interventions exist to prevent obesity in young children. The **Nutrition and Physical Activity Self-Assessment for Childcare (NAPSACC)** trial is a multicentre, cluster randomised controlled trial to evaluate the effectiveness and cost effectiveness of an environmental nutrition and physical activity intervention delivered in nurseries (NIHR, Glasgow PI Simpson, £2.3M).

• Using data from UK Biobank, we showed that active commuting involving cycling was associated with reduced risk of cardiovascular disease, cancer, and all cause mortality (Celis-Morales, BMJ, 2017). The findings have led to a partnership with British Cycling and HSBC UK Bank to develop and implement a workplace intervention to encourage cycling. The investigators were also invited to join a stakeholder engagement group, led by the Scottish Government, to ensure that the inaugural UCI World Cycling Championships being held in Glasgow in 2023 achieve a lasting physical activity legacy.

• **Distress Brief Intervention (DBI)** is a flagship Scottish Government mental health policy intervention. It is a time-limited and supportive problem-solving two-level intervention for individuals in distress. O’Connor and Melson led the development of the intervention and training (with circa £500K funding). Between 2017 and April 2020, DBI was piloted in four test areas in Scotland, with the DBI Level 1 response provided by frontline staff across a wide range of roles, including accident and emergency, GP services, ambulance services, police, and social care. In May 2020 DBI was expanded to provide a national response to distress resulting from the COVID-19 pandemic.
IHW is developing and evaluating novel, patient-directed interventions including:

- Low back pain is the most significant contributor to disability in Europe. With colleagues in Europe, IHW has developed a decision support system to improve self-management of non-specific low back pain (selfBACK). This is currently being tested in a pain trial (www.selfback.eu/) (Horizon 2020, Glasgow PI Nicholl, £3.6M)

- The DiRECT trial demonstrated the effectiveness of a total diet replacement weight management intervention at inducing remission of type 2 diabetes. At 12 months follow-up, half of the participants had achieved remission to a non-diabetic state (Lean, Lancet, 2018)

b. GLOBAL HEALTH RESEARCH

We have achieved our ambition of expanding our global health research; taking advantage of the new opportunities afforded by GCRF funding with 16 successful bids to date including:

- Leyland is PI of the NIHR-funded Global Health Research Group on Social Policy and Health Inequalities (£2M) along with Dundas, Katikireddi, Mitchell, Moore, Pell. Working in collaboration with the Centre for Data and Knowledge Integration for Health (CIDACS) in Brazil, IHW is developing novel linkages of the 100 Million Cohort to social security and health data to study the impact of welfare policies on health and health inequalities in Brazil. www.gla.ac.uk/researchinstitutes/healthwellbeing/research/mrccossocialandpublichealthsciencesunit/programmes/inequalitieshealthinequalities/global-health-research/#staff

- Hilton is PI of the MRC-funded SNAP-AMR (Supporting the National Action Plan for Antimicrobial Resistance) (£3.1M), along with McIntosh. We are working with Tanzanian academics and policy makers to provide novel insights into socio economic, cultural and biological drivers of antimicrobial resistance (AMR) to identify and prioritise tractable levers of behaviour change in hospitals and communities, in order to alleviate the burden of AMR-related illness in a low income setting. https://gtr.ukri.org/projects?ref=MR%2FS004815%2F1
• Gray, Leyland and Pell are co-investigators on the ESRC-funded Accountability and Responsiveness in Informal Settlements for Equity (ARISE) Hub; a new research consortium, set up to enhance accountability and improve the health and wellbeing of marginalised populations living in informal urban settlements in LMICs. This interdisciplinary research hub is funded by the GCRF (£12M) and will adapt existing methods, tools and instruments to collect metrics that reflect lived realities, inequalities and priorities for change in informal urban settlements in India, Bangladesh, Kenya and Sierra Leone. These will be combined with existing data to analyse intersecting inequalities in and social determinants of wellbeing. 
https://gtr.ukri.org/projects?ref=ES%2FS00811X%2F1

• Crampin, Director of the Malawi Epidemiology and Intervention Research Unit (MEIRU), along with Mair, McIntosh and Grieve, secured MRC GCRF funding (£1.1M) for ‘No to Na’ - a salt reduction trial with the aim of tackling the increasing threat from chronic diseases in LMICs. 
https://www.gla.ac.uk/media/Media_586587_smxx.pdf

• Multimorbidity in Africa - Increasing Understanding of the Patient Experience and Epidemiology (MAfricaEE). This MRC-funded project (£48k to Glasgow) is led by a team from the University of Glasgow (Professor Frances Mair, Drs Bhautesh Jani and Chris Bunn) and is a collaboration with partners in Malawi (Professor Mia Crampin, Dr Alison Price and Dr Gertrude Chapotera) and the MRC Units in Gambia (Professor Andrew Prentice and Dr Modou Jobe) and Uganda (Professor Janet Seeley). It uses both data science and qualitative methods to provide new insights into the challenges posed by multimorbidity in Africa. It will enhance our understanding of prevalence and patterns of multimorbidity but also about the experience of treatment burden in those with multimorbidity in Africa. The programme of work will promote capacity and network building, involves both primary data collection and secondary analyses of existing cohort and qualitative data and will enhance understanding of epidemiology, underpinning mechanisms and the experience of multimorbidity in Africa. Such work is essential to inform future interventions and health policy.
STRATEGIC PRIORITIES

- NIHR Global Health Research Group (£2M) (PI McIntosh co-investigators Grieve, Wyke, Bunn) is a consortium including the University of Newcastle and the Kilimanjaro Clinical Research Institute (KCRI) in Tanzania, that is investigating the health, economic and societal impact of arthritis in Tanzania.

- GCRF Centre for Sustainable, Healthy, and Learning Cities and Neighbourhoods (CSHLH). Mitchell is a co-investigator on this ESRC GCRF award of £7.1M (of which £3.2M goes to Glasgow). The overall aim of the Centre is to grow research capacity in both developing countries and the UK through a series of training programmes workshops and by means of multi-disciplinary and comparative studies of urbanisation and the formation and differentiation of neighbourhoods in urban areas in order to address the challenges of urbanisation and large scale rural to urban migration in Africa and Asia.

- Mathematical tools to inform sustainable interventions against schistosomiasis infections in Uganda. McIntosh is a co-investigator on this EPSRC GCRF award of £464k (£231k to Glasgow). The project aims to develop a mathematical approach, that integrates the biological infection process with individual behaviour and preference for the different interventions to find the most suitable combination of interventions that would be successful in the community to decrease schistosomiasis infections in Uganda.

- IHW hosts the International Coordinating Centre (ICC) (£342,493) for the Health Behaviour in School-Aged Children (HBSC) study, a WHO collaborative cross-national study of adolescent health and wellbeing, now involving 49 countries across Europe and North America. The ICC team work closely with the WHO European Office, the primary study partner, to maximise coverage and impact of the research. For example, WHO colleagues recently presented HBSC data at the Regional Committee meeting, attended by Ministries of Health across all 53 member states within the WHO European Region. The ICC also works closely with national teams located in academic and public health institutions and provides advice and support for youth participation activities, stakeholder engagement, knowledge exchange and impact activities.
• Exploring treatment burden and capacity for self-care among patients with HIV/NCD multimorbidity in South Africa to inform interventions (EXTRA). Mair is a co-investigator (£199k). This MRC-funded project uses qualitative methods to explore the treatment burden and capacity for self-care among patients with HIV/NCD multimorbidity in South Africa. This work aims to inform the development of interventions aimed at reducing workload and improving capacity for people with multimorbidity in South Africa. It is led by Professor Naomi Levitt and Dr Katherine Murphy of the Chronic Disease Initiative for Africa (CDIA) and University of Capetown in collaboration with Professor Mair here at Glasgow and Professor Carl May at the London School of Hygiene and Tropical Medicine.

• SPEEDIER: Surveillance integrating Phylogenetics and Epidemiology for Elimination of Disease: Evaluation of Rabies Control in the Philippines. Craig, Wyke and Chng are co-investigators on this £366k project. The overarching aim is to deliver a cost effective, epidemiologically robust surveillance package that can be rolled out across the Philippines to guide and sustain the elimination of canine rabies.
c. MULTIMORBIDITY

• IHW staff (Nicholl, Jani, McAllister, Macdonald, Gallacher and Mair) have led a programme of multimorbidity and frailty research funded by the Wellcome Trust, MRC, Versus Arthritis, Chief Scientist Office, the Stroke Association, Dunhill Trust, BMA and EPSRC (total £7.3M). This work aims to enhance understanding of multimorbidity in areas of socioeconomic deprivation as well as the treatment burden and prevalence and impact of frailty in chronic illness and implications for clinical management.

• The NIHR-funded 3D Study: Patient-centred intervention to improve the management of multimorbidity in general practice (total £1.8M) (Glasgow PI: Mercer) is the largest randomised controlled trial of an intervention to improve care for people with multimorbidity by restructuring primary care to treat patients holistically managing all of their conditions and medications in a single review consultation.

• Using data from our Twenty07 cohort, Katikireddi, along with Hunt and Mercer, has shown how socioeconomic inequalities in the development of multimorbidity exist even after taking into account known risk factors, and highlighted how tackling social determinants of health, including holistic health and social care, is necessary if the rising burden of multimorbidity in disadvantaged populations is to be tackled (BMC Medicine, 2017).

• Patients with multimorbidity are less likely to receive treatment than those with a single condition. There is a lack of evidence relating to patients with multimorbidity because they are often excluded from trials. McAllister was awarded a Wellcome Trust Intermediate Clinical Fellowship to develop new statistical methodologies for combining efficacy estimates from clinical trials with the natural history obtained from large routine healthcare databases to determine net overall treatment benefits.

• McAllister (PI) along with Mair and Hanlon have also studied the effect of COVID-19 on years of life lost among those with multimorbidity in a paper published in Wellcome Open Research (viewed over 13,000 times within the first week of publication).
d. MAXIMISING THE USE OF ROUTINE DATA

Cross-sectoral data linkage: Funding of £312k from Farr Scotland followed by £762k from HDR-UK, in addition to two UKRI Innovation HDR UK Fellowships, has enabled IHW to develop novel Scotland-wide linkages of databases covering health (maternity, health visitor, disease registry, prescribing, hospitalisations, cancer registrations, deaths), education (school pupil census, attendance, exams), employment, and physical environment (solar radiation, weather, pollution) data. Fleming and colleagues have been able to determine the health and educational outcomes associated with a range of childhood conditions including diabetes, asthma, epilepsy and ADHD. Furthermore, bringing together linked routine data with data on solar radiation from NASA satellites has enabled Hastie and colleagues to demonstrate an association between antenatal exposure to UVB radiation and special educational need implicating maternal vitamin D as a possible modifiable risk factor.

e-Cohorts: IHW has demonstrated the feasibility and usefulness of constructing electronic cohorts using linked routine data.

- Linkage of football club registers to routine hospital, prescribing and death data demonstrated a higher risk of adverse neurodegenerative outcomes among 7,676 former footballers than 23,028 matched population controls and demonstrated significantly higher risk among outfield players than goal-keepers (Mackay, NEJM, 2019). These findings were in contrast to other health outcomes including cardiovascular disease, mental health problems and all-cause mortality. The cohort study led directly to the English, Scottish and Northern Irish Football Associations banning children from heading footballs during training.

- The Scottish Veterans Health Study used linkage of routine data to construct a retrospective cohort study of 57,000 military veterans and 173,000 people with no record of service matched for age, sex and area of residence, with 32 years follow-up. The study showed veterans were at increased risk of smoking-related diseases, such as cardiovascular disease and lung cancer, motor neurone disease and mental ill-health, but there was no overall increased risk of suicide, leukaemia, prostate cancer or colorectal cancer. The findings have informed governmental policy and led to further funding from the Forces in Mind Trust to evaluate the impact of the Armed Forces Covenant and other initiatives.
Linkage of primary and secondary data

- Pell has been a member of the Steering Committee of UK Biobank since its inception. The 0.5 million UK Biobank participants are followed-up via linkage to routine data. IHW was one of the first research centres in the world to work with data from UK Biobank and we have developed a successful interdisciplinary programme of epidemiological and genomics research that covers multimorbidity, mental health, cognitive function, cardiometabolic health, chronic pain, and sleep and circadian rhythms. To date, we have published over 90 papers that make use of UK Biobank data.

- We have championed the development of new trial methodologies that exploit linkage to routine data to improve trial efficiency; for example, in the Early detection of Cancer of the Lung Scotland (ECLS) study which recruited over 12,000 patients and using linked data to monitor outcomes up to 10 years follow-up.

e. METHODOLOGY DEVELOPMENT

In addition to undertaking novel, original research, IHW undertakes methodological research and has played leading roles in developing research methodologies and guidance including the:

- MRC Process Evaluation Guidance
- MRC Guidance on using Routine Data to Conduct Natural Experiments
- MRC Guidance on Developing and Evaluating Complex Interventions
- MRC Guidance on Exploratory Trials of Complex Public Health Interventions
- MRC Strategic Review of the Largest UK Population Cohort Studies
- Cochrane Collaboration’s Synthesis without Meta-analysis Reporting Guideline
- NIHR Complex Reviews Support Unit
The following are examples of where IHW has achieved impact on health and health inequalities by working with stakeholders to develop novel interventions and novel ways of delivering existing interventions.

**Working with government to prevent HIV**

Men who have sex with men (MSM) are at the highest risk of contracting HIV in the UK. While changes in HIV testing policy have reduced levels of HIV, at-risk sexual behaviour levels remain high, HIV ‘literacy’ remains an issue, and around one-quarter of HIV-infected MSM remain undiagnosed. IHW research has shaped HIV biomedical prevention policy by supplying key data needed by Scottish Government policymakers to plan and fund pre-exposure prophylaxis (PrEP) for HIV prevention. In July 2017, Scotland became the first and only UK nation to fund PrEP on the NHS. Since implementation 3,354 people have received PrEP, there has been a 32% increase in HIV testing among MSM, and their HIV incidence has fallen.

**Working with football clubs to tackle obesity in men**

Rising levels of obesity challenge public health; men are particularly at risk but are underserved by existing weight management programmes. IHW researchers developed and evaluated Football Fans in Training (FFIT), a weight management programme delivered through professional football clubs. FFIT is effective, cost-effective and reaches high-risk groups. In 2016, the University of Glasgow concluded a single-licence franchise model agreement with the Scottish Professional Football League Trust. This franchise, and our collaboration with international researchers and non-governmental organisations, have led to more than 7,000 participants benefitting from healthy lifestyle programmes delivered in professional sporting clubs in six countries from 2012 onwards, losing on average at least 3 kg with subsequent health benefits.
EXAMPLES OF IMPACT

Working with the NHS to develop a novel intervention for psychosis

Eighty percent of psychosis patients experience a relapse within five years of their first episode. Relapse accounts for most of the lifetime disability and societal costs arising from psychosis. University of Glasgow research developed cognitive-interpersonal and compassion-focused therapy approaches to emotional recovery and relapse prevention within an NHS Glasgow early intervention service that improves outcomes in psychosis. Since 2014, this model has been rolled-out to mental health services across Scotland through NHS Education Scotland - with 400 mental health staff now trained in cognitive interpersonal and compassion focused approaches - bringing the benefits of this work to service users across Scotland. The research underpins the Scottish Mental Health Strategy 2017–2027 commitment to early intervention in psychosis, which in 2019 established and funded a new national improvement clinical network to support continued implementation.

Developing novel ways of delivering existing interventions - CBT

Depression and anxiety disorders are on the rise worldwide, placing conventional mental health services under considerable pressure. To address this need, University of Glasgow developed a low-intensity, cost-effective cognitive behavioural therapy (CBT) resource for use in community, health and educational settings. Living Life to the Full (LLTTF) is offered in various learning formats (book, DVD, online or group session) and delivers both immediate and long-term improvements in mood, positive attitude and coping skills. Since August 2013, individual and institutional use of LLTTF has grown in the UK and internationally. LLTTF was adopted by the Canadian Mental Health Association as its flagship programme for national roll-out in 2014. To date, this organisation has trained 460 facilitators/coaches; delivered 550 courses; supported 18,200 people; and sold 93,984 course booklets. LLTTF has also been adapted for key user groups (children, young people, postpartum mothers, older adults, non-English speakers) and to tackle specific circumstances (dental anxiety, caregiving, living with chronic illness).

Tackling exclusion of migrants and refugees

O’Donnell has led work promoting better practice in interpreted consultations, particularly for healthcare professionals working with patients in community or home-based settings. Funded by the Arts and Humanities Research Council and the Scottish Funding Council, this work led to the development of video and on-line training materials for health and social care professionals. These educational resources are freely available and, to date, they have been used by a wide variety of third sector and charity organisations in the UK, including UNITE the Union, NHS Education for Scotland, MotherTongue, Freedom from Torture and Deaf Action.
EXAMPLES OF IMPACT

Health checks for adults with learning disabilities

Adults with learning disabilities suffer inequalities in both health and access to healthcare. Undiagnosed comorbidities and unmet needs are common. Our research showed that annual health checks were not only beneficial to the adults with learning disabilities in terms of earlier diagnosis and treatment but also reduced overall healthcare costs. As a result of our research, Scotland introduced health checks and England reduced the lower age limit for its existing health checks to include the 7,500 adolescents with learning disabilities.

Smoke-free prisons

High levels of second-hand smoke in prisons adversely affect the health of both inmates and staff. We conducted research in partnership with the Scottish Prison Service that informed how and when smoke-free prisons were implemented in Scotland. Researchers in the MRC/CSO SPHSU worked with the Scottish Government and Scottish Prison Service to develop a joint action plan detailing how indoor smoke-free prison facilities could be delivered in line with the Scottish Government’s aspiration to create a tobacco-free generation of Scots by 2034. Our researchers then gained NIHR funding to evaluate graduated progress towards, and impacts of, the implementation of indoor smoke-free prison facilities in Scotland (£853,045). Researchers within the Institute guided the implementation of the smoke-free policy across all Scottish prisons. As a result of our findings the implementation date was brought forward and resulted in an immediate 80% reduction in exposure. Northern Ireland and France wish to take forward a similar approach.
Reducing risk of dementia in contact sports

Mackay and colleagues demonstrated a higher risk of adverse neurodegenerative outcomes among 7,676 former professional footballers than 23,028 matched population controls and demonstrated significantly higher risk among outfield players than goalkeepers (NEJM, 2019). As a direct result of these findings, the English, Scottish and Northern Irish Football Associations have banned children under 11 years of age from heading footballs during training. They also issued guidelines limiting how much heading older children (11-18 years) should do.

Reducing health inequalities

The General Practitioners at the DEEP End (Watt, Blane) is a collaborative project between IHW academics, 100 general practices working in deprived communities across Scotland, and the Royal College of General Practitioners. This collaboration has provided a voice for practitioners in deprived areas, highlighting concerns relating to current funding inequities in general practice. The collaboration has produced briefing papers for Scottish Government that have led to a number of funded initiatives, including the Links Worker Project and the CarePlus Project, both of which are whole-system interventions to improve the quality of life in primary care patients with multimorbidity. This innovative initiative has now gone on to inspire similar endeavours elsewhere with DEEP END England, Wales and Europe now underway, modelled on the Scottish initiative.
Maurice Bloch Lecture Series

The recorded lectures are available on: www.gla.ac.uk/researchinstitutes/healthwellbeing/events/mauriceblochannuallectureseries/

Professor Paul Mork, Norwegian University of Science and Technology, Norway, November 2018
Developing artificial intelligence applications for the primary care domain

Kerstin Bach, Norwegian University of Science and Technology, November 2018
The Nord-Trondelag Health Study (The HUNT Study): Possibilities for research and collaboration

Professor Mia Crampin, Malawi Epidemiology and Intervention Research Unit, Malawi, December 2019
The neglected health needs of Malawi ...... multimorbidity, inequalities and the double burden of malnutrition

Professor Anthony Hunter, University College London, March 2019
Towards computational persuasion for behaviour change applications

Professor Noemi Kreif, University of York, May 2019
Machine learning in policy evaluation: new tools for causal inference

Professor Kay Redfield Jamieson, Johns Hopkins University, USA, September 2019
Mood disorder and creativity

Professor Kypros Kypri, University of Newcastle, Australia, November 2019
Governments as partners in knowledge generation: Observations on alcohol policy and research in Australia and New Zealand 1999-2019

Professor Susan Grant-Muller, University of Leeds, January 2020
The role of new and emerging data in understanding the health-equity implications of transport policies

Professor Louise Arsenault, Kings College London, February 2020
With a little help from my friends: social relationships and their impact on mental health and wellbeing

Linda Geddes, Award-winning science journalist and author, April 2020
Public health implications of the new science of sunlight

Professor George Davey-Smith, University of Bristol, May 2020
Understanding the health consequences of educational attainment: triangulating evidence from genetic and non-genetic causal inference approaches

MRC/CSO SPHSU Seminar Series (not recorded)

Professor James Hargreaves, London School of Hygiene & Tropical Medicine, October 2018
Implementation science in HIV/AIDS: Where are we?
Sheena Fletcher, Glasgow Centre for Population Health, October 2018
*Using infographics as part of the GCPH communications approach*

Professor Steven Cummins, London School of Hygiene & Tropical Medicine, November 2018
*The new urban health*

Carol Emslie, Glasgow Caledonian University, November 2018
*New booze death map shame of Scottish women: taking the long view on women, men and alcohol research*

Professor Mark Petticrew, London School of Hygiene & Tropical Medicine, December 2018
*Researching commercial determinants of health*

Summer Hawkins, King’s College London, January 2019
*Understanding and addressing abortion stigma*

Anu Kumar, IPAS, January 2019
*The downstream effects of state tobacco control policies on birth outcomes: do policies have impact disparities?*

Maja Nordtug, University of Southern Denmark, February 2019
*Health, trust and media: Parental decision making on the subject of HPVA vaccine*

Professor John Frank, University of Edinburgh, February 2019
*Novel Administrative Data to Monitor SES Inequalities in Health Efficiently in LMICs*

Amy Chandler, University of Edinburgh, March 2019
*Gender, Suicide and the Potential of Critical Phenomenology*

Bernie Hogan, University of Oxford, April 2019
*Assessing the reliability of network measures collected with participant-aided sociograms*

Shannon Montgomery, Queen’s University Belfast, April 2019
*Should social networks be incorporated within behaviour change interventions in adolescents?*

Professor Katherine Keyes, Columbia University, Mailman School of Public Health, April 2019
*Does epidemiology matter? Epidemiology and population health science in the 21st century*

Nel Whiting, Scottish Women’s Aid, April 2019
*Domestic Violence*

Robin Ireland, European Healthy Stadia Network, May 2019
*Public health advocacy and the third sector*

Victor Luque de Haro, Universidad de Almería, June 2019
*Social inequality in mortality during the old regime: A study of welfare in south-east Spain (1798-1812)*

Flora Douglas, Robert Gordon University, Aberdeen, September 2019
*Lived experiences of managing a health condition for people living with long term health conditions*
EVENTS

Professor Amanda Atkinson & Professor Harry Sumnall, Liverpool John Moores University, October 2019
*Media representations of Glasgow’s Drug Consumption Rooms*

Matteo Richiardi, University of Essex, October 2019
*Modelling socio-economic status in public health research: A microsimulation perspective*

Dr Andrea Scalco, University of Aberdeen, October 2019
*Modelling the impact of interventions aimed at reducing meat consumption using agent-based modelling*

David Drabble, Tavistock Institute, London, October 2019
*Communicating findings through data visualization*

Peter Faassen de Heer, Scottish Government, October 2019
*Obesity Strategy*

Professor Sarah Rodgers, University of Liverpool, November 2019
*Blue Green Spaces and impact on mental health and wellbeing: a data rich natural experiment*

Amy Tillbrook, Urban Big Data Centre, November 2019
*How does data linkage work?*

**Other Seminars & Conferences**

Itamar Megiddo, University of Strathclyde, March 18
*Agent-based modelling for economic evaluations: analyses using data from India*

Mark Petrie, NHS Greater Glasgow and Clyde, April 2018
*Heart failure management*

Stewart Mercer & Alistair Wilson, May 18
*Mindfulness on the NHS*

Julia Frost, University of Exeter, June 18
*Mapping Elements over time*

Joanne Stirling, NHS Greater Glasgow and Clyde, September 18
*Children’s health*

Mike Drummond, University of York, October 2018
*Publish or Perish? Maximising the Chances of Your Paper Being Published*

David Anderson, NHS Greater Glasgow and Clyde, October 2018
*Managing COPD*

Philip Quinn, University of Glasgow, November 2018
*Tobacco Control Seminar*, Festival of Social Science, The Lighthouse, November 2018

Mary Ann Lumsden, University of Glasgow, November 2018
*Women’s health*

Christine Mpundu-Kaambwa, Flinders University, South Australia, December 2018
*Mapping the PedsQLTM onto the CHU9D: Assessing the external validity of existing mapping algorithms in disparate sub-groups*

Emma Frew, University of Birmingham, January 2019
*Supporting local government decision makers to tackle childhood obesity*
Thushitha Kananandam, February 2019  
*Paediatric ENT*

Stuart Bell & Iain McGraw, University of Glasgow, March 19  
*Orthopaedics*

Joanna Coast, University of Bristol, March 2019  
*Using qualitative research to improve economic evaluation: exploring capability across the life course*

SHINE Conference, COSLA centre, Edinburgh, May 19

John Paul Leach, University of Glasgow, June 2019  
*Neurology*

William Padula, University of Southern California, USA, August 2019  
*Application of machine learning to develop a cost-effectiveness analysis of pressure injury prevention for improving hospital safety*

Stephen Parente, University of Minnesota, USA, September 2019  
*Recent US health policy*

Claire Munaghan, Royal Hospital for Sick Children, Glasgow, September 2019  
*Paediatric orthopaedics*

Paddy Mark, Glasgow Renal and Transplant unit, Queen Elizabeth University Hospital, October 2019  
*Renal Update*

Laura Sills, Alcohol and Drug Services, Greater Glasgow and Clyde, November 2019  
*Addiction*

Debbie Morrison & Greg Jones, Gartnavel Hospital & Queen Elizabeth University Hospital, November 2019  
*Diabetes*

**Workshops**

*Who is left holding the baby? The need for infant mental health services in Child and Adolescent Mental Health Services, March 2018*

*Innovations in mental health research and practice, October 2018*

*Digital health: What’s happening now, May 2019*

*Invisible disabilities, May 2019*

*Do childhood adversity and neurodevelopment predict mental health outcomes? August 2019*

*Nature and children’s health, October 19*

*What next for natural experiments? November 2019*

*Glasgow Clinical Trials Forum, February 20*
The overall improvements in many health indicators witnessed over the last decade have been marred by widening health inequalities. This, in part, reflects our over-reliance on individual level interventions. IHW (Katikireddi) contributed to the Academy of Medical Sciences Health of the Public 2040 Report that highlighted the need to focus on cross-sectoral, upstream interventions if we are to reduce health inequalities as well as improve health.

This shift in focus requires multidisciplinary, multi-agency research to develop and evaluate novel interventions. As described above, IHW has completed the first phase of its strategy to achieve this by: pulling together five discipline-specific departments, a unit and centre into one large, multidisciplinary research institute; restructuring around three pan-IHW multidisciplinary research themes; increasing our focus on developing and evaluating novel, upstream interventions; and strengthening our partnerships with external stakeholders.

We are now in the second phase of this journey. IHW is currently located over ten sites which correspond to the historical discipline-specific departments. We have secured £49.6M to build a new building that will co-locate the whole of IHW from 2022. The building will be instrumental in achieving our goals in that the structure and layout have been designed to encourage planned and opportunistic networking.

- It includes ideation space for partnership working with stakeholders and facilities for knowledge exchange and public engagement events,
- It is civic-facing including a Community Hub and exhibition space that showcases the work of IHW

We strongly believe that the building should embody our beliefs and values. It has been designed to high environmental and sustainability standards. In keeping with our culture of equality and diversity, the building is intellectually and physically accessible. The ground floor is publicly accessible, informal and inviting, has a social enterprise-run café that will serve affordable, healthy food. In addition, the building has adult as well as child changing areas and all usable space is physically accessible. We believe the building should improve the health and wellbeing of occupants and visitors and have incorporated indoor green space, natural light and ventilation, as well as contemplation and social space.

We have set up a culture change workstream to inform how we use the building to maximal effect in achieving our goals and will repeat the social network analysis to evaluate whether we have achieved this.
OTHER SOURCES OF INFORMATION

Newsletters

Institute of Health and Wellbeing (IHW) HAWKEYE
www.gla.ac.uk/researchinstitutes/healthwellbeing/news/hawkeye2018onwards/archive/

MRC/CSO Social and Public Health Sciences Unit (SPHSU)
www.gla.ac.uk/researchinstitutes/healthwellbeing/research/mrccsosocialandpublichealthsciencesunit/contact/email/

Scottish Learning Disabilities Observatory (SLDO)
www.sldo.ac.uk/news-events/e-newsletters/

Health Economics and Health Technology Assessment (HEHTA)
www.gla.ac.uk/researchinstitutes/healthwellbeing/research/hehta/aboutus/newslettersannualreports/#

Blogs

MRC/CSO Social and Public Health Sciences Unit (SPHSU)
www.gla.ac.uk/researchinstitutes/healthwellbeing/research/mrccsosocialandpublichealthsciencesunit/sharingourevidence/blog/

Institute of Health and Wellbeing Knowledge Exchange (IHAWKES)
http://ihawkes.academicblogs.co.uk/

Twitter

Institute of Health and Wellbeing (IHW) HAWKEYE
www.twitter.com/UofGIHW

IHW Athena SWAN
www.twitter.com/IHWAthenaSWAN
OTHER SOURCES OF INFORMATION

MRC/CSO Social and Public Health Sciences Unit (SPHSU)  
www.twitter.com/theSPHSU

Health Economics and Health Technology Assessment (HEHTA)  
www.twitter.com/HEHTAGlasgow

General Practice and Primary Care (GPPC)  
www.twitter.com/gppcglasgow

Mental Health and Wellbeing (MHW)  
www.twitter.com/UofGMHW

Public Health  
www.twitter.com/publichealthuog
OTHER SOURCES OF INFORMATION

NIHR Complex Reviews Support Unit (CRSU)  
[Link](www.twitter.com/NIHRCRSU)

Scottish Learning Disabilities Observatory (SLDO)  
[Link](www.twitter.com/ScotLDO)

Suicidal Behaviour Research Laboratory  
[Link](www.twitter.com/suicideresearch)

Healthy Working Lives Group  
[Link](www.twitter.com/HWLGroup)

ACE (Adverse Childhood Experiences) Centre  
[Link](www.twitter.com/ACE_Centre2016)

Institute of Health and Wellbeing Knowledge Exchange (IHAWKES)  
[Link](www.twitter.com/IHAWKES1)
82 students were awarded doctorates during 2018 and 2019: 35 PhD, 2 MD and 45 DClinPsy

Doctor of Philosophy (PhD)

Ruth Agbakoba Understanding the Factors Affecting Implementation of Large-Scale National Digital Health Services in Practice

Lamia Al Aradi Assessing the impact of healthcare accreditation from the perspective of professionals in primary healthcare centres: A mixed methods case study from Kuwait

Azari Alhaleel National Accreditation Programme of Health Care Services in Kuwait: impact, challenges and barriers

Turkiya Almaskari Understanding barriers to recognition and diagnosis of autism spectrum disorders

Gheed Alsalam Assessment of patient safety culture in Kuwaiti public hospitals

Satu Baylan Imagining the effects of cognitive rehabilitation interventions; developing paradigms for the assessment and rehabilitation of prospective memory

David Blane Understanding the role of primary care in the management of adults with co-morbid obesity: a mixed-methods programme

Christine Cocker Examining the role of the social worker in the early screening and assessment of the mental health needs of looked after children

Breda Cullen Cognitive outcomes in people with behavioural and brain disorders within UK Biobank

Shadrach Dare A multilevel mixed methods study of neonatal mortality in Ghana

Amy Christina Ferguson Understanding genetic relationships between circadian function and mood disorders

Nicholas Graham Understanding the genetic interface between mood disorders and hypertension

Abdullah Habib Investigating working memory in individuals with Autism Spectrum Disorder

Michele Hilton Boon The contribution of natural experiments to the public health evidence base: four case studies in evidence synthesis

Anna Isaacs Keeping healthy and accessing primary and preventive health services in Glasgow: the experiences of
refugees and asylum seekers from Sub Saharan Africa

Aikaterina Kavalidou Multimorbidity and suicidality

Ciaran Kohli-Lynch Primary prevention of cardiovascular disease in disadvantaged populations: a comparison of modelling methods in the UK and the US

Pamela MacMahon An exploration of the attributions, beliefs and experiences of family carers supporting a relative with intellectual disability and challenging behaviour

Louise Marryat Promoting resilience, reducing risk: can parenting moderate the effects of maternal mental health issues on child socio-emotional development

Karen Maxwell The construction of fatherhood in the context of social disadvantage: conceptualisations of fatherhood and attitudes towards parenting interventions amongst socially disadvantaged fathers in Glasgow

Carrie-Anne McClay The impact of online websites to offer treatment for anorexia and bulimia

Megan McMinn Inequalities in mortality amenable to healthcare interventions in Scotland

Ana Pirc Do cultural differences in parental practices affect the development of antisocial behaviour and violence in children

Aliyah Rehman Sleep patterns in patients with psychosis

Marco Antonio Rios Salinas Exploring the role of impulsivity and decision-making on the development of suicide risk

Oonagh Robison The impact of housing tenure mix on secondary school pupils’ educational attainment in Glasgow

Emily Salt Experiences of, and attitudes towards, growing up and adulthood: a comparative study of young people with and without mild intellectual disabilities

Kanchana Srísiwat Predictors of manic symptoms in your adulthood and identification of the bipolar prodrome

Parisuth Sumransub Development of culturally and linguistically appropriate tests for neuropsychological assessment of cognition in Thailand

Sheela Tripathee Together through thick and thin: cohabiting partners’ reciprocal influence during men’s attempts to change their dietary practices and physical activity to lose weight and maintain weight loss

Yiqiao Xin Impact of variation of economic evaluation methods on the cost-effectiveness result: a case study of deep brain stimulation (DBS) in Parkinson’s

Megan Amy Yates Inequalities in mortality amenable to healthcare intervention in Scotland

Genevieve Young-Southward Transition and health for young people with learning disabilities

Mengyi Zheng Evaluation and treatment of low mood in Chinese speaking international students studying in the West of Scotland

Tiago Carlos ZorTea Psychological Vulnerability for Suicide Risk: Investigating the role of Attachment
Doctor of Medicine (MD)

**Everett Julyan** Defining the impact of maternal depression and serotonin reuptake on neonatal neural development

**Daniel Martin** Towards improving cardiometabolic outcomes in bipolar disorder

Doctorate in Clinical Psychology (DClinPsy)

**Tracey Maria Adams** Listening to mothers: experiences of mental health support and insights into adapting psychological therapy for people with severe or profound intellectual disabilities

**Claire Alexander** Cognitive function in stable Chronic Obstructive Pulmonary Disease

**Sara Beedie** Providing care during early warning signs and relapse in psychosis: exploring mental health staff perspectives using grounded theory methods

**Louise Buchan** Is prisoner’s knowledge of head injury improved following a brief psychoeducation programme?

**Sarah Byrne** An investigation of clinicians’ experiences of delivering Family Based Therapy for adolescents with Anorexia nervosa: and clinical research portfolio

**Michelle Cassells** Living with a severe mental illness and heart failure: an interpretative phenomenological analysis

**Caoimhe Clarke** ‘Life after Mellow’- An exploration of the feasibility and acceptability of long-term follow-up methods for the Mellow Babies intervention

**Eimear Crowe** Head Injury in Female Prisoners: Impact and Disability

**Julia Day** Technology Evaluating and Measuring Emotional Dysregulation (TEAMED)

**Holly de Mora** Establishing prevalence of head injury and associated disability in individuals being assessed by a pre-sentencing Criminal Justice Social Work Report & Clinical Research Portfolio

**Elizabeth Dewey** A feasibility study of ACT with older people with mental health difficulties

**Caroline Finlay** Validation of a measure of distress in adults with cystic fibrosis and Clinical Research Portfolio.

**Gillian Fraser** Validating the Narrative Recovery Style Scale (NRSS) in a sample of individuals with serious mental illness

**Ashley Gibson** An explorative study of the “active ingredients” that lead to positive outcomes following Cognitive Stimulation Therapy in dementia care

**Thomas Gilpin** Service user experiences of accessing support for psychosis in rural Highlands and the potential role of Smartphone technology: a qualitative exploration and Clinical Research Portfolio

**Louise Gordon** Social Workers’ experiences of supporting with children exposed to alcohol in utero; an Interpretative Phenomenological Analysis
Rachel Hanson Family-based treatment for young people’s eating disorders: An interpretative phenomenological analysis of parental perspectives. And clinical research portfolio

Sarah Harper “Doing justice” versus “undoing injustice”: Exploring the facilitators and barriers for adult survivors of historic child sexual abuse in engaging with the criminal justice system

Amy Homes The caregiver experience of family members of people with persistent psychosis and negative symptoms: An exploratory mixed method analysis of metacognition, caregiver attributions, emotional over-involvement and distress

Bruce Irvine A mixed methods study of the relationship between illness perceptions and the cascade genetic screening process in hypertrophic cardiomyopathy, and clinical research portfolio.

Rebecca Jury Waiting for heart transplant: An IPA study

Isabelle Kolte Transition from paediatric to adult care in inflammatory bowel disease: a qualitative exploration of adolescent perspectives

Anna Kondol Experiential but not expressive negative symptoms are associated with social cognition and functioning in schizophrenia –findings of a preliminary study with rehabilitation inpatients and Clinical Research Portfolio

David Maher Exploring the impact of perceptions of defeat and entrapment on well-being in teenagers

Lauren Manuel An Online CBT-based Life Skills Course for Carers of Children with Chronic and Life Limiting Conditions: a Feasibility Trial

Lauren Mapp Head injury and associated disability in offenders on release from custody and clinical research portfolio

David McGraw Acceptance and commitment therapy with a community older adult sample: a feasibility study investigating mechanisms of change

Christopher McKenzie Acceptance and Commitment Therapy for Depression after Psychosis: autobiographical memory specificity and rumination as candidate mechanisms of change: and Clinical research portfolio

Julie McVean Persisting disability after head injury in juvenile prisoners and Clinical research portfolio

Charmaine Murray Testing two models of delivering and maintaining life skills in a secondary school setting

Hope Plastock Factors affecting the decisions of adult survivors of childhood sexual abuse to engage as witnesses in the criminal justice system

Rachel Pritchett Does walking speed predict change in cognitive function late after head injury?

Calum Rankin Exploring the possible association of childhood peer bullying and paranoid thinking in clinical and non-clinical adolescent samples

Eleanor Seddon The epidemiology of head injury in women prisoners
Sarah Selby An investigation of the inter-rater reliability of the structured assessment of violence risk in youth (SAVRY)

Sadia Shah-Anwar Clinicians’, parents and young peoples’ perspectives of family-focused practice and engagement factors in a community parental mental health service

Kathleen Singer Attachment and compassion in an adult population

Ciara Stiles ASD and ADHD; understanding neurodevelopmental pathways to borderline personality disorder

Foteini Thriskou PRiorItieS: A study exploring PReferences for treatment, Internalised Stigma & social defeat among individuals in receipt of care for psychosis from mental health services

Asmai Torkaman A longitudinal study of cognitive and mental health outcomes in maltreated children entering care

Jessica Wainman-Lefley A pilot feasibility study of a randomized controlled trial of goal setting using the Values in Action Inventory of Strengths following brain injury: and, Clinical Research Portfolio

Jack Waldman A comparison of the content and nature of worries of young people with and without autism spectrum disorder as they transition out of school

Iona Walker Investigating the perception of emotion portrayed through body movements in Motor Neuron Disease

Frieda Whelan Experiences of cystic fibrosis and the family during adolescence: a multi-perspective account

Nikos Xanidis Exploring the implementation of Cognitive Behaviour Therapy for psychosis using the Normalisation Process Theory Framework
FUNDING AWARDS

Active Research Grants & Contracts

During 2018-2019, IHW held 671 active research grants and contracts, with a value to the Institute of £92.4million.

New Awards

Over 2018-2019, IHW won 356 new awards with a value to the Institute of £23.1 million.

Caryl F. To Estimate Of The Impact Of A Reduction In Tobacco Retailer Availability. Cancer Research UK (CRUK): £18,375

Cavanagh J. Consortium of Neuroimmunology of Mood Disorders and Alzheimer’s Disease. Wellcome Trust: £327,295

Cavanagh J. FMRI Equipment Donation. NHS Greater Glasgow and Clyde: £20,000

Cavanagh J. TNF antagonism and brain monocyte recruitment in sickness behaviour in rheumatoid arthritis. Medical Research Council (MRC): £638,529

Cleland J. Power of Bayesian Methods, RCTs, and Decision Models to Inform CRT Uncertainties. National Institutes of Health (NIH): £2,333

Conway D. Dental health of children with additional support needs / learning (intellectual) disabilities in Scotland: population data linkage studies. Baily Thomas Charitable Fund: £5,140

Cooper J. Novel low cost diagnostic tools and their impact in Africa. Engineering and Physical Sciences Research Council (EPSRC): £319,824

Cooper S. Learning disabilities - The Scottish Learning Disabilities Observatory. Scottish Government: £298,718

Craig P. Adaptation of evidence-informed complex population health interventions for implementation &/or re-evaluation in new contexts: Development of guidance for funders, researchers, policy-makers, practitioners. Medical Research Council (MRC): £75,474

Crampin A. DIPLOMATIC. National Institute for Health Research (NIHR): £41,902

Crampin A. Healthy Lives - Malawi, Intergenerational family cohort of chronic conditions. Wellcome Trust: £567,863

Dawson J. Rankin MOST. National Institutes of Health (NIH): £33,165

Dawson J. Saeboglove therapy for severe Upper limb disability and Severe Hand Impairment after stroke. Chief Scientist Office (CSO): £113,670

Dawson J. Saeboglove therapy for severe Upper limb disability and Severe Hand Impairment after stroke: a pragmatic, multicentre, parallel-group, randomised controlled trial with blinded outcome assessment. Chest Heart and Stroke Scotland (CHSS): £8,466

Dundas R. Harnessing cross-country administrative data to evaluate national policy impacts on maternal, infant and child health and health inequalities-MatCHNet. Medical Research Council (MRC): £311,557

Dundas R. Joint Research Associate Post. Glasgow Centre for Population Health (GCPH): £36,007

Dundas R. Nutrition Related Foetal Programming and Mental Health Outcomes

Edwards J. Integrating digital pathology and genomic analysis to optimise and streamline colonic surveillance within the Scottish Bowel Screening Programme (SBoSP) to enable early detection of Colorectal neoplasia. Innovate UK: £185,299


Fergie G. Developing a participatory approach for exploring young people’s perspectives on health inequalities. Economic and Social Research Council (ESRC): £225,850


Ford I. Leveraging the 25 year follow-up of the WOSCOPS trial. Chief Scientist Office (CSO): £32,535

Ford I. Research on the British Society for Rheumatology Biologics Register: Ankylosing Spondylitis. British Society for Rheumatology: £15,000

Ford I. Research on the British Society for Rheumatology Biologics Register: Ankylosing Spondylitis. British Society for Rheumatology: £15,000

Gallacher K. Optimising healthcare for stroke survivors - a study of health professional perspectives on minimising treatment burden and maximising patient capacity. NHS Greater Glasgow and Clyde Endowment Funds: £12,323

Gallacher K. Stroke Association Clinical Lectureship. Stroke Association: £9,000

Geue C. Addressing uncertainty around the reach and quality of optometrist independent prescribing in Scotland. Chief Scientist Office (CSO): £2,554


Gumley A. EMPOWER. National Institute for Health Research (NIHR): £55,329


Gumley A. The role of social factors in dissociation and threat processing in psychosis. Medical Research Council (MRC): £70,418

Hampson K. SPEEDIER. Medical Research Council (MRC): £18,379

Henderson M. Social and Emotional Education and Development (SEED): a Stratified, Cluster Randomised Trial of a Multi-component Primary School Intervention that follows the Pupils Transition


Hilton S. Supporting the National Action Plan for Antimicrobial Resistance (SNAP-AMR) in Tanzania. Medical Research Council (MRC): £370,342

Inchley J. Investigating the relationship between greenspace and health in Scottish schoolchildren. The Greenspace Availability and Scottish Schoolchildren (GRASS) project. Glasgow Children’s Hospital Charity: £22,220

Inchley J. Transdisciplinary Research for the Improvement of Youth Mental Public Health (TRIUMPH) Network. Economic and Social Research Council (ESRC): £856,403

Jahoda A. Behavioural activation (BeatIt) for depression in adults with severe intellectual disabilities. A feasibility randomised controlled study of BeatIt versus treatment as usual. Baily Thomas Charitable Fund: £59,009


Jani B. Relationship of Multi-morbidity with cancer incidence and outcomes in a large population cohort: Use of Data Sciences Methodology. British Medical Association (BMA): £23,860

Katikireddi S. Causal effects of alcohol and mental health problems on employment outcomes: Harnessing UK Biobank and linked administrative data. The Health Foundation: £325,665


Kinnear D. Supplement for 173538. Baily Thomas Charitable Fund: £2,031

Kotzur M. Bursaries for delegates of the international congress of behavioral medicine from low- and middle-income countries. The Royal Society of Edinburgh: £10,000

Langhorne P. What is the impact of large scale implementation of stroke Early Supported Discharge. National Institute for Health Research (NIHR): £5,318

Lean M. Economic Evaluation of the Diabetes Remission Clinical Trial DiRECT. Diabetes UK: £36,600
Lean M. Reversal of T2DM to normal glucose tolerance using non-surgical weight management with low-energy liquid-diet and long-term maintenance, within routine NHS care: study extension. Diabetes UK: £7,885

Lees K. MISTIE III Lead Grant Cluster Application for the Clinical Coordinating Center Supplement. National Institutes of Health (NIH): £4,443

Lees K. MISTIE III. National Institutes of Health (NIH): £9,791

Leighton S. CSO clinical training grant - psychotic disorders. Chief Scientist Office (CSO): £238,177

Lewis R. Young People’s uptake and use of condoms and contraception (CONUNDRUM). NHS Greater Glasgow and Clyde: £49,000

Lewsey J. TRends and Inequalities in Prescribing for Alcohol use Disorders in Scotland (TRIPADS). Alcohol Research UK: £59,006

Lewsey J. Understanding the direct and indirect impact of lowering Scotland’s drink-drive limit. Chief Scientist Office (CSO): £2,586

Lyall D. Investigating causal associations between cardiometabolic risk factors, and cerebrovascular health in UK Biobank using Mendelian Randomization. Neurosciences Foundation: £10,000

Lyall D. Investigating causal associations between cardiometabolic risk factors, and cognitive/brain health using Mendelian Randomization. American Psychological Foundation (APF): £17,790

Lyall L. The role of circadian and sleep disruption in depression. Royal College of Physicians of Edinburgh: £129,998

MacDonald S. Developing Media Guidelines for reporting health, illness and risk: a cancer case study. Chief Scientist Office (CSO): £24,766

MacDonald S. Multimorbidity in the context of Socioeconomic deprivation: a mixed methods exploration of how Community and Individual factors interact to influence patient capacity to manage Multimorbidity (SCIM). Chief Scientist Office (CSO): £188,041

MacDonald S. P2D award for General Practice. Medical Research Council (MRC): £9,000

MacDonald S. Sustaining Public and Patient Involvement: building a resource. Wellcome Trust: £17,673

Mair F. Academic Fellow Post in General Practice - Hanlon 2018/19. NHS Education for Scotland (NES): £54,528

Mair F. Academic Fellow Post in General Practice - McCallum 2018/19. NHS Education for Scotland (NES): £34,080

Mair F. Corcoran NES Fellowship 19/20. NHS Education for Scotland (NES): £28,906

Mair F. Foster NES Fellowship 19/20. NHS Education for Scotland (NES): £3,011

Mair F. SCREDs Post in General Practice Rughani. NHS Education for Scotland (NES): £213,375

Mair F. Understanding prevalence and impact of frailty in chronic illness and implications for clinical management. Medical Research Council (MRC): £312,901
Mair F. Understanding stakeholder views regarding the design of a trial intervention to reduce anticholinergic burden. Chief Scientist Office (CSO): £34,436

Mair F. West of Scotland Node for Scottish Practices and Professionals involved in Research (SPPIRe). Scottish School of Primary Care (SSPC): £98,797


Martin A. Systematic review on the potential of outdoor nurseries for promoting learning, social relationships, health and wellbeing in early childhood. Scottish Government: £59,881

McAllister D. Combining efficacy estimates from clinical trials with the natural history obtained from large routine healthcare databases to determine net overall treatment benefits. Wellcome Trust: £25,000

McCann M. ESRC-IAA: Developing complex systems methods capacity in NHS Health Scotland. Economic and Social Research Council (ESRC): £7,613

McConnachie A. Feasibility and multi-centre clinical trial of gait rehabilitation in patients with recently diagnosed rheumatoid arthritis of the foot or ankle. National Institute for Health Research (NIHR): £296,398

McConnachie A. Identifying risk factors and treatment options that influence outcomes for patients admitted to hospital with COPD or Congestive Heart Failure. Scottish Government: £20,854

McCrorie P. Children Create: Amplifying the voices of children in the translation of physical activity related scientific evidence. Scottish Government: £15,000


McIntosh E. NIHR Global Health Research Group on estimating the prevalence, quality and life, economic and societal impact of arthritis in Tanzania: a mixed methods study at University of Glasgow. National Institute for Health Research (NIHR): £1,484,484

McLeod H. Palestine Support Work. NHS Greater Glasgow and Clyde: £56,783

McLeod H. Strengthening Mental Health & Wellbeing Research Capacity in Low Resource Settings: Developing a Pathway to Sustainable Impact in Palestine. Academy of Medical Sciences: £21,266


McMurray J. Effect of sacubitril/valsartan compared to valsartan on left ventricular remodelling in patients with asymptomatic left ventricular systolic dysfunction after myocardial infarction. British Heart Foundation (BHF): £97,925

McPeake J. Improving health and social care integration delivery in the acute care environment. University of Cambridge (HEI): £225,000

McQueenie R. Investigating the importance of serial missed appointments in the NHS: a linkage pathfinder project of general practice, health, social care and education data. Chief Scientist Office (CSO): £31,508
Melville C. Feasibility of the Active Play intervention for children with intellectual disabilities. Chief Scientist Office (CSO): £30,938

Melville C. Transformative programmes for individuals with intellectual disabilities and challenging behaviours. Scottish Government: £200,000

Mercer S. Robert Wood Johnson Foundation donation for Scottish School of Primary Care. Robert Wood Johnson Foundation: £10,000

Mercer S. Scottish School of Primary Care. Scottish School of Primary Care (SSPC): £55,140

Minnis H. AIMS -2-TRIALS. European Commission (EC): £96,120

Minnis H. Enhancing information systems to support children’s health and development: exploring options in Glasgow. Gillberg Foundation: £19,615

Minnis H. Gillberg Foundation donation. Gillberg Foundation: £13,900

Minnis H. Gillberg Foundation Supplement for Lucy Thompson. Gillberg Foundation: £14,233

Minnis H. Pain Perception in Looked After Young People with Self-Harm. Medical Research Council (MRC): £139,297

Minnis H. Parents Inc.: A feasibility randomised controlled trial of a parenting support programme focused on families affected by ADHD. Chief Scientist Office (CSO): £275,014

Minnis H. Working on Hearts and Minds. Chief Scientist Office (CSO): £27,222

Mitchell K. National Survey of Sexual Attitudes and Lifestyles-4. Wellcome Trust: £188,824

Moore L. A multicentre cluster randomised controlled trial to investigate the effectiveness and cost-effectiveness of an informal school-based peer-led drug prevention intervention (The FRANK friends study). National Institute for Health Research (NIHR): £12,826

Moore L. PHASE: The Population HeAlth Simulation nEtwork. Medical Research Council (MRC): £360,644

Moore L. SPHSU Capital Funding. Medical Research Council (MRC): £315,000

Moore L. Using Game Theory to assess the effects of social norms and social networks on adolescent smoking in schools: a proof of concept study and implications for health behaviour interventions. Medical Research Council (MRC): £6,600

Morrison D. Survival after SACT: understanding the real world outcomes for breast cancer patients. Breast Cancer Now: £8,140


Muir K. Alteplase-Tenecteplase Trial Evaluation for Stroke Thrombolysis (ATTEST-2) Imaging Substudy. British Heart Foundation (BHF): £12,892

Muir K. I-CAIRD: Industrial Centre for AI Research in Digital Diagnostics. Innovate UK: £272,452
Mulvana H. Contract enhanced ultrasound (CEUS) to advance individual staging and treatment planning in rectal cancer. Bowel Cancer UK: £3,344

Nicholl B. Chronic pain in the context of multimorbidity. Versus Arthritis: £380,578

O’Connor R. ACES study. NHS Greater Glasgow and Clyde: £28,100

O’Connor R. Emotion processing, electrodermal activity and the transition from thoughts of self-harm to self-harm acts in young people (EMERGE). Medical Research Foundation: £245,269

O’Connor R. Mindstep Foundation fellowship. The Mindstep Foundation: £99,837

O’Connor R. Scottish Government National Suicide Prevention Leadership Group post. Scottish Government: £90,703

O’Connor R. Suicide attempt and adverse childhood experiences: An interpretative phenomenological investigation. NHS Greater Glasgow and Clyde Endowment Funds: £14,647

Paul J. BALLAD- A global study to evaluate the potential benefit of adjuvant chemotherapy for small bowel adenocarcinoma (International Rare Cancers Initiative study-IRCI 002). Cancer Research UK (CRUK): £7,083

Pell J. Linking education and health data together to study relationships between various health factors and children’s educational and health outcomes. Medical Research Council (MRC): £290,941

Pell J. Understanding the excess risk of cardiometabolic disease in individuals with serious mental illness. Medical Research Council (MRC): £323,270

Pellicori P. The epidemiology and clinical relevance of pre-clinical congestion quantified by natriuretic peptides and novel ultrasound methods in patients at risk of developing heart failure. Heart Research UK: £148,865

Petrie J. Triple therapy for T1DM with insulin, semaglutide and dapagliflozin. Juvenile Diabetes Foundation: £50,849

Reith G. Football and gambling: a feasibility study and pilot for an intervention to reduce gambling involvement among football fans. National Institute for Health Research (NIHR): £161,157


Robb K. Scottish Cancer Foundation Prize 2018. Scottish Cancer Foundation: £10,000

Rooksby M. Consultation on human computer interaction in child mental health. NHS Greater Glasgow and Clyde Endowment Funds: £2,365

Rooksby M. Tangible toys (TATO) with sensors and biofeedback mechanism: Explorative work to assess its suitability and feasibility as a tool for treating anxious children. Engineering and Physical Sciences Research Council (EPSRC): £14,969


Simpson S. Osteoarthritis Preoperative Package of care of Orthotics, Rehabilitation, Topical and oral agent Usage and Nutrition to Improve outcomes aT a Year (OPPORTUNITY). Versus Arthritis: £33,311

Smith D. Mental Health Data Pathfinder. Medical Research Council (MRC): £878,751

Smith D. Pramipexole for treatment resistant bipolar depression (the PAX-BD study). National Institute for Health Research (NIHR): £31,411


Thomson R. Predicting the impacts of universal basic income on mental health inequalities in the UK population: a microsimulation model. Wellcome Trust: £180,707

Touyz R. BHF Centre of Excellence. British Heart Foundation (BHF): £25,000

Tweed E. Morbidity and mortality among people experiencing severe and multiple disadvantage: a cohort study using cross-sectoral data linkage. Chief Scientist Office (CSO): £946


Wight D. “Mellow Babies” improve the psychosocial health of mothers and their children? The Mellow Babies Trial. National Institute for Health Research (NIHR): £12,846

Wight D. Providing strategic direction to optimize parenting interventions to prevent violence in Uganda. Oak Foundation: £24,322

