

# Public Health Annual Research and Practice Conference:

'An ounce of prevention is worth a pound of cure'

Wednesday 8 June 2016 Riddel Hall, Stranmillis



# **Conference purpose**

The Public Health Agency (PHA) and partner organisations are hosting a scientific conference focusing on the economic case for prevention and the health and social benefits of public health interventions for the population in Northern Ireland.

This joint event aims to raise the profile of public health research, interventions and innovation and engage local professionals, practitioners and researchers working in the broad field of public health.

The day will also see the launch of the Director of Public Health's seventh *Annual Report* and will provide an excellent opportunity to network across sectors and disciplines. In addition to the keynote plenary sessions delegates will have the opportunity to participate in a number of parallel sessions showcasing the economic case for prevention and the health benefits of public health interventions.

# **Target audience**

Practitioners and researchers in Northern Ireland working in the broad field of public health.

## **Twitter**

Follow updates on Twitter at: @publichealthni

The hashtag for the conference is **#PreventConf** 

# Programme

8.45am	Registration and refreshments					
Morning se	Morning session Chair: Dr Janice Bailie, Assistant Director HSC R&D, PHA					
9.30am	Welcome and DPH Report Dr Carolyn Harper, Director of Public Health/Medical Director, PHA					
10.00am	<b>The economics of prevention: equity and efficiency in cancer screening</b> Professor Ciaran O'Neill, Professor of Health Technology Assessment, NUI Galway and Honorary Professor of Health Economics, QUB.					
10.40am	Tea and coffee					
11.10am	Parallel sessions					
	Population level interventions	Technology as an enabler	Community based interventions 1	Prevention at the interfaces		
12.20pm	Economic evaluation of population health interventions: challenges and opportunities Dr Emma McIntosh, Deputy Director of Health Economics and Health Technology Assessment, University of Glasgow					
1.00pm	Lunch					
Afternoon session Chair: Professor Peter McBride, Chief Executive, Niamh						
2.00pm	Northern Ireland Affairs Committee Manifesto and Practitioner Membership (Faculty of Public Health) Dr Adrian Mairs, Chair of Northern Ireland Affairs Committee of the Faculty of Public Health and Dr Damien Bennett, Secretary of Northern Ireland Affairs Committee of the Faculty of Public Health					
2.30pm	2.30pm Parallel sessions					
	Targeted clinical interventions	Tobacco	Community based interventions 2	A medley		
3.40pm	<b>Public understanding of evidence in nutrition</b> Professor Ian Young, Chief Scientific Advisor, Department of Health and Director of Health and Social Care, Research and Development					
4.20pm	Close					
				t	hree	



# **Dr Carolyn Harper**

Dr Harper qualified in Medicine from Queen's University Belfast (QUB) and, after completing her training in general practice, trained in public health. She worked previously in the Northern Health and Social Services Board as a Consultant in Public Health with main responsibilities for acute service commissioning and clinical and social care governance.

She also worked in California as Director of Quality Improvement for the State Quality Improvement organisation. Most recently she was Deputy Chief Medical

Officer for Safety, Quality and Standards, and from April 2009 has been Director of Public Health for Northern Ireland with the PHA. She is a firm believer in partnership working and is passionate about improving health and reducing inequalities.



### **Dr Janice Bailie**

Janice Bailie completed a PhD in Biochemistry at Queen's University Belfast in 1990, and post-doctoral research in Ophthalmology at QUB, and in the Radiation Science Group, Ulster University, focusing on the role of the microvascular endothelium in angiogenesis. From 1998–2005, she was Divisional Research and Development (R&D) Manager in Molecular Biology at Randox Laboratories Ltd.

She joined the HSC R&D Office as Programme Manager in January 2005, and has since managed a programme of infrastructure initiatives and funding awards

such as the Northern Ireland Clinical Research Networks, the Northern Ireland Clinical Trials Unit, the Clinical Research Facility and the Northern Ireland Biobank. Janice was appointed to the role of Assistant Director of HSC R&D Division, Public Health Agency, in June 2013.



## **Professor Ciaran O'Neill**

Ciaran O'Neill is Professor of Health Technology Assessment, National University of Ireland (NUI) Galway and Honorary Professor of Health Economics, Queen's University Belfast. Ciaran was educated in QUB, where he was awarded a degree in economics in 1986 and a PhD in agricultural economics in 1990.

He joined the Department of Economics in QUB as a lecturer in 1990, moving to the University of Nottingham in 1997. He was appointed Professor of Health Economics and Policy at Ulster University in 2003 before moving to QUB School

of Medicine and Dentistry in January 2007 as Professor of Oral Health Research.

He joined NUI Galway's JE Cairnes School of Business and Economics as Professor of Health Technology Assessment in September 2008 and served as Dean of the College of Business, Public Policy and Law between 2013–2014 prior to taking up a Research Leader award in February 2014.

He has served on several national scientific committees and provided advice to Departments of Health in Northern Ireland and the Republic of Ireland.



# **Dr Emma McIntosh**

Dr Emma McIntosh is Deputy Director of the Health Economics and Health Technology Assessment (HEHTA) team at the University of Glasgow. Emma is a Reader in Health Economics and programme leader on the Economics of Population Health.

She has an MSc in Health Economics and a PhD in Economics. Emma's methodological interests are in the area of economic evaluation, evaluating public health interventions, stated preference methods and cost benefit analysis more generally.

In addition to publishing applied economic evaluation research in peer-reviewed journals Emma coauthored a book entitled 'Applied Methods of Cost-Benefit Analysis in Health Care' as part of Oxford University Press's Handbooks in Health Economic Evaluation series and is currently co-editing the next in the series entitled 'Applied Health Economics for Public Health practice and research'.



### **Professor Peter McBride**

Peter McBride is the Chief Executive of the Northern Ireland Association for Mental Health (Niamh). He joined Niamh in 2001 as the Managing Director of Carecall. Over the subsequent years Peter cultivated Carecall's workplace services to make it one of the largest providers of workplace Employee Assistance Programmes' services on the island of Ireland.

Peter has degrees in Science and Divinity and at Masters level in Social Work, alongside further qualifications and experience in the fields of business

management, counselling and the management of psychological trauma. Peter is a Trustee of the national charity, BBC Children in Need, in which he chairs the Nomination Committee and the Grants Committee. He is a Trustee of NICVA where he serves as Vice Chair of the Board and Chair of the Resources and Audit Committee.

Peter has also been involved for over 20 years in the victims and survivors sector in Northern Ireland and has played a leading role in the development of leadership within civil society and its response to political and social progress in Northern Ireland. He is also Visiting Professor at Ulster University's Bamford Centre for Mental Health and Wellbeing.



## **Dr Adrian Mairs**

Dr Adrian Mairs MRCGP FRCS FFPH, is a Consultant in Public Health Medicine in the PHA where he is the Quality Assurance Director for the Northern Ireland Breast Screening Programme and the Public Health Lead for both the Northern Ireland Abdominal Aortic Aneurysm Screening Programme and the Northern Ireland Diabetic Retinopathy Screening Programme. He is the Local Board Member for Northern Ireland on the Board of the Faculty of Public Health and the Chair of the Northern Ireland Affairs Committee (NIAC) of the Faculty.



## **Dr Damien Bennett**

Dr Damien Bennett is a Specialty Registrar in Public Health Medicine in the PHA. He is also Secretary of the Northern Ireland Affairs Committee of the Faculty of Public Health (FPH). Damien contributed to the development of the FPH manifesto for Northern Ireland, led meetings with policy advisors and completed an evaluation of impact on local parties' manifestos. His previous experience includes management of the Biomechanics Laboratory, Musgrave Park Hospital, Belfast and Research and Development Engineer in the medical device industry with Medtronic, Galway. He is also a Chartered Engineer with a PhD in Biomechanics from Queen's University Belfast.



### **Professor Ian Young**

Ian Young is currently Chief Scientific Advisor to the Department of Health and Director of Research and Development for Health and Social Care. In addition, he is Professor of Medicine at Queen's University Belfast, where he was also Director of the Centre for Public Health from 2008-2014, and Deputy Medical Director and Consultant Chemical Pathologist at Belfast Health and Social Care Trust. Professor Young's main clinical and research interests are in biochemical aspects of nutrition, particularly in relation to disease prevention.

He is an author of over 350 published research papers and has obtained over £30 million in research income. He is Chair of the Scientific Division of the International Federation for Clinical Chemistry and Laboratory Medicine, the world's leading laboratory medicine organisation, and Associate Editor of Clinical Chemistry, the journal of the American Association for Clinical Chemistry. He is a member of the UK Scientific Advisory Committee on Nutrition, and the Scientific Advisory Board of the National Institute of Biological Standards and Controls.

## **Parallel sessions**

The parallel sessions will highlight local public health innovations, research and evidence-based practice.

Delegates will have registered for parallel sessions, 3 presentations in the morning and 3 presentations in the afternoon. Each presentation will last 15 minutes (10 minutes for the presentation and 5 minutes question time for each presenter), and 3–4 minutes is allocated for movement between sessions.

### Morning parallel sessions

### **Population level interventions – Lecture Room 3**

### Chair: Professor Frank Kee, Centre of Excellence, Queen's University Belfast

### 1. Mental health – promotion and prevention

The Together For You project has reached over 47,000 individuals across Northern Ireland. Two under-pinning themes of the project focus on the development of resilient people and communities and an investment in efforts which promote sustainable people and communities. (Ms Amanda Jones, Together For You - Action Mental Health)

# 2. An evaluation of the health and economic benefits of the rotavirus vaccination programme in Northern Ireland

Rotavirus infection is a leading cause of gastroenteritis in infants and children. It is a major cause of childhood morbidity and a significant drain on healthcare resources. The vaccination programme has already resulted in considerable savings to the health service directly and likely in terms of wider societal benefits.

(Dr Gillian Armstrong, Public Health Agency)

# 3. Maximising Access in Rural Areas (MARA): the impact and cost-effectiveness of an anti-poverty intervention

In Northern Ireland, 21% of the general population are living in poverty, with a significant proportion of these living in rural areas. Considering negative associations between health and poverty, the Maximising Access in Rural Areas (MARA) intervention used a community-development approach aimed at tackling poverty and improving health and wellbeing for rural dwellers. (Dr Catherine Millman, Public Health Agency)

### Technology as an enabler – Conference Room 1

### Chair: Mrs Mary Black, PHA

1. Is social media an effective method for delivering skin cancer prevention public health messages?

Social media-enabled public health campaigns have the advantage of tailored messaging at low cost and large reach and an internet survey uncovered that the campaign may have contributed to a trend in improved knowledge and attitudes towards skin cancer among the target population. (Dr Aisling Gough, Queen's University Belfast)

# 2. Outcomes, cost and utilisation of a web-based intervention for reducing alcohol consumption in hazardous/harmful drinkers compared to early findings from an evaluation

Alcohol and You in the South Eastern Health and Social Care Trust provides interventions to adults drinking in a hazardous/harmful manner but who do not meet criteria for Community Addiction Services. It includes an interactive self-help website "Alcohol and You NI". (Mrs Ciara Close, Queen's University Belfast)

#### 3. Scoping study findings lead to developing an early years healthy start toolkit

Hearty Lives Carrickfergus Project is managed by the Northern Health and Social Care Trust. The project supports the development of new and effective ways of working to highlight the impact of obesity. One of the overarching project aims is to develop an evidence based multi-sectorial approach to enable families with young children (aged 0–4 years) to develop knowledge and key skills to prevent obesity and reduce risk of cardiovascular disease.

(Mrs Florence Hand and Miss Claire Ramsey, Northern Health and Social Care Trust, and Mrs Jane Turnbull, Education and Development)

### **Community based interventions 1 – Lecture Room 4**

### Chair: Miss Naomi Roberts, Equality Commission for Northern Ireland

### 1. "EDEN" EDucation in the ENvironment SHSCT and Alliance Youth Works Conservation Partnership

This is a programme that encourages service users to work, grow and become more independent. Adults with learning disabilities and mental health issues are engaging in an outdoor conservation and biodiversity based health and wellbeing programme that allows them to explore the world around them. (Mr Alyn Jones, Alliance Youth Works)

# 2. Muddy Boots – a salutatory model for sustainable edible horticulture activity within communities

The Muddy Boots initiative is a settings approach used to engage the general population at a preventive level, with a focus on those groups who may potentially be at higher risk of developing mental health issues.

(Dr Janice McConnell, Antrim and Newtownabbey Borough Council)

# 3. Promoting walking in older adults residing in independent living communities in Northern Ireland: a feasibility study

Independent living residences are a naturally occurring community setting for applying behaviour change techniques to increase long-term physical activity behaviour change (>6 months) in adults and older adults in Northern Ireland. The aim is to bridge the evidence gap by developing and testing the feasibility of a peer led, multi-component walking intervention, based upon the socio-ecological model of health, in adults and older adults living in independent living communities within Northern Ireland. (Miss Ashlene Wright, Queen's University Belfast)

### **Prevention at the interfaces – Lecture Room 2**

### Chair: Dr Naomh Gallagher, PHA

#### 1. Respiratory outbreak notifications in care homes in Northern Ireland

Respiratory infections can cause significant morbidity and mortality in elderly populations. Care home settings are at increased risk of large respiratory outbreaks, resulting in an increased workload and significant economic burden for public health, primary and secondary care. (Mr Chris Nugent, Public Health Agency)

#### 2. Family Nurse Partnership: Breaking cycles of dependency

Teenage mums are at higher risk of leaving school early, having subsequent pregnancies quickly, and having a reliance on welfare or benefits. There has been growing interest in the benefits of home visiting programmes for adolescent mums during pregnancy and early infancy, which target maternal health, life course and care giving. (Dr Karen McGuigan, NorthWest Research Northern Ireland)

#### 3. The cost of alcohol frequent attenders: staging an intervention

Alcohol related harm is estimated to cost Health and Social Care (HSC) in Northern Ireland £250 million annually. A small cohort of patients has been highlighted with recurrent alcohol related presentations and admissions.

(Ms Karen Adams, Belfast Health and Social Care Trust)

### Afternoon parallel sessions

### **Targeted clinical interventions – Lecture Room 2**

#### Chair: Ms Adele Graham, PHA

# 1. Postnatal lifestyle intervention for overweight women with previous gestational diabetes mellitus (PAIGE): a pilot randomised controlled trial

Obesity is an important risk factor for the development of Gestational Diabetes Mellitus (GDM) and for the subsequent onset of type 2 diabetes. There is good evidence that lifestyle modification can prevent or delay the development of type 2 diabetes mellitus in high risk individuals. The aim of the trial was to determine the effectiveness of a postnatal lifestyle intervention for overweight women with a history of Gestational Diabetes Mellitus (PAIGE).

(Dr Valerie Holmes, Queen's University Belfast and Dr Brid Farrell, Public Health Agency)

#### 2. Regional Weigh To A Healthy Pregnancy (WTHP) Programme

Obesity during pregnancy is associated with increased morbidity and mortality. The increased risks of medical and obstetric complications are multiple and significant. The WTHP programme has been evaluated as an effective intervention to manage these risks, resulting in significant positive health outcomes for mother and child.

(Ms Michelle Toland, Weigh To A Healthy Pregnancy Programme and Mrs Janet Calvert, Public Health Agency)

3. Weight management support during pregnancy for women with BMI greater than 30 to promote health and wellbeing, reduce health risks, and promote healthy family lifestyles.

The Hearty Lives Project supports the development of new and effective ways of working to highlight the impact of obesity in pregnant women. The incidence of maternal obesity and its attendant comorbid conditions continues to increase, with major public health implications. The project aims to provide appropriate weight management support during pregnancy for women with BMI greater than 30 to promote health and wellbeing.

(Mrs Pat Cusick and Mrs Mary Maxwell, Northern Health and Social Care Trust)

### **Tobacco - Lecture Room 3**

#### **Chair: Dr Nicola Armstrong, PHA**

1. Second-hand smoke exposure among children and young people in Northern Ireland – progress and challenges

Reducing exposure to second-hand smoke (SHS) is a core objective of the Ten Year Tobacco Control Strategy for Northern Ireland 2012–2020. Data collection on SHS exposure is critical to inform evidence-based policy to protect children's health but estimating exposure in domestic environments, in particular is challenging. (Mrs Joanna Purdy, Institute of Public Health in Ireland)

2. Smoking causes sight loss. Using optometrists to educate clients about the risk and provide brief intervention advice to promote eye health, prevent sight loss and reduce the burden of eye disease.

Although many people are aware of the links between smoking and cancer, heart disease and stroke, few people are aware of the links between smoking and sight loss. Smoking can cause or worsen eye disorders, in particular age related macular degeneration which can lead to blindness. (Dr Jackie McCall, Public Health Agency)

3. Reducing the cost burden associated with smoking through the pharmacy stop smoking service.

Deaths attributable to smoking have been identified as the single greatest cause of preventable illness and premature death in Northern Ireland. Currently 67% of quit attempts are supported by community pharmacy. This analysis will evaluate the cost effectiveness of this service. (Mr James Griffiths, Apodi Ltd)

### **Community based interventions 2 - Conference Room 1**

### Chair: Mr Brendan McDonnell, Community Evaluation Northern Ireland

Several proposed abstracts raised questions about how we can evidence the impact of community level interventions and were keen to discuss some of these issues. In response to that, this parallel session will have three short 10 minute presentations, which will allow for a longer discussion about possible approaches and experiences. It is envisaged that most participants will wish to stay for the entire session.

The three presentations will be:

# 1. Co-production in a community setting – the benefits of co-production approaches in improving health and wellbeing

According to NESTA co-production means "delivering public services in an equal and reciprocal relationship between professionals, people using services, their families and their neighbours. Where activities are co-produced in this way, both services and neighbourhoods become far more effective agents of change". Antrim and Newtownabbey Borough Council and the Public Health Agency worked in partnership with Community Development and Health Network (CDHN) to develop a piece of work which would pilot a co-production approach to improving health outcomes within a community setting. (Ms Alison Briggs, Antrim and Newtownabbey Borough Council)

# 2. Understanding the impact of walking, trail development and the natural environment on public health

In Northern Ireland, walking programmes, the development of trails and the natural environment bring valuable health and wellbeing benefits although, to date no comprehensive study has been made of the positive impacts these programmes are having in Northern Ireland. (Ms Aideen Exely, Outdoor Recreation Northern Ireland)

### 3. The Mourne Heritage Trust's Active Lifestyles Programme

The Trust's Active Lifestyles conservation volunteer programme is aimed at giving people of all ages and abilities a chance to take part in outdoor conservation work benefitting the Mourne Area of Outstanding Natural Beauty, and at the same time improve their health and wellbeing, build tolerance and social inclusion, work with other people and learn new skills. (Mr Matthew Bushby, Mourne Heritage Trust)

### A medley – Lecture Room 4

### Chair: Dr Denise O'Hagan, PHA

1. Carer-reported health conditions among seven year old children in Northern Ireland in 2011 Longstanding health conditions among children can be associated with reduced quality of life and poorer outcomes for children and their families. This research explored the role of a large range of risk factors using stepwise logistic regression models to identify those factors that had an independent effect after adjustment for the other risk factors. Analyses were weighted to the estimated population of seven year olds living in Northern Ireland in 2011. (Ms Lorraine Fahy, Institute of Public Health in Ireland)

# 2. Exploring how social media is perceived by young people to increase a sense of connectedness and prevent suicide

Suicide is a multi-faceted, complex phenomenon that continues to present as a major public health concern. Social media platforms under the stewardship of the internet have become primary access points for help-seeking and information, particularly for young people considering suicide. (Mr James Gallagher, Ulster University)

### 3. Working together supporting community pharmacies

A study into the beliefs and attitudes of pharmacists and consumers towards pharmaceutical public health concluded that there had been little change in customer and pharmacist attitudes in the past ten years. It recommended that in order to improve public health services provided in community pharmacies, training must aim to increase pharmacists' confidence in providing these services. (Mrs Florence Hand, Northern Health and Social Care Trust and Mrs Jane Turnbull, Education and Development)



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