



# SPHeRE network

POPULATION HEALTH AND HEALTH SERVICES RESEARCH NETWORK UPDATE

## Welcome

Welcome to the latest edition of the SPHeRE Network Newsletter focusing on the 1<sup>st</sup> Annual SPHeRE Conference: *'Health Research, Policy and Practice - Creating links for Effective Collaboration'* which was held on 9<sup>th</sup> January. SPHeRE scholars in attendance at the conference wrote reflective pieces on individual sessions for the newsletter.

The conference was attended by 142 delegates. There were three keynote presentations, 27 short, parallel presentations and 44 posters, which reflected the diversity of population health and health services research in Ireland. Throughout the

day a very clear focus emerged on the application of research to practice and there was much discussion on how we best communicate the findings, particularly from interventions that work, to those in decision making positions.

Planning for the 2<sup>nd</sup> SPHeRE Conference which will take place on 29<sup>th</sup> February 2016 is already underway and we will notify everyone on our mailing list when the call for abstracts opens.

The Book of Abstracts from the conference is available on the SPHeRE website :

[www.sphereprogramme.ie](http://www.sphereprogramme.ie).

## CONGRATULATIONS

Medical Research Council award



*Congratulations to Linda O'Keeffe (UCC 2010 Cohort) who has recently been awarded a fully funded four year MRC Population Health Scientist Fellowship at the University of Bristol and the London School of Hygiene and Tropical Medicine to examine gender differences in cardiometabolic health across the life course.*

*The work will be supervised by Dr Laura Howe, Prof. Debbie Lawlor and Dr Abigail Fraser at the University of Bristol and will involve extensive collaboration with a range of world leaders in cardiometabolic health and epidemiological methods including Prof. Patricia Kearney at UCC, Prof. George Davey Smith at University of Bristol and expert in metabolic medicine, Prof. Naveed Sattar at the University of Glasgow.*



*Prof Naomi Fulop (University of London and HSRN), Prof Steve Thomas (TCD), Prof Bernie Hannigan (Public Health England), Prof John Browne (UCC), Prof Hannah McGee (RCSI), Dr. Graham Love (HRB), Prof Anne Hickey (RCSI), Prof Charles Normand (TCD), Dr Declan Bedford (HRB), Prof Ruairi Brugh (RCSI).*

@sphereprogramme  
#sphere15

# Keynote Presentations

## *Doing Health Services Research that Matters: Examples, Issues and Challenges.*

**P**rof. Fulop outlined how health services research is in a good place right now and stands to respond to the challenges facing the health care services at present. Biomedical research, she believes only takes us so far, given that innovations are often taken up without testing and even if tested may not be evaluated on implementation.

She outlined two illustrative examples from her research. The first considered what happens when acute stroke services are centralised, and examined the changes implemented in the Greater Manchester Area and in London. The study, published in the BMJ, asked if this approach works and at what cost. The rate of mortality at 30 days fell in London but no equivalent change was seen in Manchester. The study found that resistance to change is an important factor, that what works in urban areas may not work in rural areas and that the involvement of clinicians is very important.

Her second example study explored the relationships between the organisational and cultural characteristics of hospitals, and how these impact upon clinical effectiveness, patient safety and patient experience. Whilst there is a good understanding of the types of quality improvement undertaken in healthcare, less is known of the organisational and cultural processes that determine the effectiveness of these methods. By examining the relationship between these processes and quality from macro (national healthcare system) through meso (hospital) to micro (frontline clinical team) levels in each of the five partner countries, the study revealed how the dynamics and interactions between different levels impacted on sustained quality of hospital care.

She emphasised the value of theory and the need to figure out why and how something works, and not simply whether it works. She described a 'co-production' of knowledge through collaboration and the



need to be prepared for uncomfortable findings. She believes a different skill set and training is required than those associated with traditional PhDs and commended SPHeRE on its work in this area.

*By Paula Byrne (1st Year SPHeRE Scholar based in NUIG)*

## *The Legacy of Austerity and the Irish Health System*



**P**rof. Steve Thomas's keynote address highlighted the vulnerability of the Irish health system as a key legacy of austerity in Ireland, and stressed that this vulnerability is difficult to reverse. Prof. Thomas outlined how the capacity restrictions imposed by austerity in Ireland led to some initial gains, or "recessionary gold", in the health system, with the introduction of clinical programmes, a decrease in drug unit costs, and increase in the number of day cases in hospitals. However, austerity has also led to significant vulnerability. This includes vulnerability of households, which have experienced increased unemployment and decreased incomes with mortgage repayments remaining largely unchanged; vulnerability in

the economy, with an increase in the debt to GDP ratio from 25 per cent to 124 per cent between 2006 and 2014; vulnerability of healthcare staff, with reductions in staffing and subsequent increases in workload; and vulnerability of healthcare quality, with public spending on health falling disproportionately in Ireland, and an over-emphasis on budgets and head counts. Further, Prof. Thomas raised the issue of reversibility and the challenges of restoration, highlighting the difficulties of reversing the decisions and changes made as a result of austerity.

*By Daniela Rohde (1st Year SPHeRE Scholar based in RCSI)*

# Keynote Presentations

## Good Practice in Involving and Engaging patients in Research



which will be of specific interest to researchers, with some research funders now requiring applicants to describe public involvement in their research. The identified resources included training courses and good practice guidelines for research funders from non-governmental organisations and statutory bodies, as well as good practice guidance by a research intensive university - University College London.

Overall, this presentation highlighted the potential and benefits that public involvement and engagement has to contribute to health research. However, the Report of the Health Research Landscape in Ireland highlighted that “the systematic involvement in research of patients or other lay people is not well developed”. The recommendations in this report include the development of an Irish Health Research Forum with some recommendations being to identify how to include health service users and lay people as research partners. This presentation highlighted the imperative to develop the infrastructure at a strategic level to facilitate public involvement and engagement in research with the overall goal of achieving excellence in health research.

*By Anne Marie Malone (HRB Scholar based in TCD)*

**P**rof. Bernie Hannigan presented on the subject of patient and public involvement and engagement in research. The INVOLVE definition of public involvement in research was used, describing this as research being conducted “with or by members of the public rather than “to”, “about” or “for” them”.

This presentation outlined the benefits and characteristics of public and patient involvement and engagement in research. Partnership with the public was identified as an imperative throughout the research process, with the overall outcome being to attain excellence in health research that would then lead to excellence in policy and practice. However, difficulties inherent in this process were also outlined. Prof Hannigan delineated available resources for researchers and potential lay partners,



*Dr Peter Hyde, Dr Siobhan Hendrick, Dr Mairead O'Driscoll, Dr Teresa Maguire, Dr Fiona Keogh, Dr Anne Cody.*

## CONGRATULATIONS



*Congratulations to Patrick Moran of Trinity College Dublin on winning the poster competition at the SPHeRE conference with his poster entitled “Cost-effectiveness analysis of a national public access defibrillation programme”.*

*The prize was presented by Programme Director, Prof. Anne Hickey (RCSI).*

*Congratulations to Patrick Moore (TCD, 2009), who recently passed his Viva. Patrick's research focused on the importance of proximity to death in modelling future drug expenditures for older people. Some of the findings were published in the Applied Health Economics & Health Policy journal at the end of 2014.*

*Patrick is pictured below with Dr. Mairin Ryan.*



## Health Interventions: Learning from Research and Practice

This session exposed both the successes and challenges in relation to the implementation of interventions developed to tackle a variety of health problems, in a range of settings, in Ireland. In terms of research and practice it highlighted problems inherent in scaling up interventions including recruitment, high levels of attrition and a lack of resources.

In Ireland, chronic conditions prevail and the services required to treat these conditions are limited. This was aptly highlighted by Dr Caragh Behan, who reported that “while it takes 60 minutes for you to receive help if your car breaks down, it takes 18 months to get help if your mind breaks down”. Dr Behan subsequently outlined the cost-effectiveness of DETECT, an early intervention in psychosis delivered in Dublin. Dr Brian McGuire reported that between 13-36% of the Irish population report chronic pain and gave a synopsis of

the Galway-based PGAP programme which was found to reduce fatigue and fear avoidant beliefs. Similarly, OptiMal, a 6-week occupation-based, self-management programme for those suffering from multimorbidities, was found to increase the number of people frequently engaging in activity. Dr Susan Coote closed this session with a motivating and inspiring presentation which outlined her on-going work with people suffering from Multiple Sclerosis on the development of a web-based resource to encourage physical activity.

While the interventions described above were found to be effective, all speakers revealed their frustrations at not being able to progress them further. They spoke of waiting lists and the need to deliver more groups but in most cases this was not an option because of limited staff and/or appropriate equipment. The session generated discussion encapsulating the im-

portance of translating these positive research findings into practice as well as the need to highlight and circulate these results amongst key stakeholders. While fascinating evidence is being captured and created in small pockets across the island of Ireland, it is imperative we follow this through to large-scale implementation and put change on the agenda.

*By Emily Kelleher (2nd Year SPHeRE Scholar based in UCC)*



*Dr. Siobhan O'Higgins and Dr. Susan Coote*

## Responding to Chronic Illness: The Case of Diabetes

Lisa Hynes presented a qualitative exploration of clinic attendance among young adults with Type 1 Diabetes. Both patients and clinicians were interviewed regarding their thoughts and opinions on attendance at a specialist-led diabetes clinic. Lisa concluded that younger adults may not always attend at clinic but they do see it as a valuable resource. In addition, when relationships are developed via an admission to hospital or a structured education programme this can lead to better attendances.

Ronan Grimes's retrospective cohort study looked at treatment patterns in Type 2 Diabetes. Patients who started on sulphonylurea were commenced on insulin earlier

than those prescribed metformin. Younger age groups were more likely to be prescribed insulin than metformin.

An analysis of diabetes related lower limb amputations in a large urban teaching hospital was the title of Pauline Wilson's study. Pauline is a Clinical Specialist Podiatrist in diabetes based in St James' Hospital (SJH), Dublin. She completed a retrospective analysis of HIPE data, using patient administration services, electronic patient records and the website [www.RIP.ie](http://www.RIP.ie) for further information. The study highlighted the rise from thirty-nine amputations in 2007 (major and minor) to seventy-four amputations in 2010 in SJH. Improved communication between primary and secondary care, regional centres and super

regional centres was recommended.

Dr Geraldine Doyle from UCD completed the session with a presentation on Patient Level Costing: A Time Driven Activity Based Method for Costing Type 2 Diabetes in Europe, Israel and Taiwan. The objective of this on-going study is to design and implement a methodology to measure and compare the micro-costs of the care of five profiles of adults with Type 2 diabetes in Ireland. Patients with the same condition follow different pathways and delivery is complex, fragmented and from multiple sources.

*By Aine Ryan (2nd Year SPHeRE Scholar based in RCSI)*

## *Diverse Populations: PHHSR in practice*

Burns A, Höfer S, Curry P, Sexton E, Doyle F. (2014). "Revisiting the dimensionality of the Hospital Anxiety and Depression Scale in an international sample of patients with ischaemic heart disease" Journal of Psychosomatic Research, Volume 77, Issue 2 Pages 116–121

Larkin, C., Di Blasi, Z., & Arensman, E. (2014). "Risk Factors for Repetition of Self-Harm: A Systematic Review of Prospective Hospital-Based Studies" PLoS ONE, 9(1), e84282.

McKenna G, Allen PF, Woods N, O'Mahony D, Cronin M, DaMata C, Normand C. (2014) "Cost-effectiveness of tooth replacement strategies for partially dentate elderly: a randomised controlled trial" Community Dentistry and Oral Epidemiology; 42: 366-374

McKenna G, Allen PF, O'Mahony D, Flynn A, Cronin M, DaMata C, Woods N. (2014) "Comparison of functionally orientated tooth replacement and removable partial dentures on the nutritional status of partially dentate older patients: a randomised controlled clinical trial" Journal of Dentistry; 42: 653-659

McKenna G, Allen PF, O'Mahony D, Cronin M, DaMata C, Woods N. (2015) "The impact of rehabilitation using removable partial dentures and functionally orientated treatment on oral health-related quality of life: a randomised controlled clinical trial" Journal of Dentistry; 43: 66-71

Moriarty F, Bennett K, Fahey T, Kenny RA, Cahir C. (2015) "Longitudinal prevalence of potentially inappropriate medicines and potential prescribing omissions in a cohort of community-dwelling older people" Eur J Clinical Pharmacology. 2015.

Wallace E, Salisbury C, Guthrie B, Lewis C, Fahey T, Smith SM. (2015) "Managing patients with multimorbidity in primary care" BMJ;350:h176.

**M**artin Davoren presented research exploring discrepancies in response patterns and bias in the assessment of health behaviour risk profiles in web-based versus self-administered surveys among university students. The survey concentrated on undergraduate students in UCC and consisted of sociodemographic, lifestyle and health-related variables with particular focus on alcohol consumption and well-being. The study found, unsurprisingly, that self-administered questionnaires that were distributed at lecture theatres yielded a much higher response rate compared to an identical web-based questionnaire (51% vs 2.4%). Significant differences were observed between the two surveys methods in key lifestyle and health related variables. However, the low response rate in the web-based survey make reliable comparisons between methods rather dubious and suggest that self-administered questionnaires are much more reliable when conducting research on undergraduate students.

Catriona Murphy presented work examining the gap in statin use between guide-

lines and clinical practise in those at high risk of cardiovascular mortality. The study, using TILDA data, focused on those aged 50-64 years who had either an existing cardiovascular disease (CVD), diabetes without CVD, or a high or very high Systematic Coronary Risk Score (SCORE). Statins have long been used in the prevention of secondary CVD. Adherence among those with a history of CVD was 68.8% while 57.4% of diabetics without CVD used statins. However, alarmingly, from a public health perspective was the adherence of those with high or very high SCORE ( $\geq 5\%$ ) with only 19% found to be taking statins. Catriona acknowledged there are difficulties in increasing statin adherence and suggested patient compliance, lack of time and Government health policy as factors impeding the implementation of CVD prevention guidelines. She also identified cost as a potential barrier suggesting it would be interesting to investigate if the reduction in costs of statins leads to an increase in adherence.

*By Jamie Madden (3rd Year HRB Scholar based in UCC)*

## *Network News*

### *Have you participated in the SPHeRE Network survey?*

*If so, thank you very much!*

*If not, we would be very grateful if you would take the time to complete this short survey which will be very valuable to us in the process of ensuring that the Network is relevant in the Irish context and inclusive of all those who should be involved. It should take less than 10 minutes and would be very helpful in informing the future direction of the Network.*

*The survey can be accessed through this link: [Network Survey](#)*

# Photo Gallery



*Prof John Browne, Dr Gerardine Doyle, Prof Charles Normand*



*Mr Doug Beaton, Ms Mary Morrissey, Ms Eithne Sexton, Ms Nora-Ann Donnelly*



*Dr Dona Tedstone, Dr Teresa Maguire, Ms Bennery Rickard, Dr Peter Hyde*



*Ms Dee Gray, Ms Rebecca O'Connor*



*Conference participants enjoy the poster presentations over coffee*



*Dr Catriona Murphy, Ms Lorna Roe*



*Prof Ruairi Brugha, Dr Catherine Hayes, Prof Steve Thomas*



*Ms Mary Morrissey, Dr Margaret Curtin, Mr Kieran Walsh, Mr David O'Riordan*



*Ms Daniela Rohde, Bennery Rickard, Dr Bridget Kane*

## Upcoming Events

[HSR Europe Spring Meeting 2015, Utrecht, the Netherlands](#), 23 - 24 April 2015.

["Unlocking the demographic dividend"](#) The International Association of Geriatrics and Gerontology European Region (IAGG-ER) Congress, Convention Centre, Dublin 23-26 April 2015

["Implementation for Impact"](#) the Global Implementation Conference, Convention Center Dublin, 27-28th May 2015.

["Making life better – improving Health and Care for Adults"](#) the Public Health Annual Scientific Conference 2015, Riddel Hall, Stranmillis Road, 10 June 2015.

[Health Services Research Network \(HSRN\) Symposium 2015](#), Nottingham Conference Centre, 1-2<sup>nd</sup> July 2015

["Evidence and Innovation in Primary Care"](#) the 44<sup>th</sup> Annual Conference of the Society for Academic Primary Care, Nuffield Department of Primary Care Health Sciences, University of Oxford, 8-10 July 2015.

["Behaviour Change - Principles and Practice"](#), Centre for Behaviour Change Summer School, University College London 17-21 Aug 2015.