

<p><b>Institution: Sheffield Hallam University</b></p>
<p><b>Unit of Assessment: 3 Allied Health Professions, Dentistry, Nursing and Pharmacy</b></p>
<p><b>Title of case study: Keeping Warm in Later Life (Kwiltt)</b></p>
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>This case study presents the impact of the Health and Temperature Research Group (HTRG) at Sheffield Hallam University, led by Professor Tod. The group generates novel, collaborative, translational, interdisciplinary (e.g. health, housing and environment, energy and welfare) research with a focus on cold related ill health. The research impact is illustrated here by The Keeping Warm in Later Life Project (KWILLT). KWILLT findings provide a unique understanding of the complex environment and multiple factors influencing older people keeping warm and well in winter. Beneficiaries include NHS, local and national policy makers, and practice organisations.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>The HTRG research group focuses on the health impacts of temperature. The underpinning research commenced in 2009 with KWILLT, the focus of this case study. KWILLT generated findings demonstrating an improved understanding of health behaviour and inequalities in groups vulnerable to cold related illness and death (References 1-3). Translational outputs were developed for applied use in policy and practice across the related academic and practice disciplines including health, housing and environment, energy and welfare. Research in HTRG has expanded to include work on households with children, environment interventions, temperature measurement and links between temperature and clinical conditions. Professor Tod (at SHU since 2006) has led the research, working with staff across the Centre for Health and Social Care Research including Dr Lusambili (Research assistant 2009-2011), Dr Allmark (Principal Research Fellow (2009-present), Dr Cronin de Chavez (Research Fellow, 2012 to present) and Catherine Homer (Research Assistant 2011-present). New members of the group include Dr Kelly (Reader, 2013-present) and Professor Childs (2012-present). The group now includes one PhD student and one Professional Doctorate student (co-funded by CLAHRC-SY).</p> <p>KWILLT was funded by a National Institute for Health Research (NIHR) Research for Patient Benefit (RfPB) Grant of £232382 from 01/09/2009 to 30/11/2011. The study was highlighted as one of two RfPB exemplars in the 2010/11 NIHR Annual Report (Reference 4). Conducted in partnership with NHS Rotherham, the study was adopted by the health inequalities theme of the NIHR South Yorkshire Collaboration for Leadership in Applied Health Research and Care (CLAHRC-SY) which enabled and enhanced dissemination and impact.</p> <p>KWILLT is a unique behavioural health study generating research findings and outputs in relation to the Department of Health Cold Weather plan and associated policy and practice. Through robust qualitative inquiry with a sample of older people and staff, alongside objective temperature measurement, KWILLT has generated findings in four main areas.</p> <p>First, it identified the complex and varied influences on vulnerable older people's decision-making regarding heating and cold at home. A range of contextual factors, attitudes and values, as well as barriers, was identified as important (References 1 and 3).</p> <p>Second, KWILLT revealed that, in order to access help, vulnerable people have to navigate a system that is fragmented, with findings illustrating how this conspires against older people keeping warm and well (References 1, 2 and 3).</p> <p>Third, KWILLT generated an understanding of the barriers health and social care staff encounter in identifying, assessing and intervening in the lives of older people at risk of cold related ill health. The findings illustrate how staff attitudes and assumptions can prevent vulnerable people from receiving the care they need. Through qualitative and social marketing analysis techniques a</p>

## Impact case study (REF3b)

segmentation model was developed describing six groups of older people vulnerable to being cold, and their core characteristics (Reference 1). The model identified how staff and systems can be developed to address problems identified (<http://kwillt.org/index.php/pen-portraits>). The segmentation model informed the development of six pen portraits. These helped public and voluntary sector organisations identify vulnerable populations, e.g. Health and Wellbeing Boards.

Finally, the HTRG has analysed KWILLT findings alongside existing evidence to address policy implementation, e.g. the Cold Weather Plan (Reference 1) and Nudge (Reference 3). During the conduct of KWILLT the Department of Health launched its first Cold Weather Plan, highlighting evidence gaps about the identification of those vulnerable to the cold and developing appropriate interventions to reduce temperature related illness. The latter stages of KWILLT (e.g. segmentation model) and further work of the HTRG aim to address this evidence gap.

### 3. References to the research (indicative maximum of six references)

#### Peer review journal articles

1. Tod AM, Lusambili A, Homer C, Abbott J, Cooke JM, Stocks AJ, McDaid KA. (2012) Understanding factors influencing vulnerable older people keeping warm and well in winter: a qualitative study using social marketing *BMJ Open* 2012;2:e000922 doi:10.1136/bmjopen-2012-000922
2. Allmark A. Tod AM. Can a nudge keep you warm? Using nudges to reduce excess winter deaths: insight from the Keeping Warm in Later Life Project (KWILLT) *Journal of Public Health*. doi: 10.1093/pubmed/fdt067
3. Keeping Warm: Social Connectedness and Technology (A Case Study of Rotherham (England): Technology and Health in the Elderly) *Adelaide Lusambili; Angela Tod; Catherine Homer; Jo Abbott; Kath McDaid; Jo Cooke* The International Journal of Health, Wellness and Society Volume 1, Issue 3, 2011, <http://HealthandSocietyJournal.com/>, ISSN 2156-8960. <http://ijw.cgpublisher.com/product/pub.198/prod.48>

#### Quality indicators of the research

4. Department of Health (2011) National Institute for Health Research Annual Report 2010/11, p14. On: [http://www.nihr.ac.uk/files/Publications/NIHR\\_Annual\\_Report\\_2010-11\\_dh\\_130283\[1\].pdf](http://www.nihr.ac.uk/files/Publications/NIHR_Annual_Report_2010-11_dh_130283[1].pdf). Accessed July 2013.

#### Key grants

01/09/2009-30/11/2011 Keeping warm at home in later life: a study to develop social marketing interventions that promote engagement of older people in keeping warm behaviour and access to anti-fuel poverty services. NIHR, Research for Patient Benefit. (Grant Reference Number PB-PG-0408-16041) £232382, Principal Investigator Prof Tod.

01/03/2012 - 31/12/2013 Warm Well Families Joint funding by NIHR Flexibility and Sustainability funding, NHS Rotherham, NHS Doncaster, and Consumer Focus Energy. £150000, Principal Investigator Prof Tod.

### 4. Details of the impact (indicative maximum 750 words)

To facilitate the impact of KWILLT on policy and practice, creative, applied outputs were developed (e.g. DVDs, videos and e-learning materials) based on KWILLT data and the segmentation model (Sources 1, 2 and 3). The outputs are available on the KWILLT website (101030 hits at 31/7/2013). The impact of KWILLT is rooted in its contribution to enhance evidence through which to inform policy and practice related to avoidable cold related illness and death. The prime example of impact relates to the Department of Health Cold Weather Plan (CWP). The CWP called for NHS staff and organisations, alongside collaborative institutions, to plan for winter to avoid the negative impact of cold weather (Source 10). This requires identifying and assessing those at risk, alongside delivering interventions including flu jabs, referral to affordable warmth schemes, home

improvement agencies and welfare and debt advice. In addition, the Department of Energy and Climate Change (DECC) is tasked with implementing the Green Deal and Energy Company Obligation (ECO). This places a premium on identifying homes vulnerable to cold related harm and also householders who would benefit from energy efficiency measures. As KWILLT indicates, those most at risk often do not access such policy initiatives. KWILLT findings and outputs have provided evidence to inform relevant organisations on how to respond to the challenges and obligations laid down in such policy. Evidence of impacts is summarised below.

- Influence in national policy was realised through the 2012/13 Department of Health Cold Weather Plan where it is recommended to stakeholder groups as a toolkit for practice and cited as key evidence (Sources 5, 6, 10). Also the DECC Fuel Poverty Team has used the electronic KWILLT outputs to increase understanding of factors influencing older people to think about ways of overcoming these barriers, and to stimulate thinking on how the DECC fuel poverty policy and ECO reaches vulnerable householders (Email communication from Senior Policy Advisor for Green Deal, DECC) (Source 9).
- Impact has also been demonstrated through evidence contribution to national consultations, primarily the Hills Fuel Poverty review (Source 7).
- KWILLT informed the development of Winter Warmth England (WWE) (Source 3), this being a web based communications and information resource that used KWILLT findings to develop the content and target audiences. This was supported by Department of Health Warm Homes: Warm Families funding to facilitate delivery of the Cold Weather Plan. How KWILLT findings were used in practice are detailed in the WWE evaluation report (Source 4). Examples include using KWILLT findings to develop and deliver clear, consistent, accurate and accessible messages to staff and the public on the health impact of cold and reducing health risk.
- A number of national organisations have used KWILLT findings and outputs for media, campaigns and training. For example, National Energy Action (NEA) used the findings within a national programme of seminars for over 150 organisations involved in delivering on ECO, and a national strategy seminar on Achieving Public Health Outcomes on Fuel Poverty and Excess Winter Deaths (28 Feb 2013).
- KWILLT highlighted the need for partnership and cross sector working to overcome existing barriers to action. KWILLT materials have facilitated collaboration at a strategic and policy level such as local Joint Strategic Needs Assessments, and also health and housing policies in Local Authorities, for example Rotherham (Source 8). Findings have helped Local Government Yorkshire and Humber identify areas with vulnerable populations and target interventions accordingly e.g. flu jabs and energy efficiency schemes such as Green Deal and ECO (Sources 4 and 8).
- In public and policy debate at a local level KWILLT findings have been used to discuss and influence local preparedness for winter, for example at Local Area Assemblies. Findings were presented at Local Area Assemblies in Rotherham to inform local neighbourhood responses to the Cold Weather Plan, e.g. promoting neighbour checks on vulnerable households. At a national level this is evidenced by invitations to present at two Department of Health seminars on the CWP, by the DECC fuel poverty team, and other forums where key stakeholders discuss organisational responses to current policy, e.g. being an invited speaker at the NEA Annual National Conferences (2009, 2011 & 2012). NEA also used the KWILLT pen portraits as materials for policy debate on the introduction of the Green Deal and in their training events with MPs and key stakeholders regarding implementation of the Green Deal (December 2011).
- Impact is illustrated through integration of KWILLT findings into staff training, e.g. in the NHS into Making Every Contact Count training to health and social care staff, in Local Authorities into training with housing department gas contractors and within the voluntary sector with the training of volunteer Energy Champions (NEA). Partnership interventions such as South Yorkshire Hotspots have also used KWILLT findings and outputs in their staff training.
- Whilst it can be difficult to establish a direct influence of research findings on practice, the impact of KWILLT on public health and NHS staff practice is evidenced from the evaluation of the effectiveness of the Winter Warmth England (WWE) web based Toolkit (Source 3), a

resource based on KWILLT findings. An evaluation of WWE indicates the website had 10475 page views and 792 people have visited the Kwillt videos on WWE up to February 2013 (Source 4. p7). The evaluation provides examples of how the KWILLT evidence was used to change practice including: helping public health managers develop action plans for winter, informing development of public campaign materials and public health communications over winter, developing practice partnerships across sectors, e.g. housing, energy and health, deliver keeping warm interventions, e.g. Barnsley case study on p37 of the evaluation report. This impact is reinforced by the CLAHRC-SY in their case study collection (Source 8).

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

1. **Keeping Warm in Later Life project (KWILLT) website.** Full details of outputs, conference presentations and publications. <http://kwillt.org/>
2. **National Institute for Health Research Annual Report 2010-2011.** p14 Research for Patient Benefit Research Highlights. [http://www.nihr.ac.uk/files/Publications/NIHR\\_Annual\\_Report\\_2010-11\\_dh\\_130283\[1\].pdf](http://www.nihr.ac.uk/files/Publications/NIHR_Annual_Report_2010-11_dh_130283[1].pdf)
3. **Winter Warmth England.** <http://www.winterwarmthengland.co.uk/>
4. **Evaluation of the Winter Warmth England Toolkit** Stocks A. McDaid K. Homer C. (2013) Winter warmth, Preparation for Winter. Evaluation and reported effectiveness of the Winter Warmth England Toolkit, p13: [http://www.winterwarmthengland.co.uk/downloads/winterwarmth\\_evaluation2013.pdf](http://www.winterwarmthengland.co.uk/downloads/winterwarmth_evaluation2013.pdf)
5. **Department of Health Cold Weather Plan 2012/13** [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/156163/9211-TSO-NHS-Cold-Weather-Plan\\_Accessible-main-doc.pdf.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/156163/9211-TSO-NHS-Cold-Weather-Plan_Accessible-main-doc.pdf.pdf) p41 and p45
6. **Health Protection Agency Evaluation Report Warm Homes, Healthy People Fund 2011/12** [http://www.hpa.org.uk/webc/HPAwebFile/HPAweb\\_C/1317136356595](http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317136356595) p15 / p16
7. **Department of Energy and Climate Change (2012) Getting the measure of fuel poverty** [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/48297/4662-getting-measure-fuel-pov-final-hills-rpt.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48297/4662-getting-measure-fuel-pov-final-hills-rpt.pdf) p179
8. **Rotherham Joint Strategic Needs Assessment p38.** KWILLT has helped inform strategic response to fuel poverty, excess winter deaths and preventable negative effects of cold weather. p38 Plus contact from Health and Wellbeing Board Chair <http://www.rotherham.nhs.uk/files/Organisational/Comissioning/JSNA%20Report%202011.pdf>
9. Senior Policy Advisor at the Department of Energy and Climate Change (DECC)
10. Senior contact at Public Health England Extreme Events and Health Protection Team.