Institution: Durham University

Unit of Assessment: Social Work and Social Policy (UoA 22)

Title of case study: Reducing Health Inequalities

1. Summary of the impact

Health inequalities are recognised as a critical UK policy issue with life expectancy gaps of up to 28 years between the least and most deprived areas. This case-study demonstrates how Durham University research has led to: (a) changing health service commissioning (with *County Durham and Darlington Primary Care Trust [PCT]*): (b) influencing NHS funding policy (by generating *Parliamentary debate*); as well as (c) contributing to the development of the new public health system in England and Wales (as part of the *Strategic Review of Health Inequalities in England post-2010 [Marmot Review]*).

2. Underpinning research

The underpinning research programme has been developed through publications, research awards and on-going relationship building by Durham University's Wolfson Research Institute for Health and Wellbeing since 2005.

(a) Worklessness, welfare receipt and health inequalities: Durham University has worked closely with County Durham and Darlington Primary Care Trust (PCT, now part of Durham County Council) on developing and evaluating a case management intervention to reduce health inequalities by tackling incapacity-related worklessness. There are 40,000 incapacity-related benefit (IB) recipients in County Durham (12% of the working age population). We supported the development, design, commissioning and evaluation of this 'health first' case management service for patients in receipt of incapacity benefit (IB) in County Durham [research 1 and 2]. The service used telephone and face-to-face techniques with the intention of improving health outcomes directly (via specially commissioned physiotherapy and counselling services) and indirectly (via addressing related barriers to health improvement such as debt or housing). We evaluated it using traditional quantitative analysis of the health and wellbeing of participants compared to similar non-participants [research 1], as well as qualitative comparative analysis techniques (QCA) [research 2], and qualitative interviews and focus groups with participants, service providers and health professionals. Our early research findings in 2010 showed that the service was under-recruiting and that referrals were largely from specialist services and not from general practice (GPs). This meant that patients had higher levels of ill health and more complex needs than the general IB population. Our interim findings of 2011 found that the service was more effective for patients with a mental health diagnosis. Our final research findings of 2012 found that the service was moderately effective and potentially cost-effective but that the health of participants remained well below the national average; that the vast majority of participants remained workless; and that there were on-going difficulties in recruitment from GPs and therefore the service was not reaching the general IB population [research 1 and 2].

(b) Healthcare and health inequalities: Durham analysis (with European collaborators) of the effects of international healthcare reforms demonstrated that decentralisation, changes to how funding is allocated to local areas, insurance-based systems and out-of-pocket payments increased socio-economic inequalities in healthcare access with nationalised, publicly funded health systems the most effective at reducing inequalities [research 3]. Building on this work, in 2012, Durham examined the effects on geographical health inequalities of potential changes to how NHS funding would be allocated to local areas. This was in response to media reports that the Secretary of State for Health was going to ask the Advisory Committee on Resource Allocation (ACRA) to re-examine the underlying principles of NHS funding to take more account of age and less of deprivation. The Secretary of State had suggested that *'"What should happen – the advisory committee will do this, I won't – the number crunching should get progressively to a greater focus on what are the actual determinants of health need"'* and that *'clinical commissioning group funding should take into account the age of a population rather than indices of deprivation,*

… [as] age is the "principal determinant of health need" in an area' [Source 1]. We analysed the potential effects of such an 'age-based' allocation model of NHS funding and found that increasing the weighting given to age and decreasing the weighting given to deprivation-related and health inequalities factors, could shift funds significantly both spatially (from North to South) and socio-economically (from poorer to richer areas) [research 4].

(c) Tackling the social determinants of health: In November 2008, the Secretary of State for Health (England) commissioned an independent review to propose effective strategies for reducing health inequalities – the *Marmot Review*. Nine task groups were asked to conduct research reviews and make evidence-based recommendations to the *Marmot Review* based on the best available evidence across a number of social policy domains. We were commissioned (alongside Liverpool John Moores University and Kings College London) to conduct the research synthesis of the effectiveness of interventions to reduce inequalities in 'Priority Public Health Conditions' (cancer, obesity, smoking, and alcohol use) [research 5 and 6]. Using rapid review methods and a Delphi process, we undertook a series of rapid literature reviews of the policy-relevant international evidence base in which quantitative studies of any design, which looked at the effects on health inequalities, the social gradient or overall population health effects, of interventions designed to address the social determinants of public health priority conditions. Recommendations were distilled using a Delphi approach. This Durham-led research concluded that there was a dearth of robust evidence on the effectiveness and cost-effectiveness of the effects of interventions on inequalities and that therefore our fifteen policy recommendations to the *Marmot Review* were by necessity based on extrapolation from general population health effects - the best available evidence [research 5 and 6].

This Durham-based research programme was led by Clare Bambra (Lecturer 2005, Reader 2009, Professor 2010+) with J. Warren (teaching fellow 2007, research associate 2009+), A. Kasim (Lecturer 2010+), K. Garthwaite (research associate 2009+), J. Mason (Professor 2004+), M. Booth (Lecturer 2008, Senior lecturer 2012+), J. Wistow (research associate 2003+), K. Joyce (research associate 2007 – 2010).

3. References to the research (Durham staff names in bold)

[1] **Warren, J., Bambra, C., Kasim, A., Garthwaite, K., Mason, J., and Booth, M.** (2013) Prospective evaluation of the effectiveness and cost utility of a pilot 'health first' case management service for long term Incapacity Benefit recipients. Journal of Public Health, 2013 doi:10.1093/pubmed/fds100. Quality: Journal Impact Factor = 2.063.

[2] **Warren, J., Wistow, J. and Bambra, C.** (2013) Applying Qualitative Comparative Analysis (QCA) in the evaluation of complex public health interventions: A case study of a health improvement service for long-term Incapacity Benefit recipients. Journal of Public Health, 2013. doi: 10.1093/pubmed/fdt047. Quality: Journal Impact Factor = 2.063

[3] Gelormino, E., **Bambra, C.,** Spadea, T., Bellini, S., Costa, G. (2011) The effects of health care reforms on health inequalities: a review and analysis of the European evidence base. International Journal of Health Services, 41: 209-230. doi: 10.2190/HS.41.2.b Quality: Journal Impact Factor= 1.205; citations all sources=10

[4] **Bambra, C.** (2012) Clear winners and losers with an age-only NHS allocation. British Medical Journal, 344:e3593. doi: 10.1136/bmj.e3593. Quality: Journal Impact Factor =14.093.

[5] **Bambra, C., Joyce, K**., Bellis, M., Greatley, A., Greengross, S., Hughes, S., Lincoln, P., Lobstein, T., Naylor, C., Salay, R., Wiseman, M., and Maryon-Davies, A. (2010) Reducing health inequalities in priority public health conditions: Developing an evidence based strategy? Journal of Public Health, 32: 496–505. doi: 10.1093/pubmed/fdq028. Quality: Journal Impact Factor = 2.063.

[6] **Bambra, C., Joyce, K.,** Maryon-Davies, A. Priority health conditions –Task Group 8 Report to the Strategic Review of Health Inequalities in England post-2010 (Marmot Review).http://www.instituteofhealthequity.org/projects/priority-public-health-conditions-task-group-report Quality: Commissioned report.

4. Details of the impact

(a) Changing health service commissioning:
Durham research had a significant impact on the decisions of the PCT in designing, commissioning, managing, adapting - and ultimately de-commissioning – a County Durham wide case management service for IB patients [source 10]. In response to our initial research findings (about recruitment and referrals), the PCT '*adapted the service specification*' so that a financial incentive could be given to GPs to increase patient referrals. Our interim findings (around mental health) '*underpinned our [PCT] subsequent decision to change the service specification'* so that the commissioned service would have to prioritise those with mental health conditions in their recruitment and thereby *'increase patient uptake and the effectiveness and cost-effectiveness of the service'* [source 10]. Our final research findings (about limited effectiveness [research 1 and 2]) '*were critical to our [PCT] decision not to re-commission or roll-out the service at the end of the contract in 2012'* [source 10]. This service affected 400 individual benefit recipients across County Durham. The PCT had intended to roll the service out to 2000 additional benefit recipients if it had been shown to be more effective

(b) Influencing NHS funding policy by generating Parliamentary debate: Durham's research [research 4] into the Secretary of State for Health's suggestion that the role of age in NHS funding allocations should be increased and the role of deprivation decreased ('age-based' allocation)[source 1], provoked a national political debate about the allocation of NHS resources in May 2012. There was widespread regional and national media dissemination of our research including interviews with ITV and BBC 1 regional news, national BBC Radio Five Live, significant Twitter traffic (including tweets by Members of Parliament [MPs]) as well as detailed coverage in the *Guardian* [source 2] and *Independent* newspapers [source 3]. The newspaper reports included comments from the Shadow Secretary of State for Health (Andy Burnham) and the Department of Health on Durham's research [research 4]. Our research was also press released by Labour Party Shadow Health team [source 11]. This prompted a series of questions in the House of Commons by the Labour MPs Paul Blomfield, Nicholas Brown, and Chi Onwurah to the Conservative Secretary of State for Health (Andrew Lansley) and Minister of State for Health (Simon Burns) in 'Health Questions' [source 4]. The subsequent formula devised by ACRA (which would have removed the health inequalities element in NHS funding) was rejected in December 2012 by the NHS Commissioning Board and a new (and on-going as of November 2013) 'fundamental' review of the allocation formula commissioned instead [source 5]. Media reports by the *Health Service Journal* [source 5] suggested this decision may have been as a result of political concerns - to which our research contributed [source 4] - about the resulting geographical funding shifts. The Chair of the NHS Commissioning Board stated the decision was from concern for preventing the movement of *"resources from areas where people sadly have worse health outcomes to those where people have much better outcomes"* [source 5] – as demonstrated by our research [research 4].

(c) Contributing to the development of the new public health system in England (as part of the *Marmot Review*): The coalition Government's 2011 White Paper *Healthy Lives, Healthy People* set out a new public health system for England which included the transfer of public health responsibilities from the NHS to local authorities, the establishment of Health and Wellbeing Boards and the creation of a new organisation - Public Health England [source 6]. In 2012, the government created the *2013-16 Public Health Outcomes Framework* - a set of indicators to monitor the new system [source 7]. The White Paper [source 6] and the Outcomes Framework [source 7] were both based on the Department of Health commissioned *Marmot Review* [source 8]. For example, the White Paper states that: *"This White Paper is the Government's response to Fair Society, Healthy Lives – the Marmot Review"* [source 6, p.32)] and the Public Health Outcomes Framework document states that: *"These indicators are in line with those recommended by Sir Michael Marmot in his report Fair Society, Healthy Lives in 2010*" [source 7, p.12]. The *Marmot Review* therefore had a significant impact on the development of national public health policy and was itself based on nine commissioned research reviews. The task group section of the *Marmot Review* website clearly states the importance of the task groups' work [source 9]: *"In February 2010, we published the Marmot Review - 'Fair Society Healthy Lives. This was based, in large part,*

on commissioned task group reports in several key areas". Durham led the research and Delphi review for one of these Task Groups – Task Group *Priority Public Health Conditions* [research 5 and 6]. Five of the fifteen evidence based policy recommendations resulting from this Durham-led work were used in the final *Marmot Review* underpinning four of the report's twenty recommendations and our underpinning research [research 5 and 6] was cited extensively in support (source 8, pages 45, 54, 57, 59, 141, 143-46, 157). Our recommendation 10 'increase use of contingency management within drug treatment programs' became the Marmot Review's Policy Recommendation F2.2(i) [source 8, page 143]. Our recommendation 1 'reduce smoking in the most hard to reach groups by focusing on price and availability, while providing stop smoking services to help the poorest groups quit' and recommendation 4 'introduce of a minimum price per unit for alcohol' became the Marmot Review's Policy Recommendation F2.2(ii) [source 8; page 144-145]. Our recommendation 2 'improve availability of and access to healthier food choices amongst low income groups' became the Marmot Review's Policy Recommendation F2.2(iii) [source 8; page 145-146]. Our recommendation number 15 - 'implement a minimum income for healthy living in older people' became the Marmot Review's Policy Recommendation D2.1 [source 8, page 120]. Durham-led research [research 5 and 6] is therefore a key part of the evidence base that underpinned the *Marmot Review* [source 8], which itself was cited as the underpinning evidence behind national-wide (England) policy changes as outlined in the 2011 White Paper *Healthy Lives, Healthy People* [source 6] and the Public Health Outcomes Framework [source 7].

5. Sources to corroborate the impact

Source 1: Williams, D. (2012) Health Service Journal News: Lansley: CCG allocations should be based on age, not poverty, 26th April 2012. Available at: http://tinyurl.com/p66hcac

Source 2: Campbell, D. (2012) The Guardian: NHS spending plan hits poorer areas, critics claim, 22nd May 2012. Available at: http://tinyurl.com/lomb9je

Source 3: Wright, O. (2012) The Independent: Controversial plans to change the way NHS spends its £100bn budget being considered, 23rd May 2012. Available at: http://tinyurl.com/knrmwq2

Source 4: Hansard (2012) Health Questions (Resource Distribution Formula), House of Commons, 12th June 2012; column 167-168 and 170. Available at: http://tinyurl.com/pez9adv

Source 5: Dowler, C. (2012) Health Service Journal News: Commissioning board's funding formula move was not 'political', 18th Dec 2012. Available at: http://tinyurl.com/nhyhoqc

Source 6: HM Government (2011) Healthy Lives, Healthy People: Our strategy for public health in England. Available at: https://www.gov.uk/government/publications/healthy-lives-healthy-people-our-strategy-for-public-health-in-england

Source 7: HM Government (2012) Improving outcomes and supporting transparency Part 1A: A public health outcomes framework for England, 2013-2016. Available at: https://www.gov.uk/government/publications/healthy-lives-healthy-people-improving-outcomes-and-supporting-transparency

Source 8: Marmot, M. (Chair). Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England Post-2010 (The Marmot Review) Available at: http://www.marmotreview.org

Source 9: Marmot Review Task Group Reports. Available at: http://www.instituteofhealthequity.org/projects/marmot-review-task-groups

Individual users/beneficiaries who could be contacted to corroborate claims:

Source 10: User evidence: testimony from Director of Public Health, Durham County Council (formerly Director of Public Health for County Durham and Darlington Primary Care Trust).

Source 11: User evidence: copy of Labour Party Press release email citing Durham research [research 4] as sent to Clare Bambra on 17th May. 2012 by Philip Ball, Labour Party Political Advisor to Andy Burnham, Shadow Secretary of State for Health.