

Institution: The University of Huddersfield

Unit of Assessment: 22 Social Work and Social Policy

Title of case study: All Players Onside: The Development and Application of the Biopsychosocial Approach to Reducing Sickness Absence and Work Disability Due to Back Pain

1. Summary of the impact (indicative maximum 100 words) McCluskey and Burton at the University of Huddersfield's Centre for Health and Social Care Research (CHSCR) have made significant contributions to bringing about a cultural shift in how back pain is viewed and treated. Our research has underpinned a new approach which replaces rest and reliance on healthcare with activity, positive attitudes and remaining at, or returning early to, work as the preferred responses to back pain. We have demonstrated that prompt recovery from back pain and continued work participation can best be addressed from a biopsychosocial perspective. Innovative interventions aimed at overcoming biopsychosocial obstacles have been based on evidence from our research which shows that key stakeholders, including individuals, employers, healthcare practitioners and members of the wider society, need to work together in order to support the occupational rehabilitation of people living with back pain.

2. Underpinning research (indicative maximum 500 words)

The case study fits into the Institute for Research in Citizenship and Applied Human Sciences research area of Long-Term Conditions, Cancer and Palliative Care (see REF5). It exemplifies impact derived from formulating, implementing and evaluating complex interventions aimed at tackling difficult health and social care problems (see REF3a). The underpinning research has been supported by £325,000 of research income earned in the period 1999-2011, with funding received from, among others, the Health and Safety Executive, the Department of Work and Pensions, The Association of British Insurers, BackCare and Bupa.

Back pain is a leading cause of sickness absence in industrialised nations, resulting in significant healthcare costs and benefit payments. It has considerable negative impacts on individuals, employers and society as a whole, leading to reduced quality of life, lost production, and poverty arising from worklessness. Research led by Burton from the University of Huddersfield, much of which was located in its Spinal Research Unit, has demonstrated that these negative outcomes can be avoided for a large number of people experiencing back pain by addressing psychosocial factors acting as obstacles to work participation, such as pessimism about recovery prospects. These barriers to occupational rehabilitation derive from underlying attitudes and beliefs shaped by the social environment. Findings from an initial study^a undertaken in 1997-98 demonstrated that a simple leaflet providing evidence-informed advice to workers with back pain could create a positive shift in beliefs and a concomitant reduction in sickness absence.

Building on these findings, in 1999 Burton and McCluskey conducted a large, psychosocial workforce survey, along with a controlled trial of an innovative evidence-based psychosocial intervention for workers with back pain. Findings identified the psychosocial factors which were particularly associated with sickness absence and demonstrated that an early demedicalised approach could reduce work loss. Importantly, it was shown that all the key players need to work together to encourage and support early return to work. The research thus highlighted the benefits of targeted, evidence-based information and advice^{b, c, d}.

Subsequent commissions were received from the Department for Work and Pensions (£55,000, 2005-2006) and the Association of British Insurers (£52,000, 2007-2008) to develop evidencebased principles and practice for tackling work disability due to common health problems, including back pain. For the first time, it was shown that work has a positive effect on health and wellbeing, and that promoting work participation improves health outcomes^{e,f}. These findings pointed to an important role for GPs in addressing the potential of patients living with back pain to sustain employment.

From 2010, our research moved on to examining the wider psychosocial obstacles to work



participation for those with persistent back pain, exploring the illness perceptions of 'significant others' such as spouses and partners, close family members⁹. Grant awards from BackCare and the Bupa Foundation (£40,000, 2010-2011) funded this research. Findings from this extension to our previous work have demonstrated how the negative beliefs of others can reinforce pessimistic attitudes about the potential for recovery of the person living with back pain, and thereby validate incapacity. The research also showed, conversely, ways in which positive beliefs can facilitate return to work and continued work participation. The findings add further weight to our efforts to reduce the adverse physical, mental and social effects associated with worklessness and unnecessary incapacity.

- 3. References to the research (indicative maximum of six references)
- ^a Burton, A.K., Waddell, G., Tillotson, K.M., and Summerton, N. (1999) Information and Advice to Patients with Back Pain Can Have a Positive Effect: A Randomised Controlled Trial of a Novel Educational Booklet in Primary Care, *Spine*, 24, 2484-2491.
- ^b Bartys, S. (now McCluskey), Burton, A.K., and Main, C.J. (2005) A Prospective Study of Psychosocial Risk Factors for Absence Due to Musculoskeletal Disorders – Implications for Occupational Screening, *Occupational Medicine*, 55, 375-379.
- ^c Supporting grant awarded to authors, Obstacles to Recovery from Musculoskeletal Disorders in Industry. Health and Safety Executive, 1999-2003, £177,500.
- ^d McCluskey, S., Burton, A.K., and Main, C.J. (2006) The Implementation of Occupational Health Guidelines Principles for Reducing Sickness Absence Due to Musculoskeletal Disorders, *Occupational Medicine*, 56, 237-242.
- ^eWaddell, G., and Burton, A.K. (2006) *Is Work Good for Your Health and Wellbeing?* London: The Stationery Office.
- ^fWaddell, G., Burton, A.K., and Kendall, N.A.S. (2008): *Vocational Rehabilitation What works, for Whom and When*? London: The Stationery Office.
- ^g McCluskey, S., Brooks, J., King, N., and Burton, A.K. (2011) The Influence of 'Significant Others' on Persistent Back Pain and Work Participation: A Qualitative Study of Illness Perceptions, *BMC Musculoskeletal Disorders*, 12, 236 (Highly Accessed).
- 4. Details of the impact (indicative maximum 750 words)

In 2011 Burton was awarded an OBE for services to occupational healthcare. The award was given in recognition of the significant contribution of the documented research with respect to promoting successful return to work for people living with back pain. The Chief Medical Adviser and Director for Health and Wellbeing at the Department of Work and Pensions has stated that our overall programme of research has "*fundamentally underpinned the development of the health and work agenda over the last 6 years*"¹. Referring to a crucial shift in public beliefs and growing recognition of the need to involve all 'key players', the editor of The BackLetter which is published in the USA summarised the impact of the research as follows².

As editor of the BackLetter, my job for the past twenty years has been to follow the evolution of back pain research and the impact of the back pain and back pain-related disability crisis on societies around the world. The role of Kim Burton and the Spinal Research Unit at the University of Huddersfield in the evolution of modern thinking about low back pain cannot be overestimated. In my view, this unit is one of the three or four most influential back pain and spinal research groups on earth—key participants and innovators in the modern "Back Pain Revolution." In the traditional medical approach to low back pain, back pain was interpreted as a signal of disease or injury, usually attributed to the physical stresses of work. The medical prescription for these injuries—rest and inactivity until the injury healed and pain abated— proved to be disastrous, removing millions of workers around the world from health-enhancing employment to the sad fate of permanent disability, at huge expense and productivity losses to national economies. Burton and colleagues at the University of Huddersfield—along with key collaborators around the world— have helped overthrow this traditional medical approach to back pain in favor of a much more flexible and practical biopsychosocial model. They have altered perceptions about the nature and course of back pain and its relationship with physical stresses and work. They have identified the most important obstacles to recovery and return-to-work, barriers which have strong psychological and social underpinnings. They have helped ordinary people, healthcare providers, and society learn to recognize these obstacles and move past them. They have re-energized the concept of rehabilitation. They transformed it from a second stage process that occurs after healing is



complete into an activating intervention that occurs in the early days after the onset of a potentially disabling common health problem—when it is still possible to overcome minor obstacles that might otherwise morph into major barriers to recovery and return-to-work. In their various studies, articles, and contributions to reviews and guidelines they have communicated their knowledge effectively at multiple levels-in language everyone can understand. For ordinary people and employees around the world. The Back Book has become the world's most widely circulated evidence-based educational aid on low back pain. And there are now mirror editions of The Back Book approach in multiple health areas. Burton and colleagues have contributed to the groundbreaking RCGP Clinical Guidelines for the Management of Acute Low Back Pain, the Occupational Health Guidelines for the Management of Low Back Pain at Work, the European Guidelines on Back Pain—including the seminal European Guidelines for Prevention in Low Back Pain, which Burton chaired. And they have not restricted their research and practical solutions to the narrow area of back pain. They have applied the knowledge from intensive back pain research to many other common health problems and the psychological, social and economic obstacles they create. While this is a group with strong scientific credentials they are very definitely not ivory tower scientists. They are a hands-on, roll-up-the sleeves group interested in developing practical solutions for ordinary people grappling with illness and disability in the complexities of real world settings.

The importance of this research, which has highlighted the need to tackle biopsychosocial obstacles to achieve timely recovery from back pain, has been recognised by the BUPA Foundation through their annual Health at Work Awards in 2005 and 2008. The most prominent example of the underpinning research being directly communicated to individuals with back pain is *The Back Book*, a leading educational resource which has sold over 3 million copies since it was published in 1996³. Originally developed from Burton's pioneering study^a of how a change in beliefs could impact on sickness absence due to back pain, it has been translated into more than 20 languages and continues to be used and requested by healthcare services, workers compensation systems and insurers in various countries. It is <u>endorsed</u> by The Association of British Spine Surgeons for acute back pain⁴. Their website states that: "*The 'Back Book' has been shown in a randomized controlled trial to assist in giving the right message at an early stage. Many Health Centers and Hospitals will have it, if not, it can be obtained from The Stationery Office by post. Simply click on the picture of the book for a direct link if you would like a copy".*

The key recommendation from our work, that remaining in work and returning early to work are generally beneficial for health, has become a pivotal message underlying major policy initiatives. It was drawn on by the UK National Director for Health and Work, Dame Carol Black, in her 2008 report Working for a Healthier Tomorrow⁵. Citing Waddell and Burton^e, the report says, (page 21): "In particular, the recent review 'Is Work Good for Your Health and Well-Being?" concluded that work was generally good for both physical and mental health and well-being ... Overall, the beneficial effects of work were shown to outweigh the risks and to be much greater than the harmful effects of long-term worklessness or prolonged sickness absence. This approach was endorsed by the UK Government and this support was confirmed⁶ in a 2013 update by the Department for Work & Pensions and HM Treasury. It was endorsed in the 2009 NICE guidance for reducing sickness absence and unemployment; and in the Government-commissioned 2011 report Health at Work: An Independent Review of Sickness Absence⁷. The wide influence of our research on current health and work policy, and its implementation into practice, has been confirmed by the Chief Medical Adviser and Director for Health and Wellbeing at the Department for Work and Pensions: "These reviews are widely quoted across the public and private sectors, the academic community, internationally and by Government Ministers"¹.

Because of our research expertise concerning the beliefs and attitudes of the 'key players', we were commissioned to prepare guidance for GPs on the importance of work to health, and on how they should advise their patients to encourage work participation rather than incapacity. This guidance was sent to all UK GPs in 2010 to coincide with the introduction of the FitNote⁸ which replaced traditional incapacity certification; and was incorporated into the related National Education Programme for GPs, run by the Royal College of General Practitioners in 2010-11. Burton and colleagues have produced a range of widely-read leaflets guiding professionals



associated with occupational rehabilitation. For example, their leaflet <u>Work & Health: Changing</u> <u>How We Think About Common Health Problems in Health Care in the Workplace and in Society</u> "challenges how you think about health at work, and offers ideas on what you should and should not do - based on new scientific evidence about what is good for workers themselves", drawing on the underpinning original research and research syntheses outlined above. Another leaflet, <u>Advising Patients About Work: Evidence Based Approach For GPs</u> offers guidance to GPs about helping patients to return to, or stay in, work. The underpinning research demonstrated that they can play a critical role in this respect.

The influence of our work promoting the beneficial effects of an early return to work can also be seen further afield. The Chief Medical Advisor to the Irish Department of Social Protection has credited our research with "profoundly influencing the policy and operational aspects pertinent to early intervention measures resulting in the reduction of progression of acute common health problems to a state of chronic disability and dependence on long term illness benefits and job loss. All are beneficiaries, the patient/worker (with better health outcomes), the employer (with reduced absenteeism and higher production) and the taxpayer (with reduced cost of illness benefit)".⁸ Our research has influenced practice in workers' compensation systems in Australia. The Chair of the Australian Faculty of Occupational and Environmental Medicine Policy and Advocacy Committee stated that "The body of work regarding management of back pain from the University of Huddersfield has led to change in the way doctors and health practitioners are educated, both in Victoria and across Australia. In 2011, the Australasian Faculty of Occupational and Environmental Medicine released a position statement 'Realising the Health Benefits of Work' which relied heavily on the research of the University of Huddersfield and has led to better management of people out of the workforce due to health problems"⁹.

This strand of the underpinning research concerned with the role of significant others in occupational rehabilitation⁹ for people with back pain has already generated local, national and international media interest, including articles in the *Huddersfield Examiner* (March 2011), *Osteopathy Today* (November 2011), the American Pain Academy's <u>e-newsletter</u> (June 2012) and MDLinx *Orthopedics News* (February 2013). McCluskey has been invited to present findings from this strand of the research to pain management clinicians and occupational health professionals both nationally and internationally.

- 5. Sources to corroborate the impact (indicative maximum of 10 references)
- ¹ Factual Statement 1 by the Chief Medical Adviser and Director for Health and Wellbeing at the Department of Work and Pensions.
- ² Factual statement 2 by a member of the Board of Editors on the Cochrane Back Review Group, Canada.
- ³ Burton, K., & Waddell, G. (2002) *The Back Book*. London: The Stationery Office.
- ⁴ Current <u>endorsement</u> for *The Back Book* from the Association of British Spine Surgeons (BASS) on their website.
- ⁵ Black, C. M. (2008) Working for a Healthier Tomorrow: Dame Carol Black's Review of the Health of Britain's Working Age Population. London: TSO Shop.
- ⁶ Department for Work & Pensions and HM Treasury policy statement, 2013, <u>Helping People to</u> <u>Find and Stay in Work.</u>
- ⁷ Black, C. D., & Frost, D. (2011). *Health at Work: An Independent Review of Sickness Absence*. London: TSO Shop.
- ⁸ Department for Work and Pensions (2010) <u>Getting the Most Out of the Fit Note: Guidance for</u> <u>GPs</u>.
- ⁹ Factual Statement 3 by the Chief Medical Advisor to the Irish Department of Social Protection.
 ¹⁰ Factual Statement 4 by the Chair of the Australian Faculty of Occupational and Environmental
- Medicine Policy and Advocacy Committee.