Institution: University of Exeter

Unit of Assessment 4: Psychology, Psychiatry and Neuroscience

Case Study 1:

Mood Disorders Centre – Improving Psychological Treatments for Depression.

1. Summary of the impact (indicative maximum 100 words)

Depression is a major public health problem producing substantial decrements in health and well-being, with 15% lifetime prevalence, affecting 350 million people worldwide. The Mood Disorders Centre (MDC) has improved treatment for depression by (i) understanding psychological mechanisms underpinning depression; (ii) translating this into innovative treatments and prevention interventions, evaluated in clinical trials; (iii) improving dissemination, delivery, and access to treatments. This research has **improved patient care and quality of life**, **influenced national policy** (NICE Depression Guidelines), **informed national service and training provision** *(Improving Access to Psychological Therapies IAPT* programme, with 680,000 people completing treatment 2008-2011) and **achieved international impact** on clinical practice.

2. Underpinning research (indicative maximum 500 words)

As a frequent, recurrent condition, depression produces substantial decrements in health and well-being, is the leading cause of disability (WHO, 2000), and imposes significant economic costs through lost productivity and health and welfare costs (for 2010, estimated £10.9 billion p.a. in UK). The MDC is a partnership between the University and the NHS to address these challenges. It has grown from 3 staff in 2005 to over 50 staff in 2013, with its own dedicated building[#1]. Its vision is to develop new knowledge about mood disorders, translate this knowledge into more efficacious psychological interventions, improve the accessibility of evidence-based treatments, and provide innovative programmes that train the next generation of clinical researchers and practitioners: see http://www.exeter.ac.uk/mooddisorders/, http://cedar.exeter.ac.uk/

Selected MDC research underpinning beneficial impacts includes:
(1) **Targeting treatment-resistant depression.** Experimental laboratory research into rumination[#2,3], a key depressogenic process, found distinct constructive and unconstructive forms characterized by different styles of thinking*[1] (**Watkins,** Professor of Clinical Psychology), leading to the hypothesis that shifting thinking style may enhance treatment. This insight was translated into novel (i) rumination-focused cognitive-behaviour therapy (RFCBT), with a randomized controlled trial (RCT) demonstrating that adding RFCBT to antidepressant medication significantly improved outcomes for treatment-resistant residual depression[*2,#4] and (ii) an innovative guided self-help treatment that outperformed treatment-as-usual in a primary care RCT[*3,#5]. A further large-scale RCT[#6] evaluating CBT as an adjunct to pharmacotherapy for treatment-resistant depression in primary care (**Kuyken**, Professor of Clinical Psychology**)** confirms that CBT should be offered when patients do not respond to antidepressants[*4].

(2) **Reducing Vulnerability**. Mindfulness-based CBT (MBCT) uses meditational approaches to increase resilience. A phase II RCT[#7] led by **Kuyken** found MBCT to be as efficacious as continuation antidepressant medication in reducing relapse*[5], leading to the largest definitive RCT of MBCT worldwide[#8] (424 patients randomized). A school-based intervention to reduce depression and improve well-being in children (Mindfulness-in-Schools Programme feasibility trial, 522 12-16 year olds in non-randomised trial) has been completed.

(3) **Improving Access to Effective Psychological Interventions**. Maximizing the accessibility of evidence-based therapies and developing more effective treatment delivery models is a priority because of the limited availability of treatment for many patients. One approach is to use internet-based treatments to improve access, coverage, and up-take. **Watkins** developed and evaluated an internet variant of RFCBT (MindReSolve). **O'Mahen** (Senior Lecturer) developed and evaluated an internet psychological treatment for mothers with depression, in a unique partnership with high-profile parenting website Netmums.com[*6] (993 patients in RCTs). Another approach is the

development of low-intensity and simpler interventions, such as guided self-help and behavioural activation delivered by a more cost-effective paraprofessional workforce[#5,*3]. **Farrand** (Senior Teaching Fellow) has led the development, preparation, and evaluation of low-intensity approaches (e.g., ongoing MRC-funded BAcPAc trial[#9]), with significant influence on IAPT training programmes (including low-intensity curriculum). The Case Study "Improving Treatment Delivery for Depression" submitted for UoA2 by Prof **Richards** (MDC faculty 2008-2013, now Prof of Health Services Research in the Exeter Medical School) details the impact of Exeter's research on development of IAPT service provision, and the ongoing COBRA RCT[#10] which, addressing a NICE research recommendation, examines whether behavioural activation is as efficacious as CBT but more accessible and cost-effective through delivery by less expensive health-care professionals.

The quality of our early underpinning research was recognised by British Psychological Society May Davidson awards to Watkins (2004) and Kuyken (2006) for "clinical psychologists who have made an outstanding contribution to the development of clinical psychology within the first 10 years of qualification".

(*[N] *=References to the research;* [#N]*=Selected research grant support*)

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

Key peer-reviewed publications in leading journals *(MDC staff in bold):*

1. **Watkins, E.R**. (2008). Constructive and unconstructive repetitive thought. *Psychological Bulletin,* 134, 163-206.
2. **Watkins, E.R**., **Mullan, E.G**., Wingrove, J., Rimes, K., Steiner, H., Bathurst, N., Eastman, E., & Scott, J. (2011). Rumination-focused cognitive behaviour therapy for residual depression: phase II randomized controlled trial. *British Journal of Psychiatry, 199, 317- 322.*
3. **Watkins, E.R**., Taylor, R.S., Byng, R., Baeyens, C.B., Read, R., Pearson, K., & Watson, L. (2012). Guided self-help concreteness training as an intervention for major depression in primary care: a Phase II randomized controlled trial. *Psychological Medicine, 42*, 1359-1373.
4. Wiles, N ., Thomas, L., Abel, A., Ridgway, N., Turner, N., Campbell, J., Garland, A., Hollinghurst, S., Jerrom, B., Kessler, D., **Kuyken, W**., Morrison, J., Turner, K., Williams, C., Peters, T., & Lewis, G. (2013). Cognitive behavioural therapy as an adjunct to pharmacotherapy for primary care based patients with treatment resistant depression: results of the CoBalT randomised controlled trial. *Lancet,* 381, 375-384.
5. **Kuyken, W**., Byford, S., Taylor, R.S., **Watkins, E.R**., Holden, E., White, K., Barrett, B., Byng, R., Evans, A., **Mullan, E**., & Teasdale, J.D. (2008). Mindfulness-based Cognitive therapy to prevent relapse in recurrent depression. *Journal of Consulting and Clinical Psychology*, 76, 966-978.
6. **O'Mahen, H**., **Richards, D**., Woodford, J., Wilkinson, E., McKinley, J., Taylor, R., & Warren, F. (2013). Netmums: a phase II randomized controlled trial of a guided internet behavioral activation treatment for postpartum depression. *Psychological Medicine* doi:10.1017/S0033291713002092

Selected research grant support related to reported research:

1. Principal Investigator (PI) **Watkins**, Co-PI **Kuyken**, **O'Mahen**, **Wright** (Senior Lecturer). Improving psychological interventions for mood disorders: a translational research approach. Wellcome Trust Capital Award: £3.6 million, providing clinical research centre building, ***The Sir Henry Wellcome Centre for Mood Disorders Research,*** opened 2012.
2. PI: **Watkins.** Reducing persistent depressive rumination: the role of processing style. Wellcome Trust Project Grant. 2002-2006. £144,508.
3. PI: **Watkins**. Reducing vulnerability to depression: dysregulation of processing style and depressive rumination. Wellcome Trust Project Grant. 2006-2009. £226,349.
4. PI: **Watkins** Rumination-focused cognitive-behavioural therapy for residual depression. NARSAD Young Investigator Award. 2004-2006.: $60,000.
5. PI: **Watkins**. Cognitive Training as a facilitated self-help intervention for depression. MRC – Experimental Medicine Grant. 2006-2010. £464,000.
6. PIs (Exeter) **Kuyken** & Campbell (CI Wiles, Bristol). COBALT: Cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment resistant depression in primary care. NIHR-HTA. 2008-2011. £1.5 million.
7. PI: **Kuyken**, Co-PI **Watkins**. Preventing depression relapse in NHS practice using Mindfulness-

based Cognitive Therapy. MRC Trial Platform. 2005-2007. £237,246.
8. PI: **Kuyken**, Co-PI **Watkins**. Mindfulness-based CBT as a relapse prevention treatment. NIHR-HTA. 2009-2013: £2.1 million.
9. PI: **Farrand**, Co-PI Taylor Integrating Behavioural Activation and Physical Activity promotion (BAcPAc): A pilot randomised controlled trial with depressed patients. Medical Research Council: National Prevention Research Initiative. 2012-2014. £378,000.
10. PI: **Richards**, **Farrand**, **Kuyken**, **O'Mahen**, **Watkins**, **Wright**, Ekers, McMillan, Gilbody. COBRA: Cost and Outcome of BehaviouRal Activation. NIHR-HTA. 2012-2016. £1,871,570.

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

The research has already had, and will continue to have, a far-reaching and significant impact on the lives of patients with depression. Other beneficiaries include health service commissioners and providers, mental health workers, and the wider populace through the economic benefits of increased productivity and reduced welfare costs. (In 2010, depression's annual costs in England were estimated at £1.9 billion service costs, £9 billion lost earnings).

(1) Our experimental and clinical research has directly led to innovations in treatment that address key priorities in treating mood disorders (tackling treatment-resistant depression; preventing relapse; increasing access), and improving patients' health and quality of life. The RFCBT and COBALT research has provided valuable and effective adjuncts to existing treatments for treatment-resistant patients. The MBCT research provides patients with a viable alternative to long-term pharmacotherapy for relapse prevention. The internet and guided self-help research provides viable high-volume, low-cost treatment options.

(2) These innovations have been implemented nationally and internationally, providing treatment options for patients, and informing service and training provision through the following processes:

(a) **Wide dissemination of findings nationally and internationally** through publication, conferences, manuals (first international textbook on low intensity CBT, **Farrand[1];** case conceptualisation, **Kuyken**[2]), self-help booklets, and frequent workshop training (over 1000 clinicians annually).

(b) **Direct influence on formation of national policy**:
(i) Evidence from the MBCT trial[#7] influenced NICE's Depression Update (2009)[3] recommendation that MBCT be offered as a relapse prevention programme in the NHS. The ongoing COBALT and COBRA trials directly address NICE's 2009 research priorities to inform the next NICE guidelines.
(ii) **Kuyken** was a member of the 2009 NICE Depression Guideline group (chair of psychological therapies group)[3,9], **O'Mahen** of the 2014 NICE Antenatal and Postnatal Mental Health Guideline group, **Farrand** of the low-intensity CBT for Long-Term conditions Department of Health Pathfinder group, and **Watkins** reviewed the OST Foresight Mental Capital documents.
(iii) The Depression guideline explicitly referenced papers by **Kuyken** and **Watkins[3]**. MDC research has directly impacted the revision of UK NICE treatment guidelines for depression (2007-9)[3,9], determining the blueprint of service level and treatment models referred to nationally by all Primary Care Trusts (PCTs) and their replacement commissioning groups.

(c) **Influence on service provision locally, nationally, and internationally**. Our RCTs indicated the value of MBCT and RFCBT and trained specialist therapists in Devon and Cornwall, resulting in MBCT services in North Devon and the local PCT commissioning a MDC treatment clinic to provide MBCT, RFCBT, and perinatal treatment services in Exeter. Our work has informed national approaches to training and implementation of MBCT in the NHS, including frequently-accessed implementation resources[4]. Internet-RFCBT is implemented within the University of Exeter Student Wellbeing Service and from 2014 will be an integral element within the Cornwall Foundation Trust IAPT service (10k depressed and anxious patients referred annually). The Netmums internet therapy is being implemented within Torbay IAPT and Camden and Islington IAPT, providing the first specific perinatal treatment in IAPT services. Our low-intensity treatment research underpins our partnership with Help for Heroes in their £7.5m (Libor-funded) "Hidden Wounds" programme to

develop psychological support for veterans and their families (**Watkins**, **Mullan**, **Farrand**). Our research-led interventions have been implemented abroad: low-intensity CBT is now trained and adopted in Hong Kong and the "Beyond Blue" national Australian Depression Initiative (http:beyondblue.org.au), and RFCBT implemented in clinical services in Western Australia and Denmark. There are 350 Mindfulness In Schools Programme trained teachers in the UK, Asia, Australia, New Zealand, Europe, and North America. Research has produced direct benefit for over 2400 local Devon patients who have received treatments from the MDC (1200 clinic, 1200 research trials). The Netmums therapy treated over 600 mothers with depression nationally.

(d) **Influence on the nature and content of national therapy provision and training (IAPT).** The MDC has led design, delivery, and quality control of the training for the £700m IAPT programme, which aims to provide every individual in England with depression or anxiety the option of an evidence-based psychological treatment, and underpins the current coalition government's '*No Health without Mental Health*' and talking therapies strategies[5] (see also "Improving Treatment Delivery for Depression" case study for UoA2). Since starting in 2008, IAPT has trained 4,900 new practitioners, 1.73m patients (1m by March 2012) have accessed treatment, over 45% recovered from depression and anxiety disorders, and over 70.6k (45k by 2012) discontinued sick pay and benefits[5,6]. **Farrand** was in charge of the national course accreditation programme, a member of the IAPT Education and Training Committee, and prepared the low-intensity national curriculum[7]. We are the sole provider of IAPT training in the South West since 2011**,** training 245 Psychological Wellbeing Practitioners and 100 high-intensity IAPT therapists since 2008. Our research is incorporated into the evidence-based training delivered to the workforce. Exeter's is also one of only 3 UK courses providing accredited MSc training in MBCT.

(e) Our research has contributed to public knowledge about mental health issues, increased awareness of treatment options, and reduced stigma through significant and positive media coverage (e.g., the Daily Telegraph[8], Daily Mail, The Herald, BBC News website, Radio 4, BBC World Service; The Metro, Irish Independent, New Scientist, the Guardian).

(3) In recognition of our psychological treatment and research expertise, the MDC has garnered national awards and been used as an exemplar of good translational clinical research by the MRC in presentations to NIHR (**Watkins**).

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

1. Bennett-Levy, J., Richards, D., **Farrand**, P. et al. eds (2010). *Oxford Guide to Low Intensity CBT Interventions***,** Oxford, Oxford University Press.
2. **Kuyken**, W., Padesky,C., Dudley.R. (2011).*Collaborative Case Conceptualisation: Working effectively with clients in cognitive-behavioral therapy*. Guilford Press. 7000 copies sold.
3. The NICE Depression Guideline Group (2007-9) [CG90 Depression in adults: full guidance: http://www.nice.org.uk/nicemedia/live/12329/45896/45896.pdf] references work by **Kuyken, Watkins**: Kuyken and Tsivrikos (2009) p.166; Kuyken (2008) p.226, (relapse rates) p.237, (costs) pp. 237,238; Watkins et al. (2007) p.215.
4. Crane, R. & **Kuyken, W.** The implementation of mindfulness-based cognitive therapy in the UK Health Service. *Mindfulness*. Published online 22nd June 2012. Downloaded 700 times in first 3 months; (http://mindfulnessteachersuk.org.uk/)
5. Department of Health (2011). *Talking Therapies: a four year plan of action*. London. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123759
6. Department of Health (Nov 2012) *IAPT three-year report. The first million patients*. London.
7. Richards, DA, **Farrand, P, Chellingsworth,** M (2011). *National curriculum for the education of psychological wellbeing practitioners (PWPs) (second edition, updated and revised, March 2011)*. Department of Health, London.
8. http://www.telegraph.co.uk/health/alternativemedicine/3568885/Try-Buddhism-on-prescription-to-tame-depression.html

Individual providing external corroboration:

9. Referee for NICE work: Joint Director, National Collaborating Centre for Mental Health.