Institution: University of York

Unit of Assessment: 2, Public Health, Health Services and Primary Care

Title of case study: Improving primary care for depression

1. Summary of the impact

York research showing that a) *screening for depression in primary care* is ineffective and b) *collaborative and stepped care* improves outcomes for depression in primary care, has changed national and international policy. The National Institute for Health and Care Excellence (NICE) revised its guidelines, the National Screening Committee altered its recommendations, and money has been saved by no longer paying GPs to screen for depression under the Quality and Outcomes Framework. US advisory bodies have also shifted away from recommending routine screening for depression. Treatment guidelines/programmes in the USA, Europe and Australia now recommend collaborative care for the management of depression. Our research has also resulted in an expansion of the NHS Improving Access to Psychological Therapies programme, with many patients benefitting from improved care. The computer support system (PC-MIS©) we developed to record treatments and to track patient progress over time is the most widely used in the NHS. The clinical performance benchmarks we derived from this form the basis of metrics used for NHS-wide performance management of depression services.

2. Underpinning research

Depression is the most common mental disorder and is the second most common cause for consultation in primary care (where 90% of care is delivered). Estimates of the incidence of depression within the population range from 3-6% of adults. Our programme of research addressed two major issues: (a) screening for depression and (b) organisation and delivery of primary care for management of depression.

a) Screening for depression in primary care

Our Cochrane review, which pooled data from 16 randomised controlled trials (RCTs) including 5996 patients, reported that screening had no clinical impact on quality of care (RR 1.03; 95% CI: 0.85 to 1.24) or depression outcomes (standardized mean difference -0.02; 95% CI: -0.25 to 0.20).[1] On the basis of these meta-analyses we, (with international collaborators from McGill, Stanford and Pennsylvania Universities), concluded that the policy of screening for depression did not meet international criteria.[2,3]

b) Organisation and delivery of primary care for management of depression

Systematic reviews to evaluate the effectiveness of collaborative care: A meta-analysis in 2006 led by Gilbody (36 RCTs, 12,355 participants) found that average depression outcomes in primary care improved (standardised effect size = 0.26; 95%CI: 0.18 – 0.32) when services were managed in a 'collaborative' fashion by the use of trained case managers who deliver evidence-based psychological and pharmacological treatments'.[4] The greatest improvement in depression outcomes was found where case managers received rigorous training and supervision and used computer-decision support systems (p=0.03).

RCT to evaluate clinical and cost effectiveness of collaborative care in the NHS: From 2006 onwards we adapted a model of collaborative care for the NHS (writing treatment manuals, developing a computer support system (PC-MIS©) and training a cohort of case managers to deliver telephone support) using the MRC complex interventions framework.[5] York researchers then conducted the first UK multi-centre trial of collaborative/stepped care in adults. This confirmed the model's effectiveness in improving depression outcomes compared to usual care in working age adults (standardised effect size = 0.63 95% CI 0.18–1.07).[5]

University of York Staff

Staff: Gilbody (MRC Fellow 1996-2000 & 2005-present as Senior Lecturer and then Professor); Richards (2004-2009 Professor of Mental Health – academic lead for PC-MIS and lead for IAPT demonstration sites; chief investigator on MRC trials); Sheldon (1992 – present, Senior Research Fellow (SRF) and Professor); Bland (2004-present Professor and lead statistician on MRC trials);

Torgerson (1996-present Senior Research Fellow and Professor).

3. References to the research

The research findings have been published in high quality peer-reviewed journals. All the research was funded by competitive, peer-reviewed grants from the MRC.

1. Gilbody, SM, House, AO, Sheldon, TA (2008) Routine screening/case finding for depression (Cochrane Review). *The Cochrane Library* Wiley. DOI: 10.1002/14651858.CD002792.pub2
2. Gilbody, SM, House, AO, Sheldon, TA (2008) Routine screening/case finding for depression. *Canadian Medical Association Journal* 178(8):997-1003 DOI: 10.1503/cmaj.070281
3. Thombs, B., J. Coyne, P. Cuijpers, P. de Jonge, S. Gilbody, J. Ioannidis, B. Johnson, S. Patten, E. Turner and R. Ziegelstein (2011). "Rethinking recommendations for screening for depression in primary care." *Canadian Medical Association Journal* **184**: 413-418. DOI: 10.1503/cmaj.111035
4. Gilbody, S., P. Bower, J. Fletcher, D. Richards and A. J. Sutton (2006). "Collaborative care for depression: a cumulative meta-analysis and review of longer-term outcomes." *Archives of Internal Medicine* **166**: 2314-2321. 410 citations, Scopus, July 2013. DOI: 10.1001/archinte.166.21.2314
5. Richards, D. A., K. Lovell, S. Gilbody, L. Gask, D. Torgerson, M. Barkham, M. Bland, P. Bower, L. A., A. Simpson, J. Fletcher, D. Escott, S. Hennessy and R. Richardson (2008). "Collaborative care for depression in UK primary care: a randomized controlled trial." Psychological Medicine 38: 279-287. DOI: 10.1017/S0033291707001365

Grants:

Gilbody conducted the early work on screening for depression whilst funded by a MRC fellowship in health services research at the University of York (1996-2000). The subsequent Cochrane reviews on screening were conducted whilst Gilbody was a senior lecturer/Professor at the University of York (2005-).

RCT of collaborative care for depression in adults - MRC grant G03000677 (£167,000 2004-2007) Chief investigator Richards and co-investigators Gilbody and Bland.

4. Details of the impact

(a) Screening for depression in primary care

Prior to the conduct and dissemination of our work, guidance issued by NICE (*source 1*) and international bodies such as the US Agency for Healthcare Research and Quality (AHRQ) (*source 2*) had been supportive of screening for depression. In the UK, since 2005 General Practitioners were paid to screen for depression in certain populations under the Quality and Outcomes Framework (QoF) (the 'DEP 1 indicator'). Our research showed that this strategy was ineffective and inefficient. Our outputs generated debate both nationally and internationally, prompting editorials in the BMJ (*source 3*) and the Canadian Medical Association Journal *(source* 4).

National impact

(i) The National Screening Committee (NSC), which oversees screening programmes in the NHS, reversed its policy recommendations on the effectiveness of screening for depression in primary care using our work as the primary source of evidence (*source 5*). The 2010 NSC evidence-based policy cites and updates our work: "*This paper uses evidence published up to June 2009 to update the review by Gilbody et al of the performance of screening for depression….Routine screening of the population or subsets of the population for depression is now not recommended by the UK NSC."* (*source 5*);

(ii) NICE's 2009 guidelines for depression (CG90) now recommend against routine screening and cite our Cochrane reviews as the main source of evidence (*source 6*), reversing previous policy;

(iii) In 2011 the body which oversees the Quality and Outcomes Framework (QOF) ceased to incentivise screening for depression, and 'retired' and 'revised' the QOF DEP indicators, citing

York-led research to conclude *'case-finding for depression as a routine strategy has not been shown to improve outcomes, or process measures, based on high quality evidence*' (*source 7)*. The annual costs of supporting the QOF DEP indicators were £8.4M (*source 8*).The revision of QOF indicators has improved the use of NHS resources.

International impact

Our reviews are also cited in evidence summaries in other healthcare systems, demonstrating the international reach of our work. The Agency for Healthcare Research and Quality and the US Preventative Services Task Force (two of the most influential and respected federally-funded organisations in the USA) refer to our research in their 2009 revision of depression guidelines, where a reversal of policy is made on the basis of our reviews (*source 9*).

(b) Effective and efficient strategies to manage depression in primary care

National impact

The first iteration of guidance from the National Institute of Health and Care Excellence (NICE) in 2004 did not mention collaborative care. Our research helped produce a wholesale shift in emphasis towards primary care led strategies with improved access to more effective care and improved outcomes for the substantial section of the population who suffer from depression.

(i) NICE revised its guidelines on the management of depression in 2009 and 2011 and our research is cited (47 times in the most recent guidance) as evidence of the effectiveness of collaborative care as an organisational model (*sources 6 & 10).*

(ii) Our research also formed the evidential basis for an influential handbook for NHS commissioners on the configuration/specification of primary care for depression which helped to change practice over the REF period (*source 11*) *'This handbook seeks to provide guidance on a model of care for depression in line with the current evidence* (cites Gilbody's reviews).'

(iii) There has been NHS-wide improved access to psychological therapies (IAPT) for depression as a result of a major UK policy shift and investment initiated in 2006. York's research was directly cited as the evidence underpinning the first 'demonstration sites' in Doncaster (*source 12*). Due to the success of field trials this programme was scaled up and one million NHS patients received new episodes of care under the IAPT by 2013 (*source 13*).

(iv) York developed a secure and responsive computer support system to record treatments and track patient progress over time (Primary Care Management Information System – PC-MIS©). This formed the central IT support for our collaborative care trials (www.pc-mis.co.uk/). PC-MIS© has been widely adopted; it is being used in 69 NHS trusts and has recorded the outcome of over one million patient episodes (over six million individual patient contacts) since roll out in 2006 (*source 1*4).

(v) We pioneered the analysis of PC-MIS IAPT clinical outcome data to 'benchmark' local clinical performance against national standards. This system of service-level evaluations was adopted nationally and forms a national template to allow mental health services to engage in 'Payment by Results' based on reliable and statistically significant measures of clinical change (*source 15*). The metrics of treatment success which York researchers developed though PC-MIS© are now the 'gold standard outcome' for IAPT 'Payment by Results' (*source 16*), which is being rolled out across the NHS, having initially been piloted in 23 sites in the UK.

International impact

Our research is cited in international guidelines in the US, Canada, Europe and Australia. York's evidence synthesis, for example, formed an organising principle in the US Veterans Affairs services for depression (*source 17*) and influenced (and was cited in) the 2009 revision of depression guidelines by the Agency for Healthcare Research and Quality & US Preventative Services Task Force (*source 9*). York's 2006 review is cited as the evidential basis for a US-wide training programme led from the University of Washington (*the IMPACT evidence based depression care programme www.impact-uw.org*). *('A meta-analysis of the evidence for collaborative depression care was published by Gilbody, et al …concluded that sufficient*

randomized evidence had emerged by 2000 to demonstrate the effectiveness of collaborative care beyond conventional levels of statistical significance. …and it is unlikely that further randomized evidence will overturn this result.' (*Source 18*). This programme of training and organisational enhancement for depression has now been implemented in 31 states in the USA, and has been adopted by a number of US healthcare providers, including Kaiser Permanente (serving over 3 million people) and the Institute for Urban Family Health) (*source 18*).

5. Sources to corroborate the impact

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3. Scott, J. (2006). "Depression should be managed like a chronic disease: Clinicians need to move beyond ad hoc approaches to isolated acute episodes." *BMJ* **332**(7548): 985. DOI: 10.1136/bmj.332.7548.985
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6. National Institute for Clinical Excellence (2009). *Depression: core interventions in the management of depression in primary and secondary care*. London, HMSO.
7. Primary Care Quality and Outcomes Framework Indicator Advisory Committee Wednesday 8th June 2011 Agenda Item 9.1: Review of Depression indicators – recommendations on DEP01 http://www.nice.org.uk/media/E19/EA/NICEIndependentPrimaryCareQOFAdvisoryCommittee080611ConfirmedMinutes.pdf
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14. The Primary Care Management Information System (PC-MIS) http://php.york.ac.uk/healthsciences/spip.php?rubrique2
15. Delgadillo, J., D. McMillan, et al. (2012). "Benchmarking routine psychological services: a discussion of challenges and methods." *Behavioural & Cognitive Psychotherapy* **1**(1): 1-15. DOI: 10.1017/S135246581200080X
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18. IMPACT Evidence Based Depression Care program: http://impact-uw.org/about/research.html and http://impact-uw.org/stories/implementation.html