

Treating depression in people with long term conditions: do we need to use integrated care models?

Dr Peter Coventry, Centre for Primary Care & CLAHRC GM,
University of Manchester

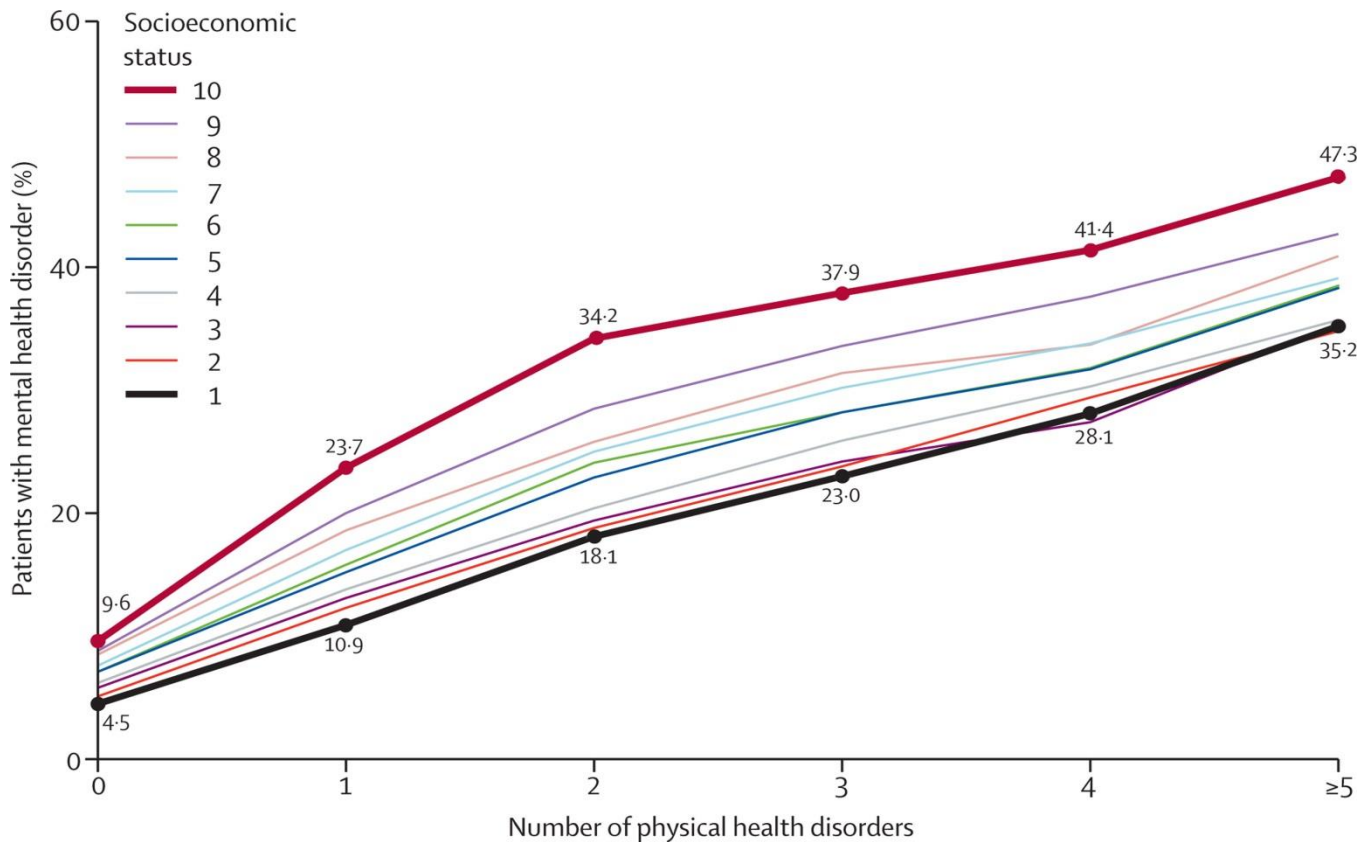
Today's seminar

- Scale of the problem: depression and LTCs
- Current approaches to management
- Alternative models: collaborative care
- Findings from the COINCIDE trial
- Discussion and interpretation of findings
- Case for integration and future research

Scale of the problem

- 15.4 million people in England have a long term condition and a third will have depression
- Coexistence of depression is associated with poorer outcomes, increased mortality, and unscheduled care, with significant cost implications:
 - Depression increases the cost of care for patients with LTCs by at least 45%, or from £3910 to £5670 a year
- Increasing number of people with LTCs have multiple conditions
 - The number with ≥ 3 is expected to increase from 1.9 million in 2008 to 2.9 million in 2018)

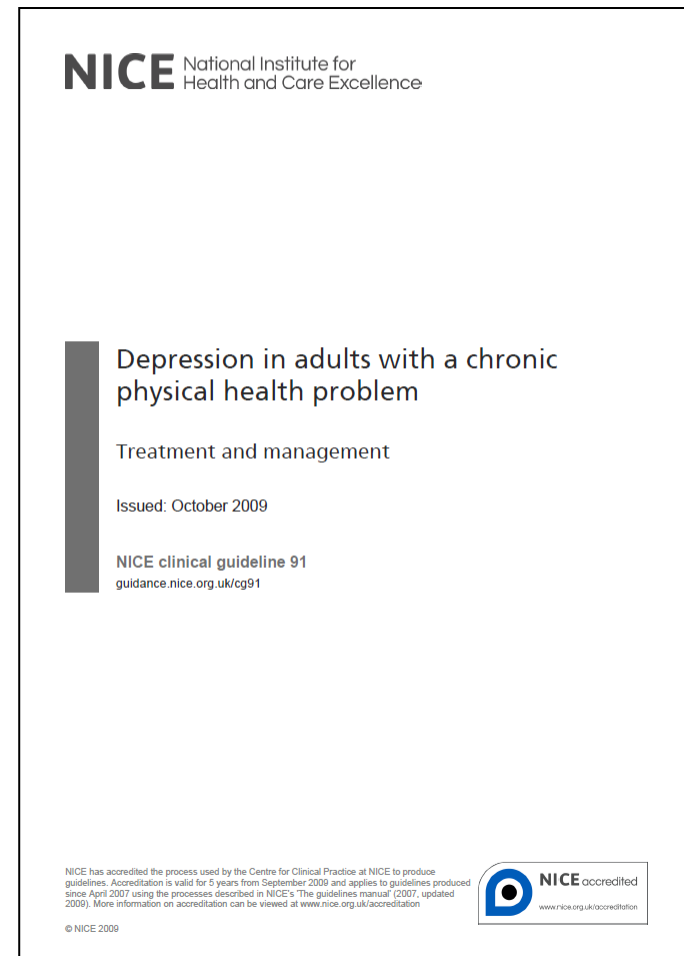
Mental-physical multimorbidity



The Lancet 2012 380, 37-43. DOI: 10.1016/S0140-6736(12)60240-2

Managing depression in LTCs

- Underpinned by NICE guidelines and stepped care model
- Low-intensity psychological interventions based on CBT
- Higher intensity psychological interventions
- Medication
- Collaborative care



Psychological therapies for depression in diabetes

- Patients with diabetes have elevated rates of mental health problems such as depression
- Systematic review of 49 treatment comparisons found:
 - Psychosocial interventions were associated with modest improvements in HbA1c (SMD = 0.29, 95% CI 0.37 to 0.21)
 - Smaller improvements in mental health (SMD = - 0.16, 95% CI 0.25 to 0.07)
- Interventions including both a lifestyle and a mental health component were significantly more effective than lifestyle interventions alone in improving mental health

Diabetes Care 2010; 33:926–930

Psychological therapies for depression/coronary heart disease

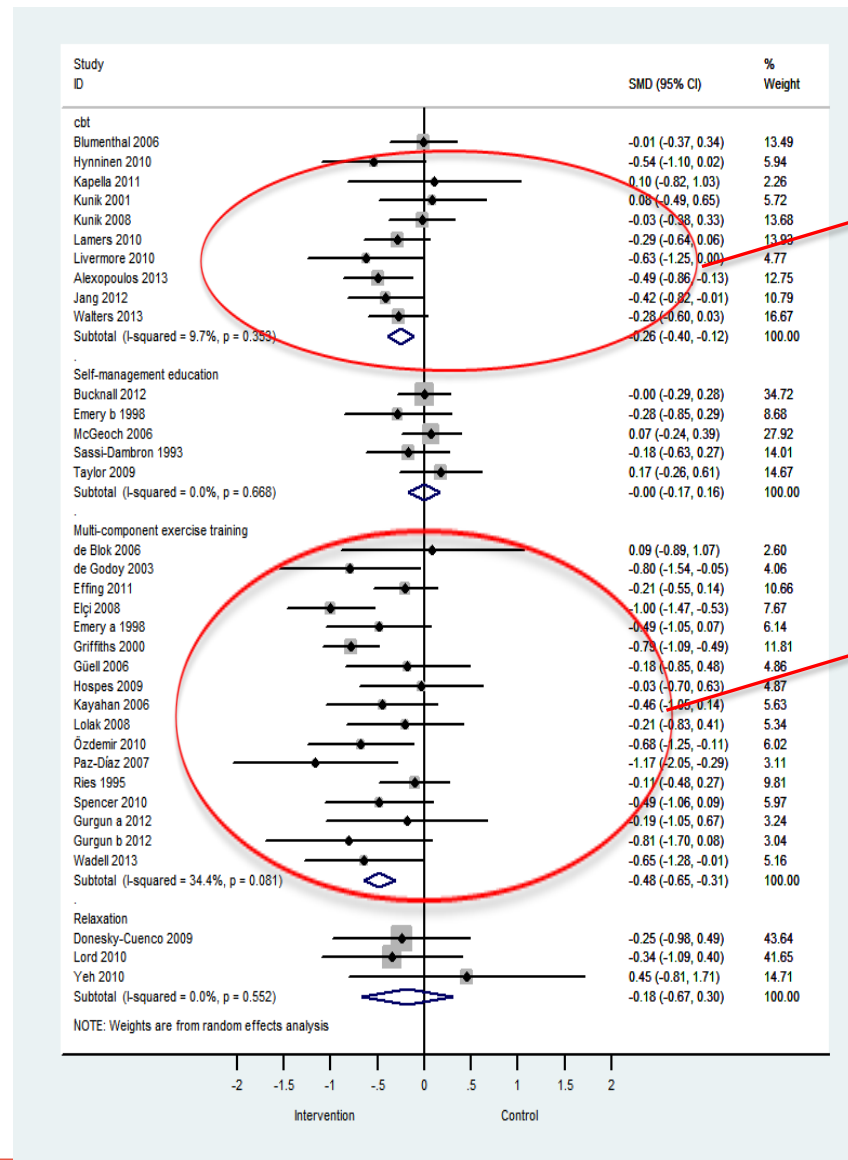
- Effects of psychological interventions on depression among CHD patients are very mixed
- 58 independent treatment comparisons were identified
- Small but significant effects for general education, exercise, problem solving, CBT, and relaxation
- Among high-quality studies of depressed patients only, evidence was strongest for CBT, but effects were small (SMD = 0.31)

Psychosomatic Medicine, 2013; 75:211-221

Psychological interventions for depression/COPD

- Previous review found non significant effect for CBT and depression in COPD ([10.1371/journal.pone.0060532](https://doi.org/10.1371/journal.pone.0060532))
- Update included 34 trials (36 comparisons, n= 2577) ([10.2147/COPD.S72073](https://doi.org/10.2147/COPD.S72073))
- Sub-group analysis showed that CBT interventions were associated with small and significant improvements in depression

Effectiveness of psychosocial interventions on depression/COPD




CBT -0.26

Pulmonary rehabilitation -0.48

Barriers to managing depression in LTCs

- Depression difficult to detect and manage in people with LTCs because:
 - Emotional distress normalised by patients/practitioners
 - Consultations are highly performed managed and time limited
 - Absence of shared language and concepts about depression

Coventry et al. *BMC Family Practice* 2011, 12:10
<http://www.biomedcentral.com/1471-2296/12/10>

 BMC Family Practice

RESEARCH ARTICLE **Open Access**

Talking about depression: a qualitative study of barriers to managing depression in people with long term conditions in primary care

Peter A Coventry*, Rebecca Hays, Chris Dickens, Christine Bundy, Charlotte Garrett, Andrea Cherrington, Carolyn Chew-Graham

Abstract

Background: The risk of depression is increased in people with long term conditions (LTCs) and is associated with poorer patient outcomes for both the depressive illness and the LTC, but often remains undetected and poorly managed. The aim of this study was to identify and explore barriers to detecting and managing depression in primary care in people with two exemplar LTCs: diabetes and coronary heart disease (CHD).

Methods: Qualitative in-depth interviews were conducted with 19 healthcare professionals drawn predominantly from primary care, along with 7 service users and 3 carers (n = 29). One focus group was then held with a set of 6 healthcare professionals and a set of 7 service users and 1 carer (n = 14). Interviews and the focus group were digitally recorded, transcribed verbatim, and analysed independently. The two data sets were then inspected for commonalities using a constant comparative method, leading to a final thematic framework used in this paper.

Results: Barriers to detecting and managing depression in people with LTCs in primary care exist: i) when practitioners in partnership with patients conceptualise depression as a common and understandable response to the losses associated with LTCs - depression in the presence of LTCs is normalised, militating against its recognition and treatment; ii) where highly performed managed consultations under the terms of the Quality and Outcomes Framework encourage reductionist approaches to case-finding in people with CHD and diabetes; and iii) where there is uncertainty among practitioners about how to negotiate labels for depression in people with LTCs in ways that might facilitate shared understanding and future management.


Conclusion: Depression was often normalised in the presence of LTCs, obviating rather than facilitating further assessment and management. Furthermore, structural constraints imposed by the QOF encouraged reductionist approaches to case-finding for depression in consultations for CHD and diabetes. Future work might focus on how interventions that draw on the principles of the chronic care model, such as collaborative care, could support primary care practitioners to better recognise and manage depression in patients with LTCs.

Background

People with chronic physical health problems or long term conditions (LTCs) are approximately twice as likely to suffer from depression than the adult general population [1,2]. Furthermore, when present with LTCs, depression is significantly associated with greater reductions in health status compared with depression alone, or with single or multiple LTCs alone [1]. This is especially important from a therapeutic perspective because depression is linked to poorer self-care [3], non-compliance with medical treatment [4], and disengagement from lifestyle and behavioural changes known to be protective in people with LTCs [5].

Despite evidence that supports the efficacy of antidepressants and structured forms of psychotherapy, depression generally remains under-detected and under-treated by non-psychiatric health professionals, including general practitioners (GPs) [6]. There is growing

* Correspondence: peter.a.coventry@manchester.ac.uk
 Greater Manchester Collaboration for Leadership in Applied Health Research and Care, Health Sciences Research Group and Manchester Academic Health Sciences Centre, Williamson Building, University of Manchester, M13 9PL, UK

 BioMed Central

© 2011 Coventry et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/2.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Improving care of depression and LTCs

Global Mental Health: No health without mental health
 About 14% of chronically disabled people live with mental health problems. However, mortality, they reduce poverty, appreciation of protein, there non-communicable conditions and influences of care for both evaluate psychiatric diseases. Health existing programs and malaria; gender and innovative activities. Men promotion of health, and research health and social

No health without mental health: A cross-government strategy for England
 Introduction
 The WHO pro without mental Pan American Ministers, the the UK Royal substance of the Mental dis contribution to WHO's 2005 provide evidence worldwide.¹⁴ becoming the developing reg The Global Bur scale of the contribution of mental disorders, by use "genital diseases", "female", "infant nutrition disorders", "and and Institute of Psychiatry.

RC PSYCH: THE ALPHAS
 JULY 2009
 fairdeal for mental health

Putting People First: Transforming Adult Social Care
 Improving the lives of people with mental health problems
 World class services for people with mental health problems
 information tool for commissioners

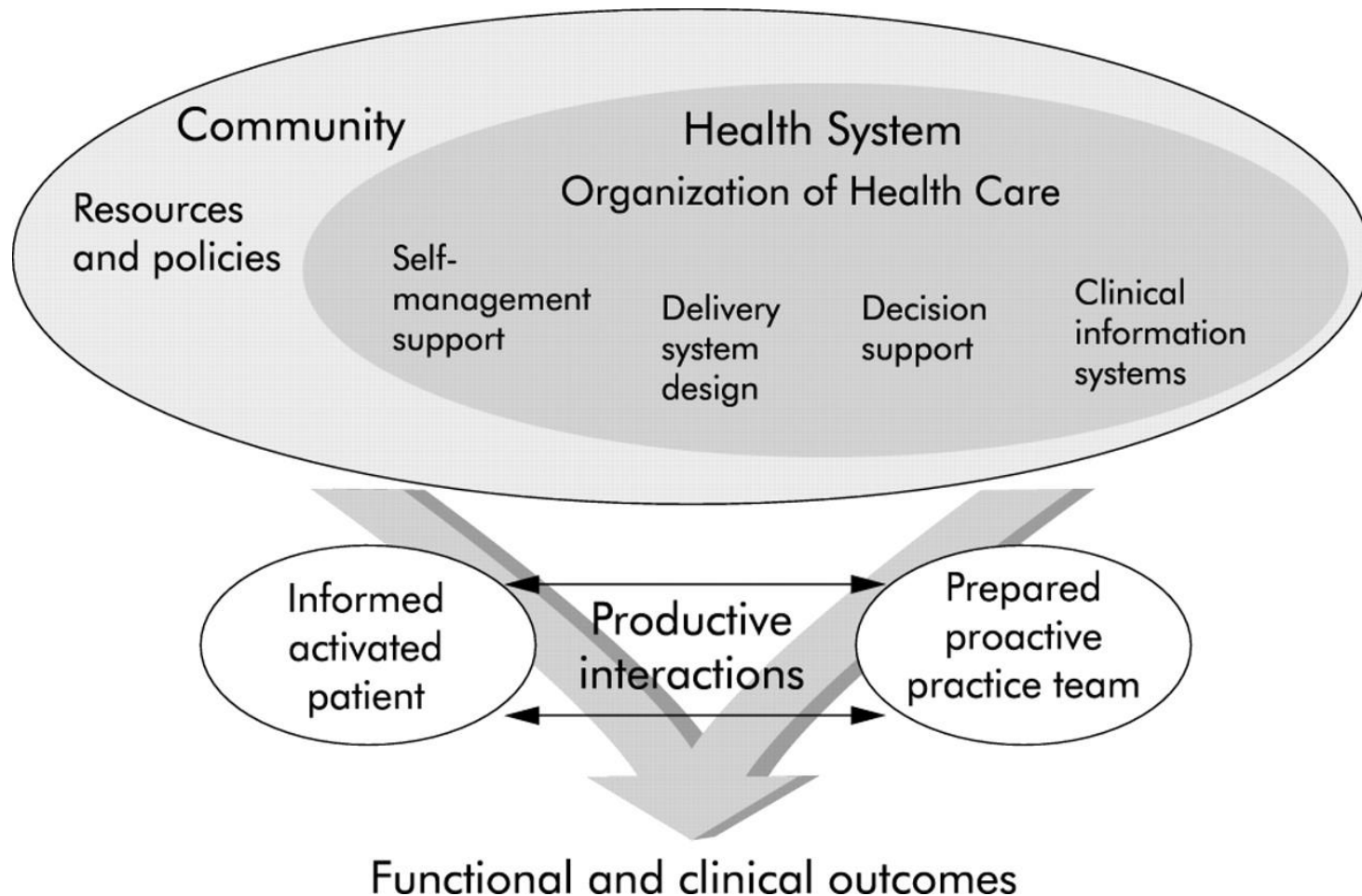
Mental Health: The Need for a World Class Service
 WORLD

Talking therapies: A four-year plan of action
 A supporting document to No health without mental health: A cross-government mental health outcomes strategy for people of all ages

Achieving integration through collaboration

- One promising intervention is ‘collaborative care’, a complex intervention which involves:
 - **Non-medical case manager** working with the GP under regular supervision from specialist mental health clinician(s).
 - **A structured management plan** of medication support and/or brief psychological therapy.
 - **Scheduled patient follow-ups** on one or more occasion (face to face or remotely).
 - **Enhanced inter-professional communication** between the multi-professional team who share responsibility for the care of the depressed patient (e.g. team meetings, case conferences, supervision).

Chronic care model



Effectiveness of collaborative care

- Cochrane review of 79 collaborative care trials (n=24,308):
 - More effective than usual care for both depression and anxiety after treatment, and up to two years later
 - Associated with greater use of anti-depressant medication

Collaborative care for depression and anxiety problems (Review)

Archer J, Bower P, Gilbody S, Lovell K, Richards D, Gask L, Dickens C, Coventry P



THE COCHRANE
COLLABORATION®

Active ingredients of collaborative care

- Collaborative care that includes psychological therapy (with or without medication) is more effective than care that only includes medication
- Patients more likely to adhere to antidepressant medication if:
 - They have a LTC
 - Are systematically identified off disease registers

OPEN ACCESS Freely available online

PLOS ONE

Characteristics of Effective Collaborative Care for Treatment of Depression: A Systematic Review and Meta-Regression of 74 Randomised Controlled Trials

Peter A. Coventry^{1*}, Joanna L. Hudson², Evangelos Kontopantelis³, Janine Archer⁴, David A. Richards⁵, Simon Gilbody⁶, Karina Lovell⁴, Chris Dickens⁵, Linda Gask¹, Waqas Waheed⁷, Peter Bower³

1 Collaboration for Leadership in Applied Health Research and Care, Centre for Primary Care and Manchester Academic Health Science Centre, University of Manchester, Manchester, United Kingdom, 2 Health Psychology Section, Psychology Department, Institute of Psychiatry, King's College London, London, United Kingdom, 3 NIHR School for Primary Care Research, Centre for Primary Care and Manchester Academic Health Science Centre, University of Manchester, Manchester, United Kingdom, 4 School of Nursing, Midwifery & Social Work, University of Manchester, Manchester, United Kingdom, 5 Institute of Health Service Research, University of Exeter Medical School, University of Exeter, Exeter, United Kingdom, 6 Mental Health Research Group, Department of Health Sciences and Hull York Medical School, University of York, York, United Kingdom, 7 Lancashire Care NHS Foundation Trust, Preston, United Kingdom

Abstract

Background: Collaborative care is a complex intervention based on chronic disease management models and is effective in the management of depression. However, there is still uncertainty about which components of collaborative care are effective. We used meta-regression to identify factors in collaborative care associated with improvement in patient outcomes (depressive symptoms) and the process of care (use of anti-depressant medication).

Methods and Findings: Systematic review with meta-regression. The Cochrane Collaboration Depression, Anxiety and Neurosis Group trials registers were searched from inception to 9th February 2012. An update was run in the CENTRAL trials database on 29th December 2013. Inclusion criteria were: randomised controlled trials of collaborative care for adults ≥ 18 years with a primary diagnosis of depression or mixed anxiety and depressive disorder. Random effects meta-regression was used to estimate regression coefficients with 95% confidence intervals (CIs) between study level covariates and depressive symptoms and relative risk (95% CI) and anti-depressant use. The association between anti-depressant use and improvement in depression was also explored. Seventy four trials were identified (85 comparisons, across 21,345 participants). Collaborative care that included psychological interventions predicted improvement in depression (β coefficient -0.11 , 95% CI -0.20 to -0.01 , $p=0.03$). Systematic identification of patients (relative risk 1.43, 95% CI 1.12 to 1.81, $p=0.004$) and the presence of a chronic physical condition (relative risk 1.32, 95% CI 1.05 to 1.65, $p=0.02$) predicted use of anti-depressant medication.

Conclusion: Trials of collaborative care that included psychological treatment, with or without anti-depressant medication, appeared to improve depression more than those without psychological treatment. Trials that used systematic methods to identify patients with depression and also trials that included patients with a chronic physical condition reported improved use of anti-depressant medication. However, these findings are limited by the observational nature of meta-regression, incomplete data reporting, and the use of study aggregates.

Citation: Coventry PA, Hudson JL, Kontopantelis E, Archer J, Richards DA, et al. (2014) Characteristics of Effective Collaborative Care for Treatment of Depression: A Systematic Review and Meta-Regression of 74 Randomised Controlled Trials. *PLOS ONE* 9(12): e112000. doi:10.1371/journal.pone.0112000

Effectiveness in LTCs

- Large treatment effects for both physical and mental health outcomes in landmark [Teamcare](#) trial in US
- But relevance of US trials limited
 - Separate treatment protocols for physical and mental health
 - Heavily reliant on elite academic input
 - Highly selected affluent populations who could afford psychological therapy
 - Patients without multimorbidity



COINCIDE

Collaborative Interventions for
Circulation and Depression

Rationale and aim of COINCIDE

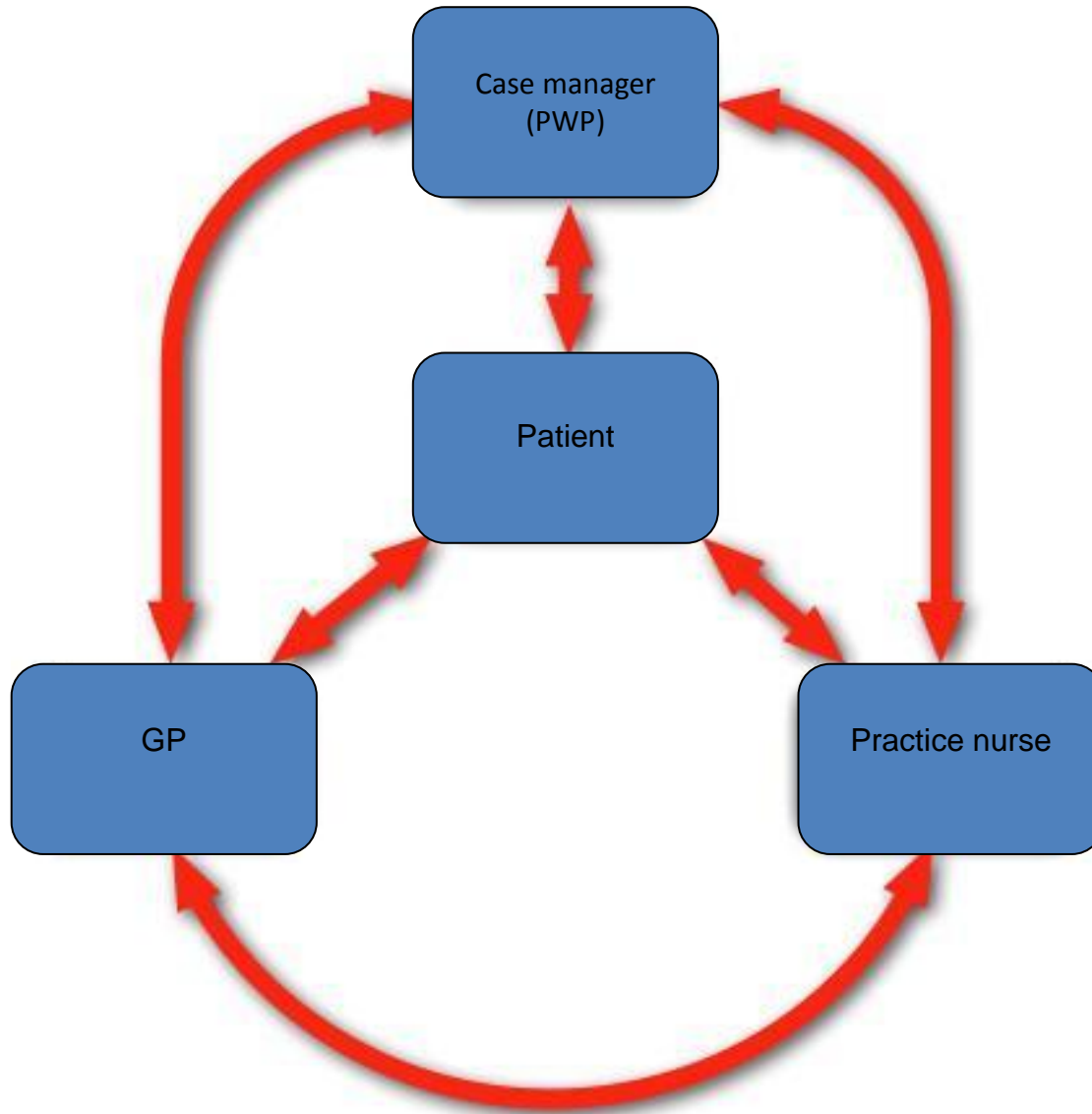
- CADET trial showed benefits of collaborative care can translate to NHS ([doi: 10.1136/bmj.f4913](https://doi.org/10.1136/bmj.f4913))
- But uncertainty about the effectiveness of collaborative care for managing depression in LTCs in settings that resemble routine care
- COINCIDE aimed to test the (cost) effectiveness of an integrated collaborative care model for
 - People with depression and diabetes/CHD
 - Interventions were delivered by existing providers (i.e. IAPT and practice nurses)
 - Patients had freedom to choose a variety of psychological treatments and/or medication

The COINCIDE trial

- Pragmatic cluster-randomised controlled trial conducted across north west in 36 GP surgeries
- Compared integrated collaborative care with usual care
- Primary outcome - severity of depression at 4/6 months using the SCL-D13
- Secondary outcomes – disease specific QOL, anxiety (GAD-7), QOL (WHOQOL-BREF), self-efficacy, patient centredness (PACIC) patient self-management behaviour (heiq), patient satisfaction (CSQ-8), social support (ENRICH), healthcare utilisation and health utilities (EQ-5D).

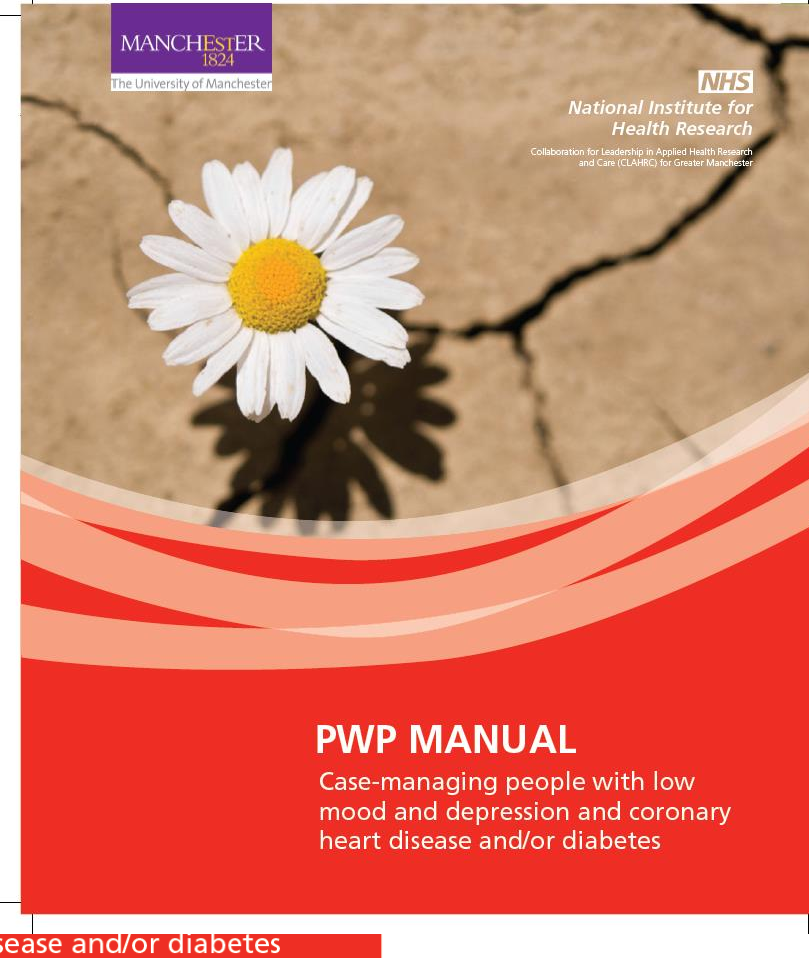
Care model

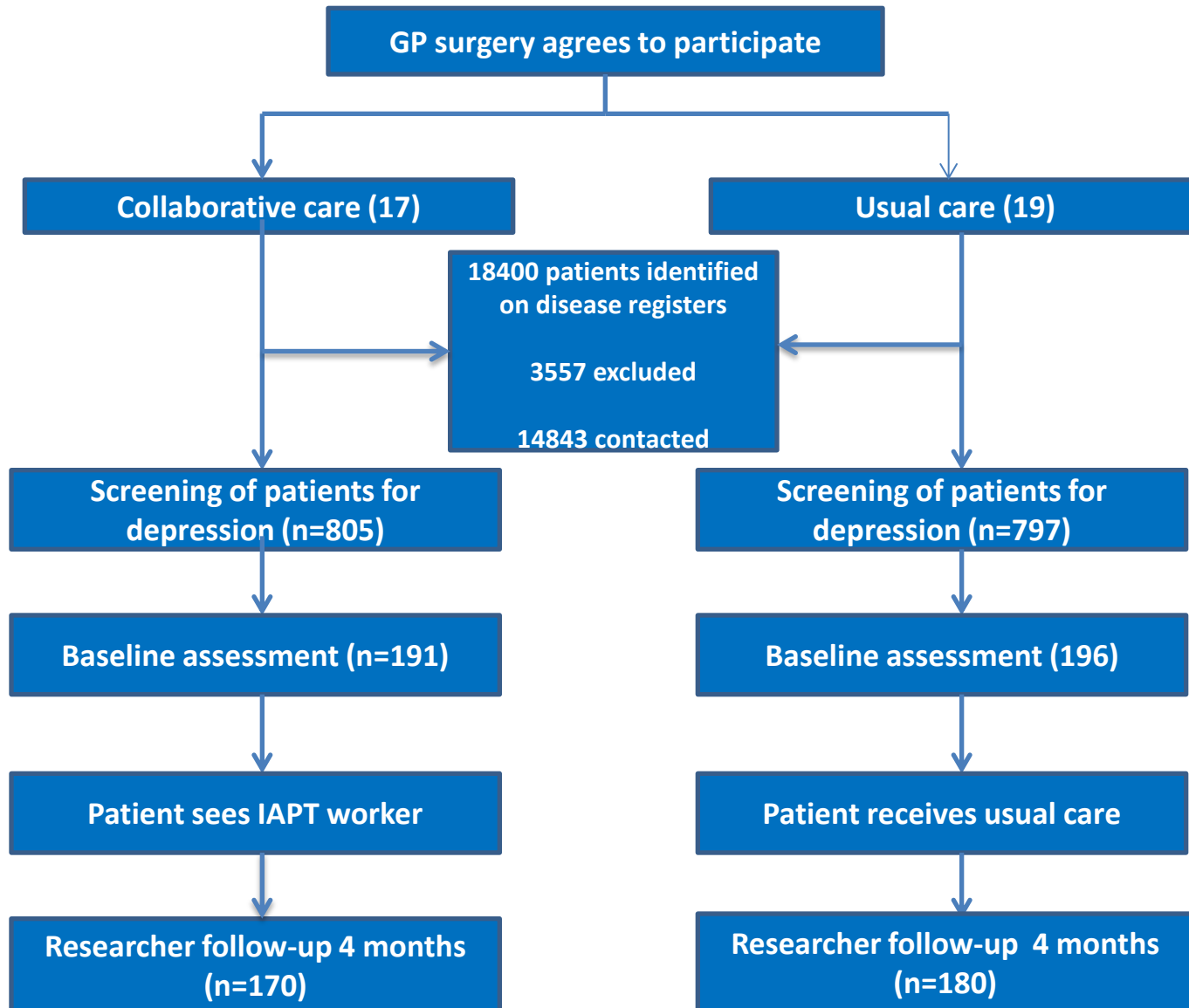
- Patients referred to IAPT from trial manager
- Brief psychological interventions based on CBT
- Biopsychosocial assessment using ABC-E model
- Up to 8 sessions
- Session 2 and 8 to be held jointly with practice nurse and PWP
- Supervision as usual within IAPT
- Stepped up or signposted to alternative services if appropriate



COINCIDE care model

Integrated guided self-help





Participant characteristics

- 76% of participants were recruited from practices from moderately and heavily deprived areas
- Only 25% of participants were in paid employment.
- 63% of participants met criteria for moderately severe (or severe depression
- 75% of participants met criteria for caseness for anxiety
- Participants had a mean of 6.2 long term conditions in addition to either diabetes or coronary heart disease
- 62% of participants were male, with a mean age of 58.5 years (11.7)
- Half of participants were prescribed anti-depressant or anti-depressant medication at baseline.

Clinical findings

- Mean scores were 0.23 SCL-D13 points lower (95% CI - 0.41 to -0.05) in the collaborative care arm
 - Equal to an adjusted standardised effect size of 0.30
- Improved anxiety outcomes
 - GAD score -1.45 (-2.45 to -0.56) points lower
- Better self-managers on 5 of 8 domains of heiq
- Rated care as more patient centred – congruent with goals of chronic care model
- More satisfied with their care
- No significant differences for QOL, disease specific QOL, self-efficacy, disability, and social support.

Process of care

- PWPs treated a mean of 9 patients (SD 6.3)
- Patients received a mean of 4.4 sessions (3.3, 0-14)
- 50 (26%) participants attended one joint integrated care session, and 46 (24%) patients attended two joint integrated care sessions
- Mean length of mental health treatment sessions was 27 mins
- Mean length of integrated care sessions was 19.7 mins
- Small but non-significant increase in antidepressant use during the trial (6% increase in collaborative care, 7% in usual care).

Key findings and implications

- Integrated collaborative care can reduce depression and improve chronic disease self-management in people with mental-physical multimorbidity.
- Mental health providers and practice nurses can be trained to deliver patient centred integrated health care for people with mental-physical multimorbidity
- COINCIDE can be potentially implemented within the context of routine chronic disease management with only minimal changes to the organisation of primary care.

Strengths and weaknesses

- Strengths
 - Pragmatic design in routine settings
 - Population had mental-physical multimorbidity and from deprived areas
 - Trained existing care providers to adopt collaborative care
- Weaknesses
 - Effect size less than the pre-specified effect
 - Short term follow-up
 - Only half of patient engaged with integrated care sessions

Did COINCIDE deliver integrated care?

- Integrated care is an organising principle for care delivery that aims to improve patient care and experience through improved coordination.
- Integration is the combined set of methods, processes and models that seek to bring this about.

Patient and provider perspectives on integration

- Interviews with
 - 11 PWPs, 12 PNs, and 7GPs
 - 31 patients (15 completers, 16 disengaged treatment)
- Integration
 - Enhanced co-ordination of mental and physical health care
 - Provided a sense that patients' health was being more holistically managed
- Division
 - Preference for therapeutic separation between mental and physical health.
 - Patients valued separate space outside of LTC clinic to discuss emotional health problems

Integration

“PWP10: Working collaboratively...in terms of your practice it's very helpful to get that reassurance that what you're doing in the sessions is the right thing, is useful, and will be helpful for the person.” PWP10

“PN10: If you mention mental health there is still that - yeah, another word for it is it's still a stigma. People don't like to address it, admit to it, or whatever. So maybe I think it needs to be addressed side by side as part of the whole care. At present it does, anyway, until people's attitudes change.” PN10

Division

“PT12 (Male, Completed): [The PWP is] more qualified in that sense [talking about emotions]. She’s... the nurse basically looks after your body, not your mind. Each one’s got a job to do.”

“PWP06: We tried to do a gated, boundaried piece of work... Some of them wanted to receive treatment on their mental health and talk about things that were nothing to do with their health condition”

Levels of integration in COINCIDE

- COINCIDE achieved integration through improved
 - Care coordination between providers
 - Inter-professional communication
- Partially achieved clinical and therapeutic integration but need for flexible approach to achieve integrated care for patients with multimorbidity

COINCIDE now

- Current CLAHRC GM is funded to support roll out of COINCIDE with IAPT
 - <http://clahrc-gm.nihr.ac.uk/our-work/patient-centred-care/coincide/>
- Training IAPT workforce to collaboratively manage depression and anxiety in LTCs
 - Liaison with primary care (practice nurse) and specialist nurses in secondary care
 - More generic and transdiagnostic approach
- Train the trainer to support wider implementation

Thank you for listening

peter.a.coventry@manchester.ac.uk

<http://www.population-health.manchester.ac.uk/staff/PeterCoventry/>