David Richards, PhD

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UNIVERSITY OF EXETER | MEDICAL SCHOOL

Where on earth is Exeter, Devon?

Staring into the emptiness

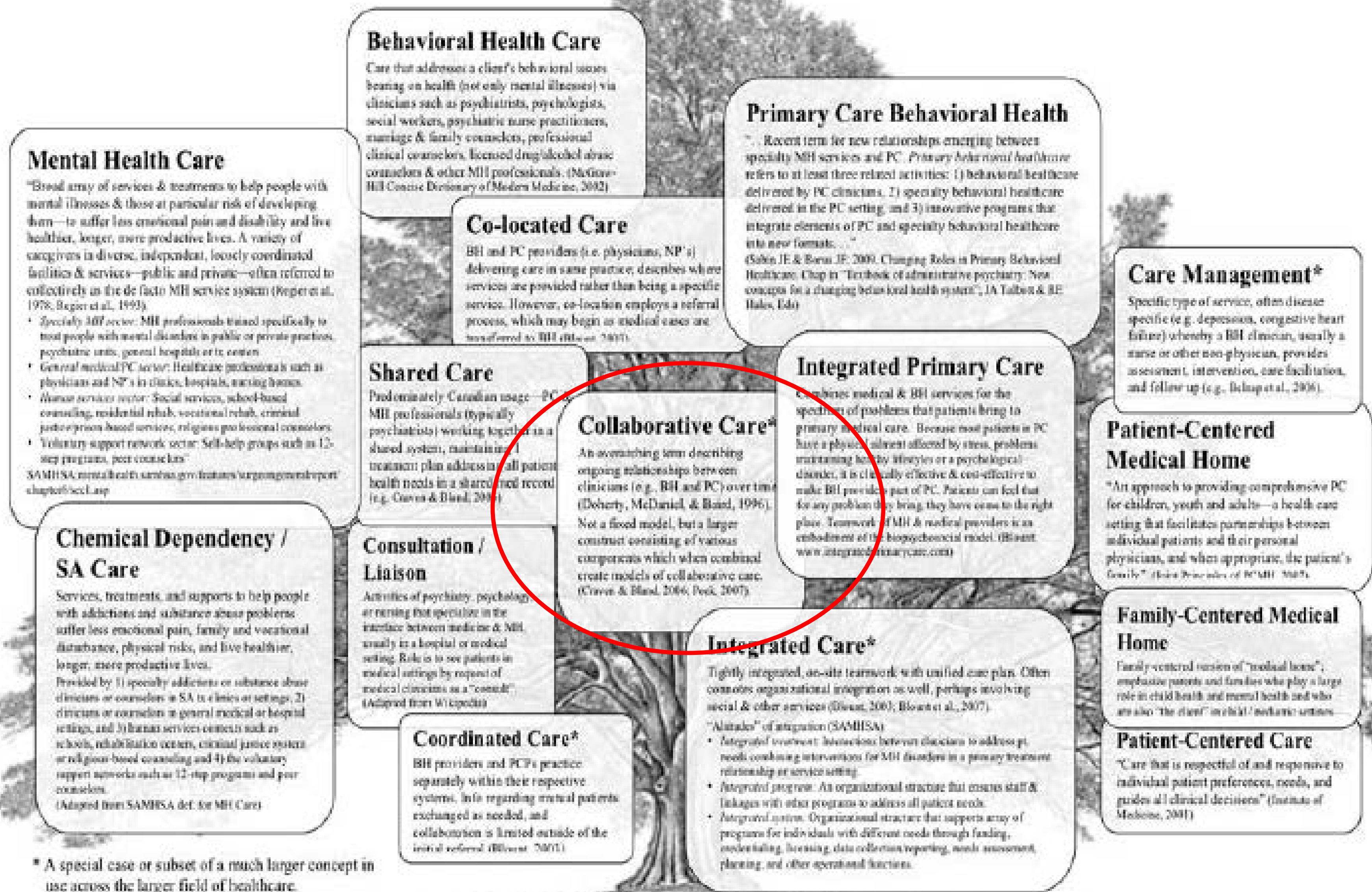
- "*During the early part of the 21st century, to be anxious or depressed was to stare across an abyss, empty of assistance.*"

Richards, D.A
Br. J. Wellbeing, 2010

The Layard Report

- Worldwide the economic burden of this untreated anxiety and depression to economies runs to hundreds of billions of dollars, (estimated to be £19 billion in the UK alone)

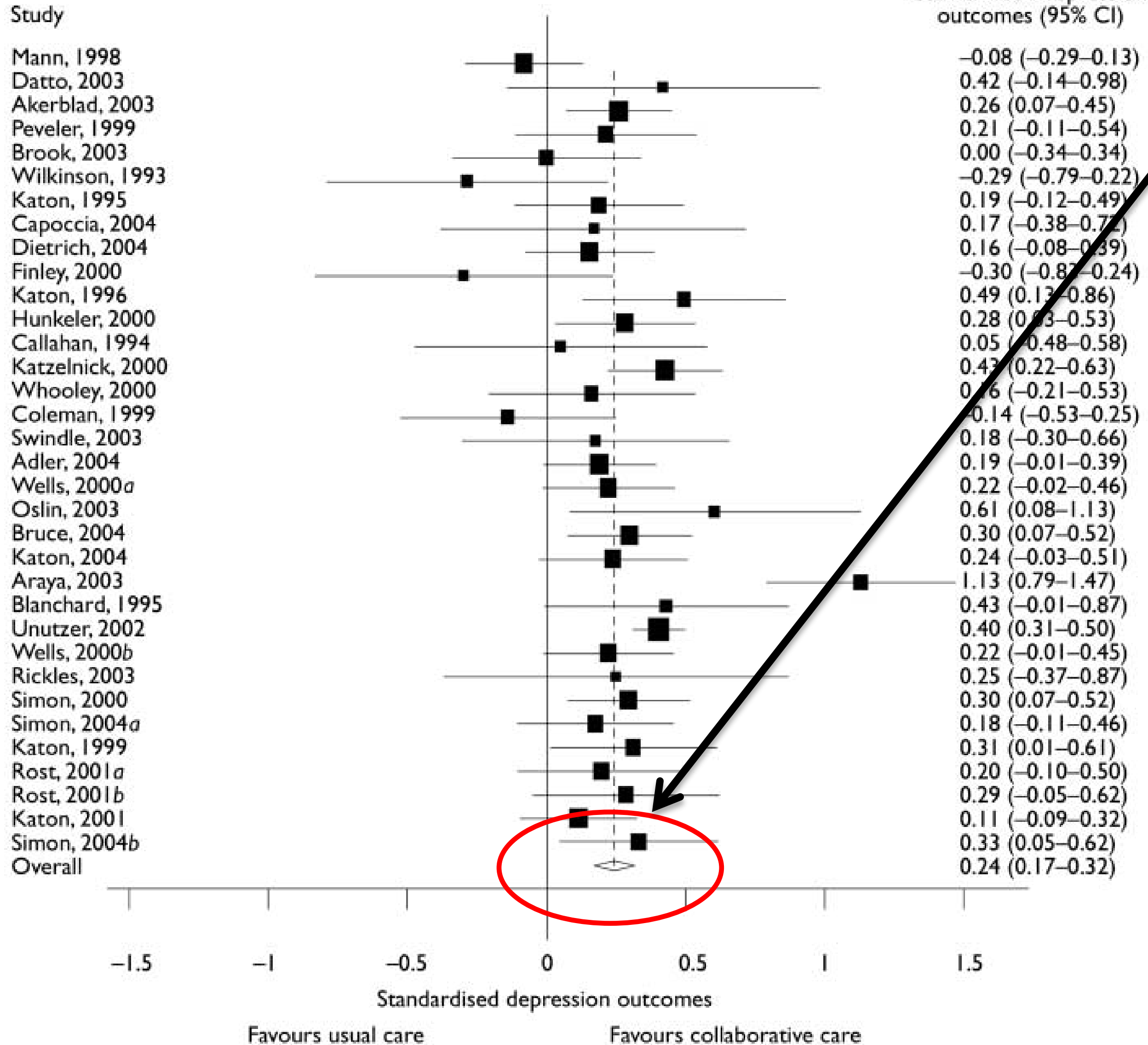
Figure 1. Family tree of terms in use in the field of collaborative care



US Agency for Healthcare Research and Quality (AHRQ) 2011

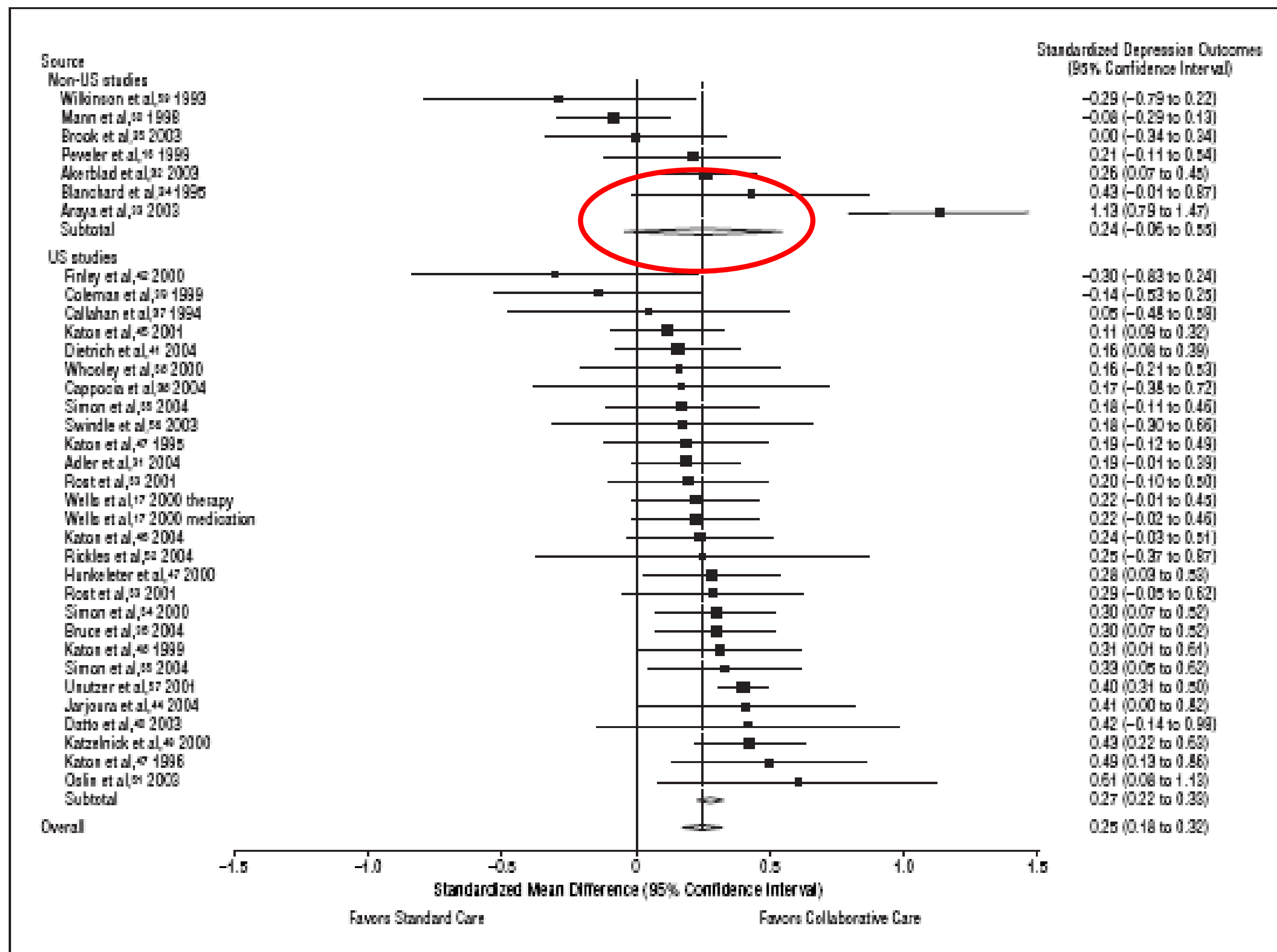
Collaborative Care

ES = 0.24 (95% CI 0.17 to 0.32)



Bower et al. *BrJPsychiat.* 2006

The International Literature



The possibilities…

- Collaborative care emphasizes the recognition and care of mental health problems in primary care settings and the effective collaboration of primary care and mental health clinicians.
- *"Improvements in the coordination between mental health and primary care offer a prominent example of an area of healthcare reorganization that can contribute to both better quality and lower costs."* (p5)

US Agency for Healthcare Research and Quality (AHRQ) 2011

US vs. UK System Differences

- Taxation funded
- Universal coverage
- Specialist services available to all
- Integrated primary care sector
- Very little private healthcare or insurance
- No co-payments
- But…similar problems of access, availability, fidelity and quality?

Research Question

- Is collaborative care more clinically and cost effective than usual care in the management of patients with moderate to severe depression in UK primary care?
- Design: Cluster RCT
  - 3 sites – Manchester, London, Bristol

BMC Health Services Research

Study protocol

Open Access

Collaborative Depression Trial (CADET): multi-centre randomised controlled trial of collaborative care for depression - study protocol

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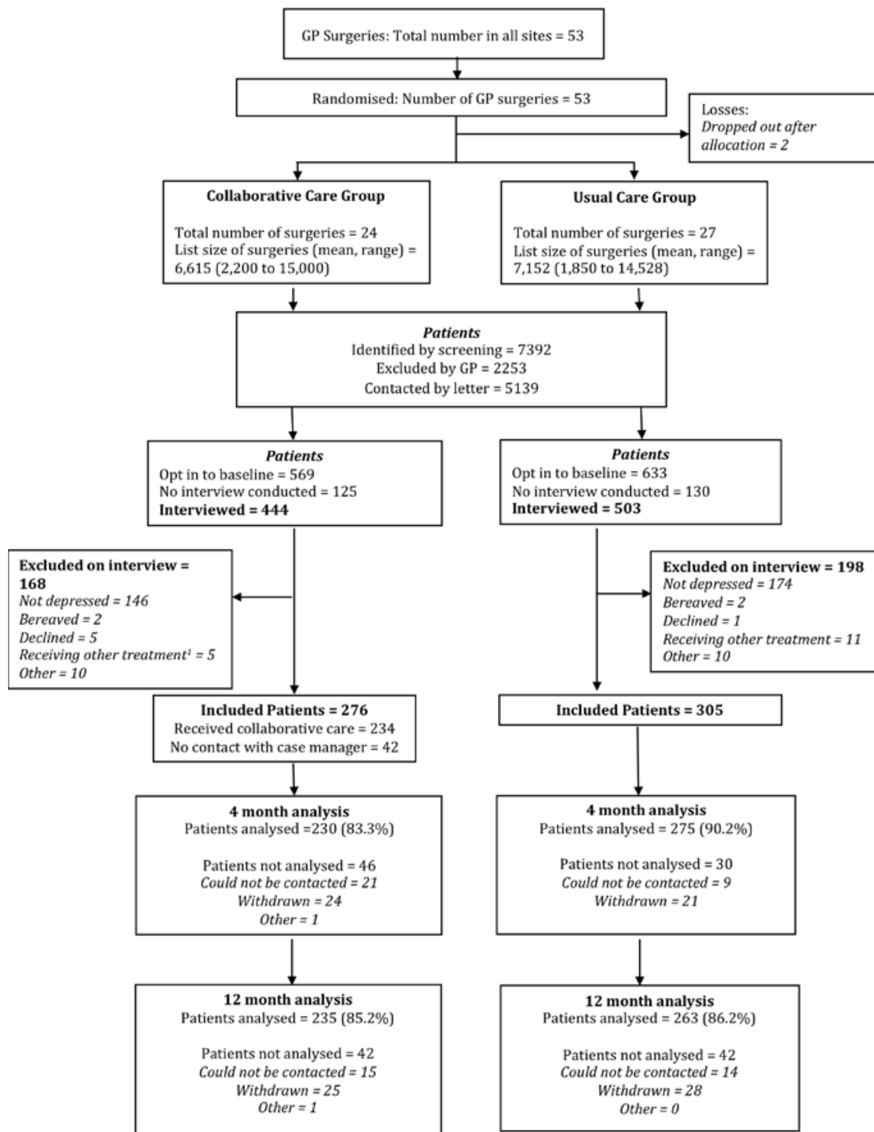
Collaborative Care Intervention

- Usual care from their GP plus:
  - 6-12 case manager contacts with participants over 14 weeks
  - 30-40 minutes for an initial face to face appointment followed by 15-20 minute telephone contacts thereafter
- Contacts included:
  - education about depression; medication management; behavioural activation; and relapse prevention advice
- Communication with primary care
  - case managers provided GPs with regular updates and patient management advice at least four weekly and more often if clinically indicated

Case Managers

- Para-professional primary care mental health workers with post-graduate education in mental health care
- Additionally trained for five days in collaborative care
- Received weekly supervision
  - from specialist mental health professionals including clinical psychologists, psychiatrists, academic general practitioners with special interest in mental health or a senior nurse psychotherapist



Outcome Measures

Primary Outcome
Depression at 4 months, PHQ-9

Secondary Outcome
Depression at 12 months, PHQ-9

Other Secondary Outcomes at 4 & 12m

Anxiety	GAD7
Quality of Life	SF36
Health Care Utilisation	Questionnaire
Health State Utilities	EQ5D
Satisfaction with Care	CSQ-8
Process of implementation	Clinical records

Sample size:	581
Follow up 4m:	505 (87%)
Follow up 12m:	498 (86%)

Participants

- Depression:
  - 29·9% severe, 55·6% moderately severe, 14.3% mild
  - 72·6% past history of depression
- Anxiety:
  - 98% had a secondary diagnosis of an anxiety disorder, the most common being generalised anxiety disorder
- Physical health
  - 63·7% longstanding physical illness (for example, diabetes, asthma, heart disease)
- 72% women
- mean age 44·8 years (SD 13·3)
- 43·5% in full or part-time paid employment

Population Morbidity

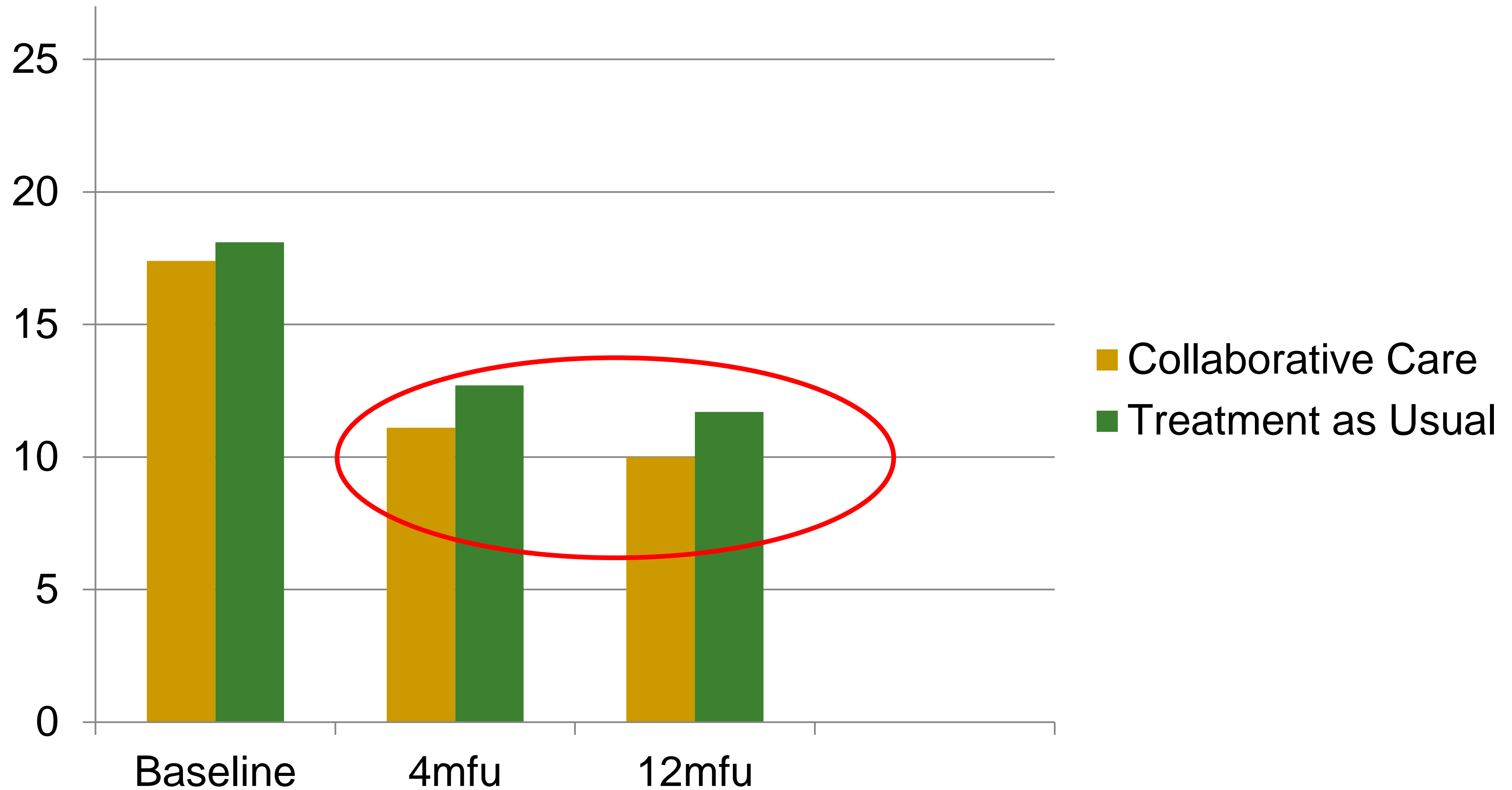
PHQ9 Baseline

Group	Count	Mean	Standard deviation	Minimum	Maximum
Collaborative Care	276	17.4	5.2	4	27
Usual Care	305	18.1	5.0	4	27
Total	581	17.8	5.1	4	27

GAD7 Baseline

Group	Count	Mean	Standard deviation	Minimum	Maximum
Collaborative Care	275	12.9	5.3	0	21
Usual Care	305	13.6	4.7	0	21
Total	580	13.3	5.0	0	21

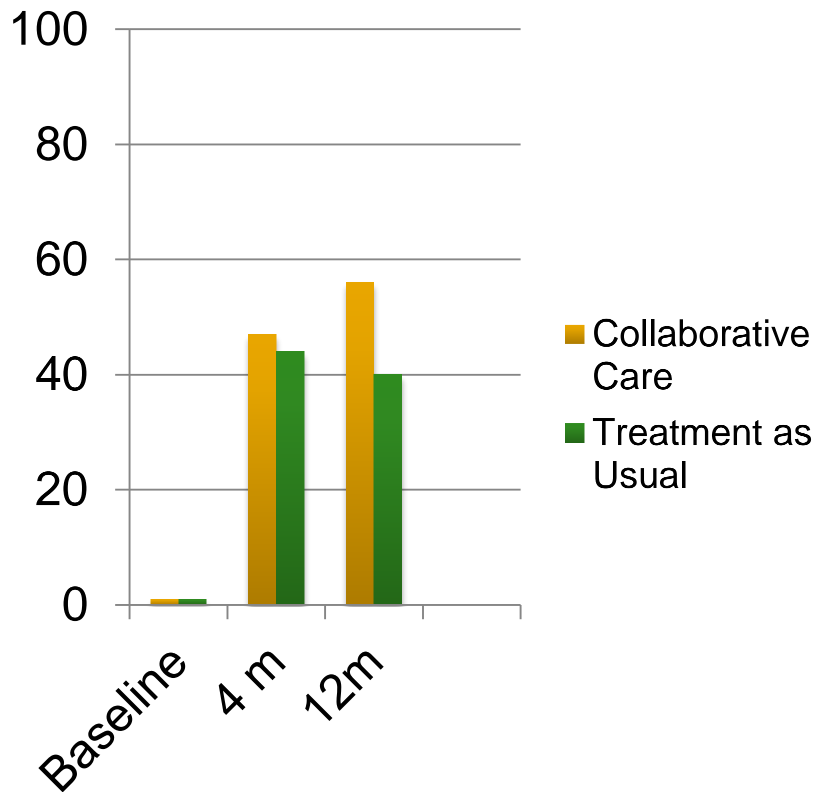
Results: Depression

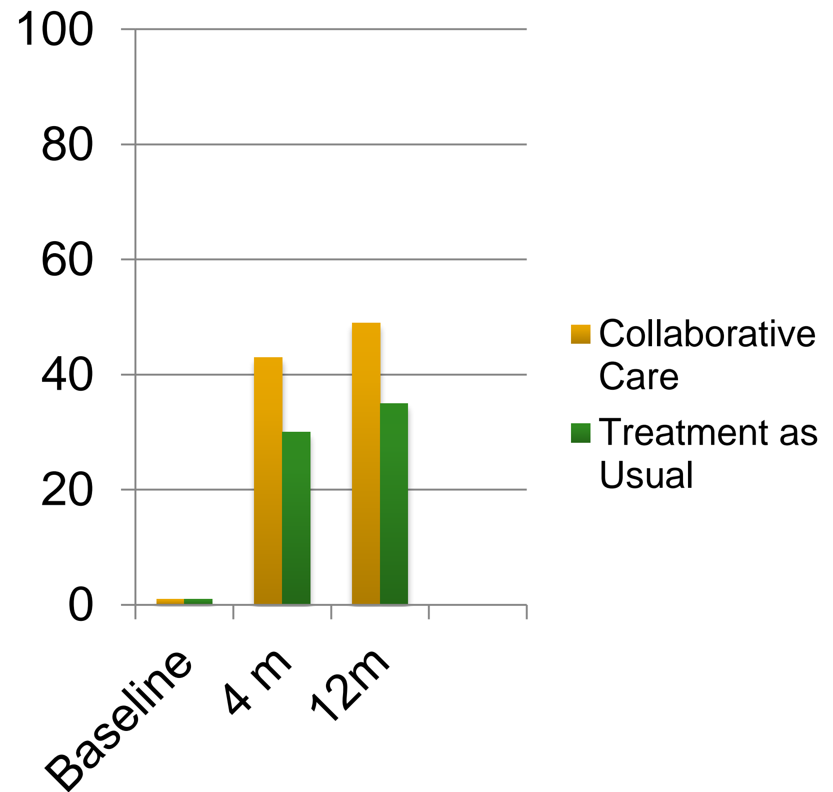


Depression outcomes (PHQ-9)

- Four months:
  - Collaborative care participants were 1·33 PHQ-9 points lower (95% CI 0·35 to 2·31, p = 0·009) after adjustment for baseline depression
  - Standardised effect size = 0·26 (95% CI 0·07 to 0·46)
- 12 months:
  - Collaborative care participants were 1·36 points lower (95% CI 0·07 to 2·64, p = 0·04) after adjustment for baseline depression
  - Standardised effect size = 0·26 (95% CI 0·01 to 0·52)

Recovery and Response Rates





Secondary Outcomes

- Collaborative care:
  - produced better outcomes than treatment as usual on the mental component scale of the SF-36 at four but not 12 months,
  - had little additional effect on anxiety and the physical component scale of the SF-36 compared to treatment as usual
  - participants receiving collaborative care were more satisfied with their treatment than those receiving treatment as usual

Economics at 12mfu

- No significant difference in direct and societal costs: £425·67 higher for collaborative care, 95% CI: -£119·53, £1,169·31)
- EQ5D: modest but not significant QALY difference of 0·019 (95% CI -0·019 to 0·06) in favour of collaborative care
- SF-6D: significant QALY difference of 0·017 (95% CI: 0·001 to 0·032) in favour of collaborative care

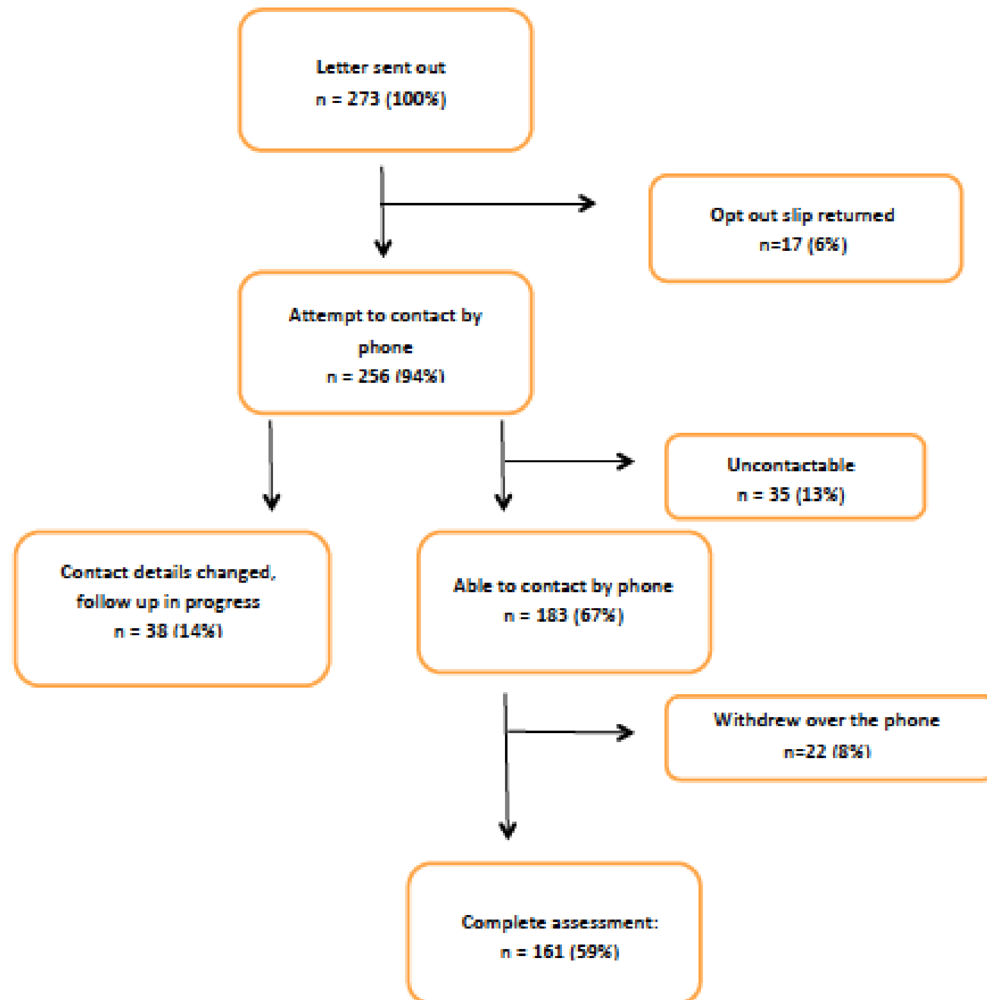
Cost Effectiveness

- Incremental cost per QALY = £22,404, with an expectation of being cost-effective in 56% of cases at a payer willingness to pay threshold of £30,000 per QALY.
  - *However, this analysis is greatly influenced by one participant outlier where direct/societal costs are more than three times greater than the nearest other participant.
- Outlier removed, incremental cost per QALY = £6,130, with an expectation of being cost-effective in 80% of cases.

Next steps – 36m follow up

Sept 2012 – March 2014

Progress so far:



Summary

- We found that collaborative care in the UK
  - has persistent positive effects,
  - is cost effective against commonly applied decision-maker willingness to pay thresholds
  - patients are more satisfied compared to treatment as usual
- Exactly in line with international literature

Cochrane (2012) meta-analysis of 79 RCTs

- Overall SMD = 0.29 (95% CI 0.25 to 0.33)
- CADET SMD = 0·26 (0·07 to 0·46) no different from:
  - US SMD = 0·29 (0.24 to 0.33)
  - non-US ex-the UK SMD = 0.33 (0.23 to 0.43)
  - UK SMD = 0·25 (0·13 to 0·37)
- Collaborative care in the UK is as effective as US trials, therefore, for an example of a taxation-funded, integrated health system with a well-developed primary care sector

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http://medicine.exeter.ac.uk/research/healthserv/complexinterventions/

IAPT: the first three years: latest data

- Key successes of the programme in the first three full financial years from 2008-2011 include:
  - Over 1 million people entering treatment
  - 680,000 people completing treatment
  - Recovery rates consistently in excess of 45%
  - 65% of people significantly improved
  - Over 45,000 people moving off sick pay and benefits
  - Nearly **4,000** new clinical practitioners trained

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SCAN THROUGH THE MAGS FREE

Thank you
(again).