Effective Ingredients in Assertive Outreach (ACT) Tom Burns: University of Oxford

Int

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PACT - Stein & Test 1980

- Project for Assertive Community Treatment
- 126 psychotic patients in RCT of:
 - Intensive case management (ACT)
 - Treatment as usual
- Results:
 - Hospitalisation
 - Social Functioning
 - Symptoms
 - Employment
 - Costs

Reduced Improved Same/Improved Enhanced Equivocal

PACT Clinical Practice

- Low case loads 1:10
- Frequent contact (weekly to daily)
- In vivo (outreach to home and neighborhood)
- Daily team meetings
- Multidisciplinary work 'whole team approach'
- Flexibility, crisis stabilization, available 24/7
- Not time limited
- Emphasis on medication
- Emphasis on survival skills and circumstances
 - Accommodation, food, money
 - Social functioning leisure, work and substance abuse

ACT research takes off

• Over 50 studies in Meuser's 1998 review

– Of which >30 ACT like

- Mueser KT, Bond GR, Drake RE, Resnick SG. Models of community care for severe mental illness: a review of research on case management. Schizophrenia Bulletin 1998;24(1):37-74.
- Over 90 studies in Catty 2002 review

– Of which >60 ACT like

 Catty J, Burns T, Knapp M, Watt H, Wright C, Henderson J et al. Home treatment for mental health problems: A systematic review. Psychological Medicine 2002;32:383-401

ACT vs Standard Care Hospital Admissions

Study	Treatment	Control	Peto Odds Ratio 95% C	l - Weight %	Peto Odds Ratio 95% Cl
Audini-London	9/33	9/33		6.5	1.00 [0.34, 2.93]
Bond-Chicago1	32 / 45	34 / 43		8.2	0.66 [0.25, 1.72]
Bond-Indiana1	12 / 50	33 / 53	4 −∎−−	12.6	0.21 [0.10, 0.47]
Chandler-California	49 / 252	57 / 264	_ _	41.5	0.88 [0.57, 1.34]
Lehman-Baltimore	42 / 77	45 / 75		18.4	0.80 [0.42, 1.52]
Test-Wisconsin	15 / 75	26 / 47	4 →	12.8	0.21 [0.10, 0.45]
Fotal (95% CI)	159 / 532	204 / 515	•	100.0	0.59 [0.45, 0.78]
lest for heterogeneity ch	i-square=18.78 (if=5 p=0.0021			
fest for overall effect Z=∹	3.74 p=0.00	-			

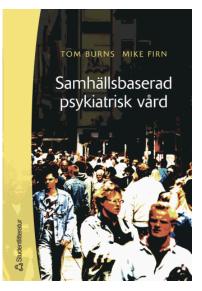
Marshall M, Lockwood A. Assertive Community Treatment for people with severe mental disorders (Cochrane Review). The Cochrane Library [3]. 25-2-1998.

Case Management vs Standard Care Hospital admissions

Study	E×pt n/N	Control	Peto Odds Rati	o 95% CI	Weight %	Peto Odds Ratio 95% Cl	
Curtis-New York	48 / 147	22 / 145		+	22.0	2.60 [1.52, 4.45]	
Ford-London	17 / 39	14 / 38	-++		7.7	1.32 [0.53, 3.26]	
Franklin-Houston	62/213	38 / 204		-	31.4	1.77 [1.13, 2.78]	
Macias-Utah	0/20	6/21			2.2	0.11 [0.02, 0.59]	
Marshall-Oxford	17 / 40	10 / 40	+	•	7.5	2.17 [0.86, 5.44]	
Tyrer-London	58 / 196	35 / 197	-	•	29.3	1.92 [1.21, 3.06]	
Fotal (95% CI)	202 / 655	125 / 645	-	•	100.0	1.84 [1.43, 2.37]	
Test for heterogeneity o	hi-square=12.88 (df=5 p=0.0245					
Test for overall effect Z	=4.77 p=0.00						

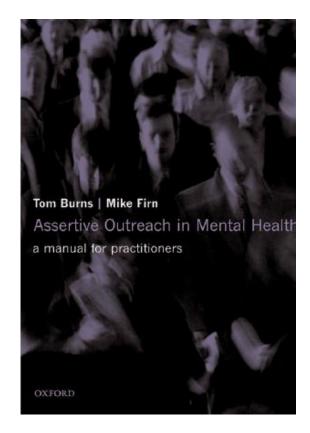
Marshall M, Gray A, Lockwood A, Green R. Case management for severe mental disorders (Cochrane Review). The Cochrane Library [1]. 2001.

Clinical practice extensively described



Assertive Outreach in Mental Health A Manual for Practitioners Tom Burns and Mike Firn, OUP

Excellent book – available in English, Italian and Swedish



The intellectual puzzle

- No European study has replicated the reduced hospitalisation found in US ACT studies.
- UK700 and PRiSM showed no difference

ARTICLES

Intensive versus standard case management for severe psychotic illness: a randomised trial

Tom Burns, Francis Creed, Tom Fahy, Simon Thompson, Peter Tyrer, Ian White, for the UK 700 Group*

Lancet 1999; 353: 2185-89

• Without this surprising finding we would be no further forward in understanding ACT

Attempting to answer the question empirically:

Going beyond definitions



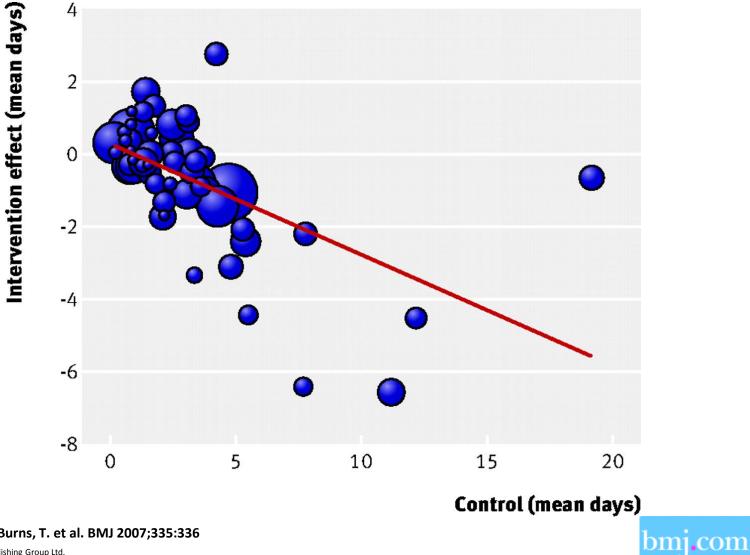
Use of intensive case management to reduce time in hospital in people with severe mental illness: systematic review and meta-regression

Tom Burns, Jocelyn Catty, Michael Dash, Chris Roberts, Austin Lockwood and Max Marshall

BMJ 2007;335;336-; originally published online 13 Jul 2007; doi:10.1136/bmj.39251.599259.55

Impact of current bed usage

Metaregression of Intensive Case management studies Control group mean v mean days per month in hospital. Negative treatment effect indicates reduction relative to control

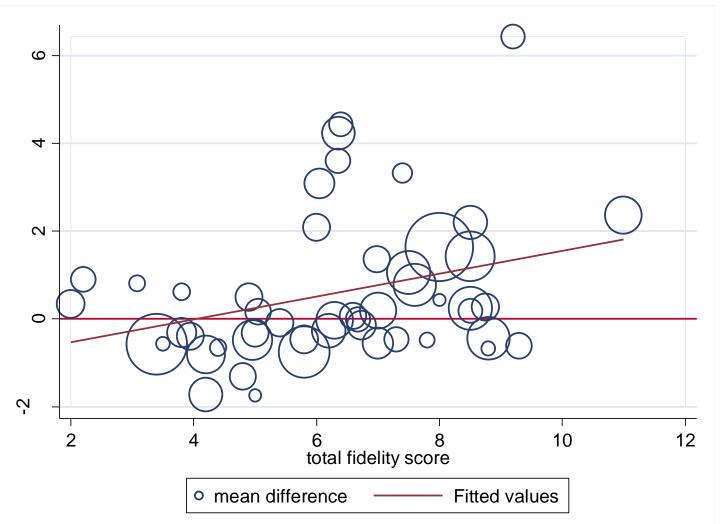


Burns, T. et al. BMJ 2007;335:336

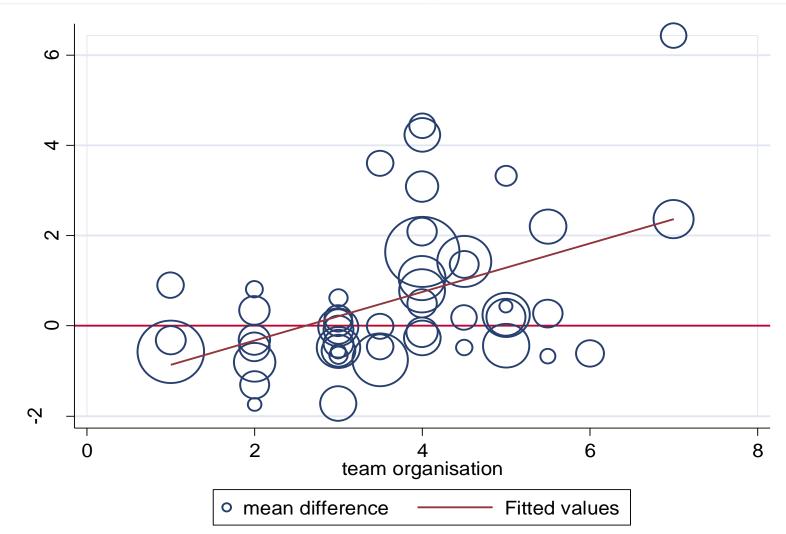
Impact of model fidelity (ACT)

Measured using IFACT scale: process staffing treatments

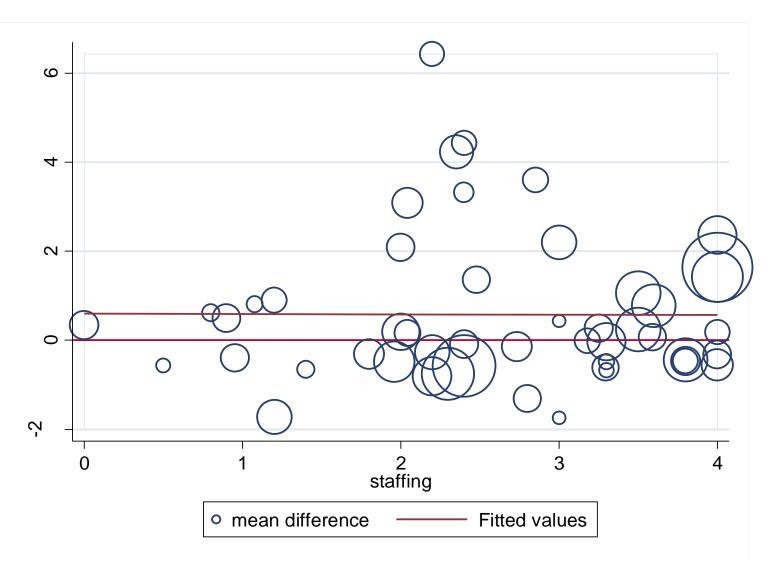
Meta-regression of Fidelity v Reduction in IP days



M-R of Team organisation v Reduction in IP days



M-R of Team staffing v Reduction in IP days



Testing for characteristics of home-based care using cluster analysis and regression

Soc Psychiatry Psychiatr Epidemiol (2004) 39: 789-796

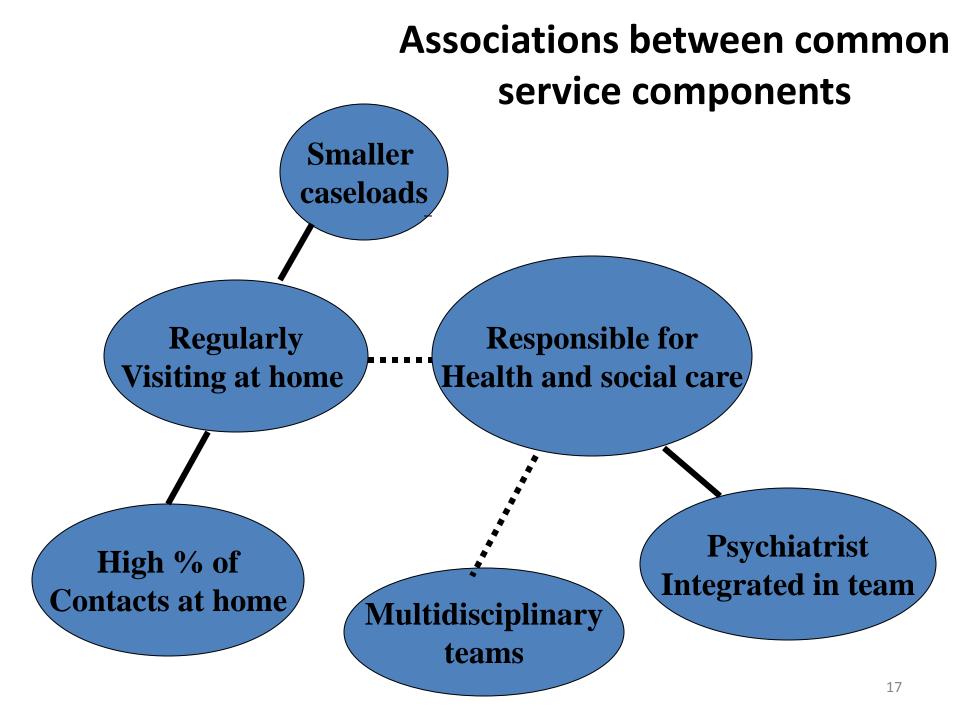
DOI 10.1007/s00127-004-0818-5

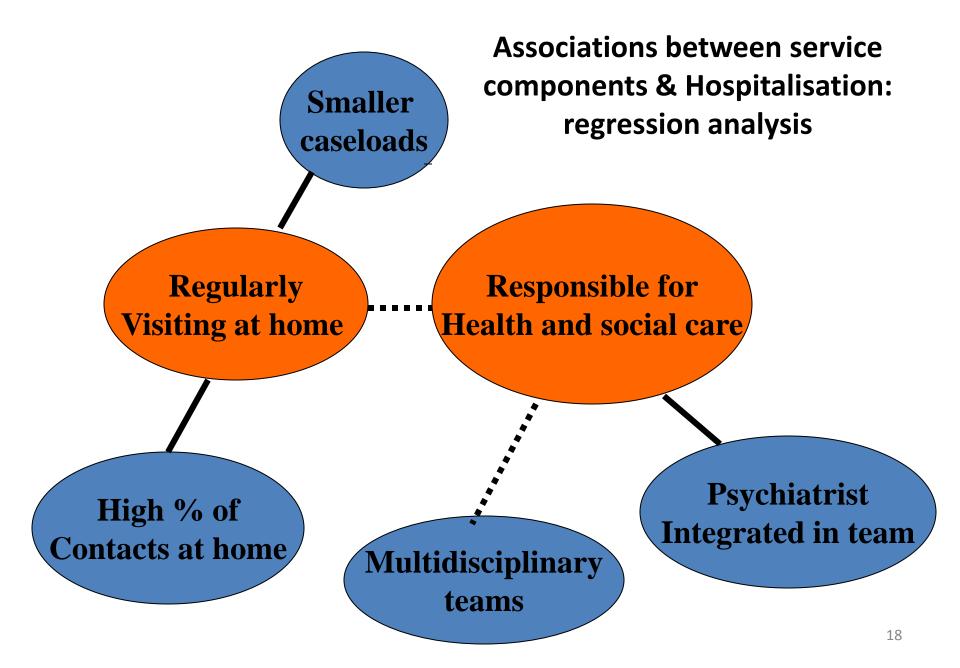
ORIGINAL PAPER

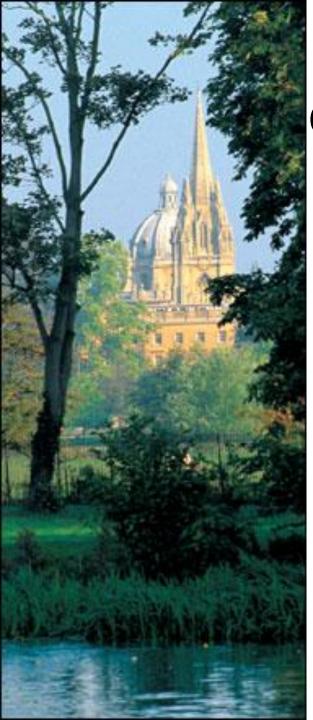
Christine Wright · Jocelyn Catty · Hilary Watt · Tom Burns

A systematic review of home treatment services Classification and sustainability

20 characteristics of home-based care Experimental services only 60 of 90 replied, international response







Conclusion: Effective ingredients

Home visiting

- Integrated psychiatrist
- Combined health and social care
- Multidisciplinarity
- Small caseloads (1:20)
- Team organisation: not specifics of staffing

What have we learnt about research methodology?

1 – Describe control services properly

- Journals should require adequate descriptions of control services in community psychiatry trials
- We should require this too before reading them
- Burns T, Priebe S. Mental health care systems and their characteristics: a proposal. Acta Psychiatrica Scandinavica 1996 December;94(6):381-5.

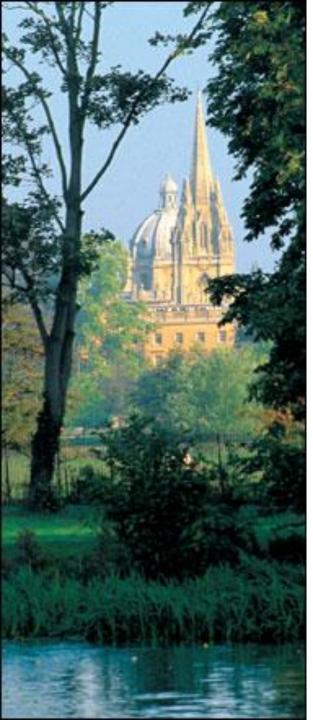


2 –Treat both experimental and control services equally in interpretation

- RCTs require equipoise to initiate them
- Outcomes should be interpreted equally
 - Where control has same outcome but significantly 'cheaper' then it is superior
 - CMHTs persistently deliver equally to ACT therefore
 ACT has inferior cost-effectiveness

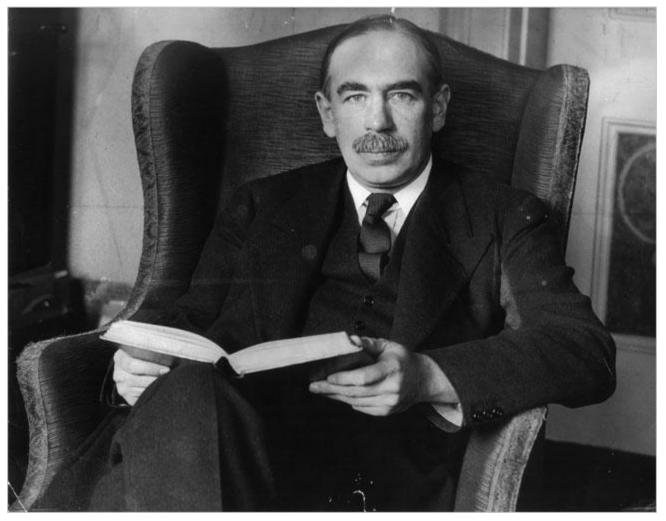


End of the road for Treatment as Usual studies? (2009) BJPsych, 194, in press



Conclusions 3 Research methodology

- Community Psychiatry research needs intense attention to methodology
- Greater rigour, not flexibility, is called for in complex and *'fuzzy'* interventions
- Do not change essentials or test it! (CBT)
- There is no placebo control service in CP, only an active comparator service
- International results must be tested for local context
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"When the facts change, I change my opinion. What, sir, do you do?"

John Maynard Keynes, economist

Good news and bad news

- The bad news
 - Most of that effort ensuring model fidelity was unnecessary
 - Community care models do not ensure enduring bed reductions
- The good news
 - We know better what works
 - We can get the same good results as ACT without
 - Very small case loads
 - 24 hour services
 - Highly prescriptive staffing
 - High quality assertive outreach available for more patients

Thank you for listening And greetings from Oxford

THE REF. WIT THE

