Assertive Community Treatment in England
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Assertive Community Treatment

- Most intensive form of mental health case management
- Focus on home based treatment and engagement to reduce need for admission
- Evolved from Training in Community Living Project, Madison, Wisconsin, US (Stein &Test (1980), *Arch Gen Psych*, 37: 392-397)
- Replicated in Sydney, Australia (Hoult, J. (1986), *BJPsych*, 149: 137-144)

Dartmouth ACT Scale (DACTS)

Teague et al., 1998, *Am J Orthopsych*, 68: 216-232

- Maximum case load 10-12 per full-time worker
- Full multidisciplinary team (including vocational expert, substance misuse expert, expert by experience)
- Team manager has caseload
- Extended hours (24 hours)
- 'In vivo' contact (2 hours per week, >5 contacts per week)
- 'Assertive' engagement
- No drop-out policy – time unlimited (<5% d/c per year)
- Team based approach
- Regular and frequent team meetings - daily plans
- Use skills of team rather than outside agencies
- Family/carer support and liaison
- Own beds, responsible for admissions/discharges
- Emphasis on social needs: accommodation, leisure, occupation
- Medication management

Intensive case management for severe mental illness

Cochrane Schizophrenia Group, Cochrane database of systematic reviews, 1; 2003 (Marshall and Lockwood)

- Systematic review of 75 RCTs of intensive case management (includes ACT) vs standard care
- 17 included in meta-analysis: 15 US, 1 Swedish, 1 UK

Intensive case management clients:

- less likely to be lost to follow up
- less likely to be admitted and shorter admissions
- improved social outcomes: employment, accommodation stability
- greater satisfaction with service
- no greater chance of adverse events
- no difference in symptoms or social function

Cochrane conclusions

‘ACT is clinically effective approach to managing the care of severely mentally ill people in the community. If targeted correctly on high users of inpatient care it can reduce the cost of hospital care whilst improving outcome and patient satisfaction. Policy makers should support the setting up of ACT teams.’

Mental health policy in UK

- National Service Framework for Mental Health (DH, 1999)

  By 2003:

  - 220 Assertive outreach teams (ACT teams)
  - 335 Crisis resolution teams
  - 50 Early intervention services
- By 2005:
  - 263 AOTs (< 3,000 staff), 168 crisis teams, 41 early intervention services
  - DH guidance on implementation of ACTs varied from original model:
    - Not 24 hour service
    - No specialist vocational, substance misuse or service user on team

Evidence re. intensive case management in UK

- Intensive case management for severe mental illness (Holloway & Carson (1998), *BJPsych*, 172: 19-22)
- PRiSM Study (Thornicroft et al. (1998) *BJPsych*, 173: 363-427)
- UK700 Study (Burns et al. (1999), Lancet, 353: 2185-2189)
- Heavy users of acute psychiatric beds: RCT of enhanced community management (Harrison-Read et al. (2002), *Psychol Med*, 32: 403-416)

Intensive case management clients:

- ➢ Increased contact/engagement
- ➢ Greater satisfaction with service
- ➢ No differences in admissions
- ➢ No differences in other clinical or social outcomes
- ➢ Cost more or no difference in cost effectiveness

Problems with UK evidence

- No trial of high fidelity ACT
- UK 700 was not trial of ACT but of small case loads
- PRiSM was not RCT - two groups differed at baseline and not aimed at ‘difficult to engage’ clients
- Good standard care from CMHTs in UK so control group different to US, particularly when considering older trials

Marshall, M., Bond, G., Stein, L., Shepherd, G., McGrew, J., Hoult, J. Test, M., Huxley P. *et al.* PRiSM Psychosis Study: Design limitations, questionable conclusions. *BJPsych*, 1999, 175, 501-503

REACT: A Randomised Evaluation of ACT in North London.

Killaspy H, Bebbington P, Blizard R et al., *BMJ*, 2006, 332: 815-819

- RCT of high fidelity ACT vs. usual CMHT care
- 2 ACT teams, 13 CMHTs Camden and Islington
- 1999 to 2004
- 251 participants – severe mental health problems, high users of inpatient care, difficult to engage
- Outcomes at 18 months: clinical and cost-effectiveness
- Primary outcome data on all

- 59% male,
- Mean age 39 years
- 89% unemployed
- 46% black and minority ethnic groups
- 83% schizophrenia/schizoaffective
- 25% substance misuse problems
- Mean illness length 10 years
- Mean 8 previous admissions
- Mean length of stay 70 days
- 46% recruited as inpatients
- 21% homeless and 28% significantly violent last 2 years
- 21% prison (ever)
- 39% - deliberate self harm (ever)

- **No differences in characteristics, symptoms, needs or functioning between ACT and CMHT clients at recruitment**

REACT study results

- No differences between ACT and CMHT participants at 18 months follow-up on any measure of inpatient service use, symptoms, social function, needs, quality of life, substance misuse, adverse events, medication adherence
- ACT participants had 3x more face to face contacts with staff than CMHT participants
- ACT participants better engaged, less likely to be lost to follow-up and more satisfied with service

REACT study: 3 year outcomes.

Killaspy, Kingett, Bebbington *et al*. *BJPsych,* 2009, 195: 81-82

- No differences in inpatient service use for ACT and CMHT clients (total bed days, any admission, number, length, involuntary admissions)
- No difference in adverse events (violence, arson, deliberate self-harm, homelessness)
- No difference in use of supported accommodation
- ACT clients less likely to be lost to follow-up
  (3/95 ACT vs 11/89 CMHT, $\chi 2 = 5.53$, $p = 0.019$)
- ACT clients had 2x more face to face contacts with staff than CMHT clients

REACT study 10 year outcomes

Killaspy, Mas, Marston, King. *BMCPsych*, 2013, 14:296

- Inpatient service use: linear regression with GEE of total inpatient days in 10 years since REACT randomisation:

	Coefficient	Bootstrap SE	95% CI	p
Randomised to ACT	-34.61	51.16	(-179.30, 110.09)	0.639
Stayed with or transferred to ACT	223.01	71.38	(83.10, 362.92)	0.002
Inpatient days prior to randomisation	0.19	0.072	(0.05, 0.33)	0.009

- No association between ACT and better social outcomes (employment, training course, leisure activities, family contact)
- Those randomised to ACT originally were more likely to remain in ACT or be in forensic care at 10 years than those allocated to CMHT care originally (OR 2.89, 95% CI 1.49 to 5.60, p = 0.002).
- Those who were on a Community Treatment Order (CTO) at 10 year follow-up were more likely to be under ACT or forensic care at this point than those who were not on a CTO (OR 6.39, 95% CI 2.98 to 13.70, p<0.001).

Impact of National Service Framework for Mental Health on psychiatric admission rates in England.

Glover et al., *BJPsych*, 2006, 189: 441-445

- National Mental Health Service Mapping Exercise and NHS routine admission database
- From 1998 to 2004 admissions reduced across country by 11%
- Areas with crisis resolution teams had greater reductions in admissions than areas without
- Areas with ACTs showed no additional reduction in admissions

Why is ACT not more effective than standard CMHT care in England?

- Overlap in the content of care i.e. key components of ACT delivered by both ACT teams and CMHTs?
- ACT teams not operating with high fidelity i.e. inadequate implementation of key ACT components?
- Although effective at engaging 'difficult to engage' clients, are ACT teams failing to delivery evidence based interventions?
- Service context

Key components of ACT

Catty et al. Home treatment for mental health problems. *Psychol Med*, 2002, **32**:383-401.

91 RCTs and non-RCTs of home treatment (59 US, 25 in Europe, 14 in UK)

- **integrated health and social care**
- high proportion of **home based ("in vivo") treatment**

Burns et al. Intensive case management and hospitalisation – explaining the inconsistent findings. A Systematic Review and Meta- Regression. *BMJ,* 2007, **335:**336-40.

64 RCTs (7,819 patients):

- **Community based**
- **Manager has case load**
- **Team has full clinical responsibility**
- **Meet daily**
- **Shared caseload**
- **Time unlimited service**
- **Extended hours**

Overlap in delivery of key components of ACT by ACT teams and CMHTs in the REACT study

Similarities

- Integrated health and social care staff
- Community based
- Manager with case load
- Full clinical responsibility
- In vivo work

Differences

- Meeting daily
- Shared caseload
- Time unlimited service
- Extended hours (but CMHTs and ACT teams could access crisis teams 24 hours)

Inadequate implementation of ACT in England?

2003: Pan London ACT survey (Wright *et al.* (2003), *BJPsych*, 183: 132-138)

- 3/24 (12%) scored as high model fidelity on DACTS
- 10/24 (41%) teams had no psychiatrist and no beds
- 80% contacts in office hours
- 64% contacts "in vivo"

2003: National ACT survey (Wright *et al.*)

- 26/222 (12%) ACT teams scored as high model fidelity on DACTS
- 50% had no psychiatrist and no beds
- 60% had OT, very few teams had psychologist
- Many missing key components (extended hours, daily meetings, team approach)

2007: National ACT postal survey (Ghosh and Killaspy, *J Ment Health*, 2010)

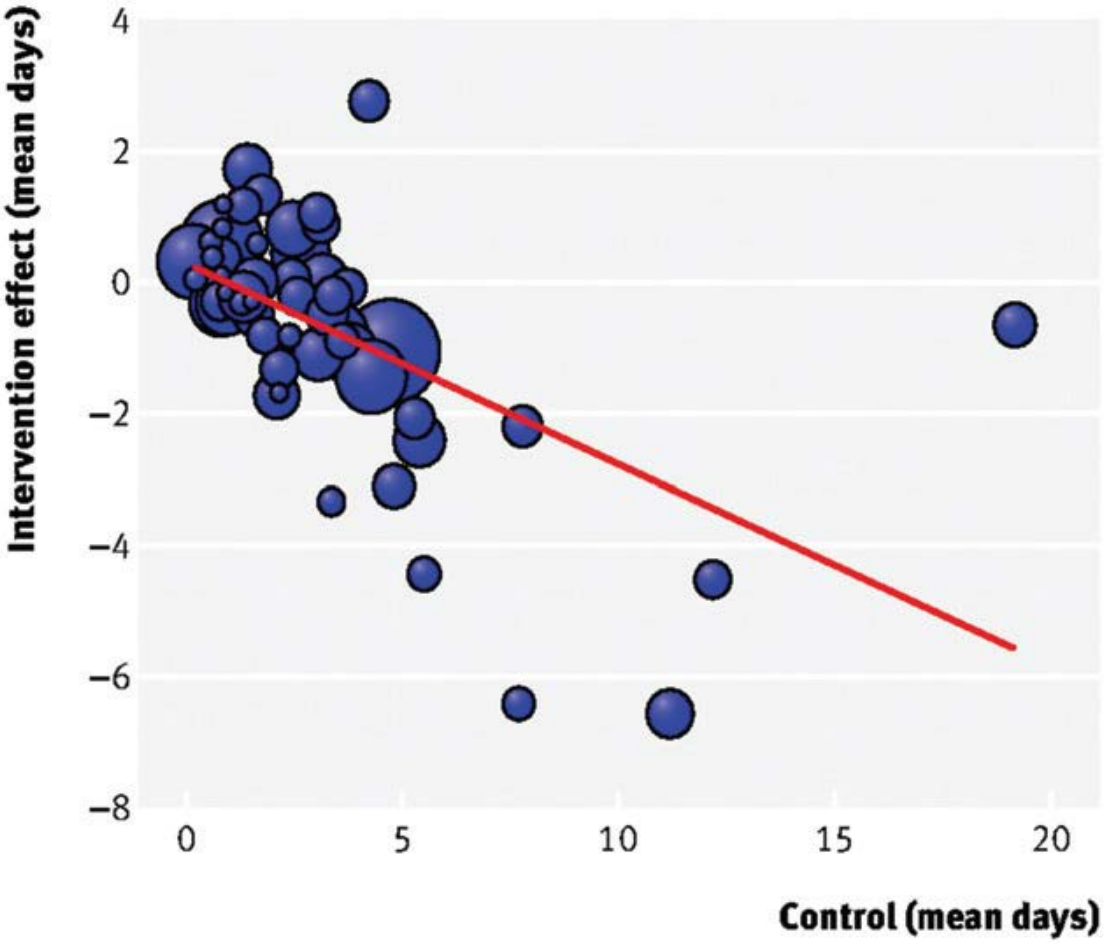
- 187 teams (104 responded)
- 36% had no psychiatrist and 82% had no beds
- 52% had psychologist, 66% had OT
- Almost all saw their primary goal as client engagement

Service context

- Areas with greater levels of inpatient resource and less developed standard community services show more benefits from ACT
- Inpatient mental health services in inner cities in the UK operate at a very high admission threshold and interventions aimed at reducing admissions are therefore unlikely to succeed

(Burns, T. *BJPsych,* 2009, 195, 5-6).

Control mean days per month in hospital versus reduction in hospitalization. Burns et al. (2007).

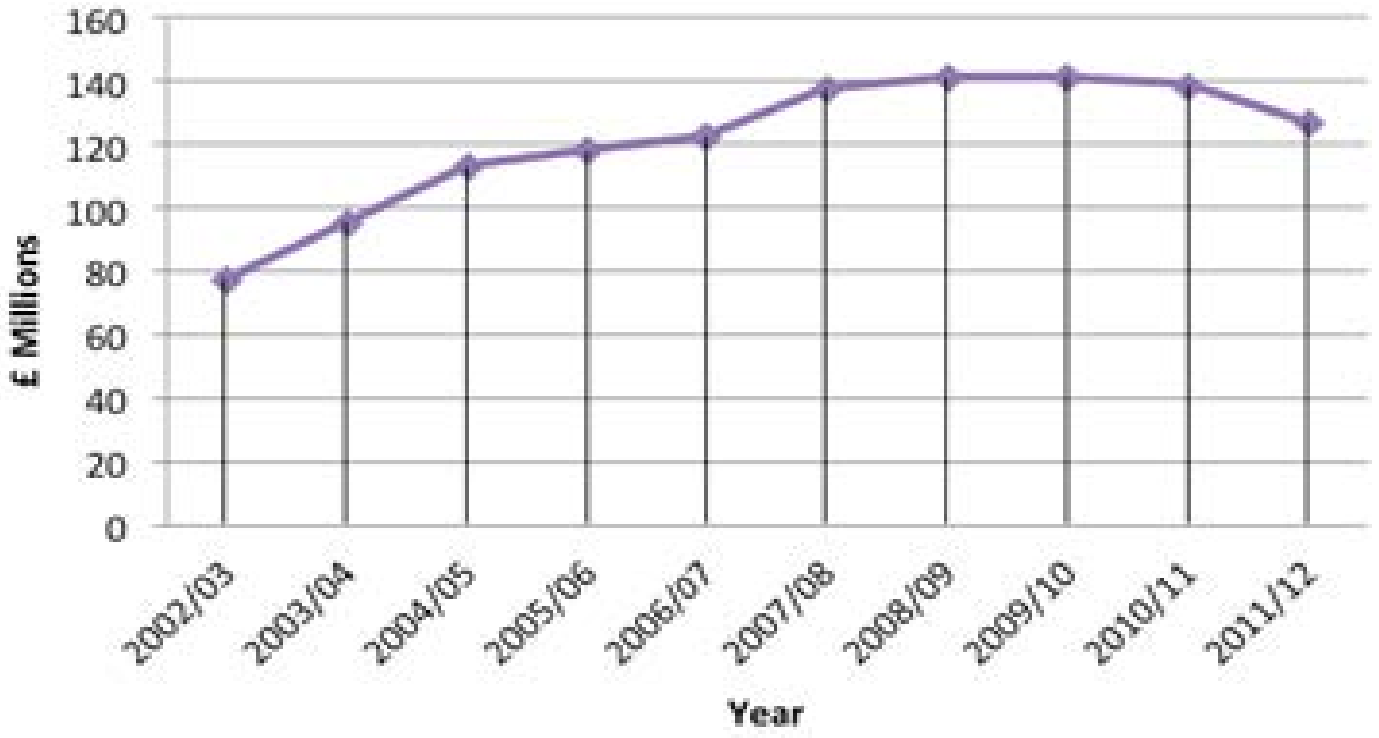


Updated Cochrane review: Intensive Case Management (ICM) for severe mental illness (Dieterich et al., 2010)

- 38 trials, max follow-up 36 months
- 24 compared ICM (caseload < 20) and “standard care” (outpatient clinics)
- 14 compared ICM vs non-ICM
- Larger range of countries than previous Cochrane review
- ICM vs standard care: ICM associated with
  - shorter length of hospitalisations
  - greater satisfaction with care
  - less likely to drop-out of contact with services
  - greater housing stability
- ICM vs non-ICM: ICM associated with
  - less likely to drop-out of contact with services
- Meta-regression: reduced length of hospitalisation associated with:
  - **greater ACT model fidelity**
  - **higher use of hospitalisation in local population**

Investment in ACT in England

(Mental Health Strategies, 2012)



Current situation in UK

- Many ACTs closed or merged with CMHTs
- Loss of key components of ACT which engage and improve client satisfaction and support staff (intensive and flexible approach, not time limited, in vivo, team based approach, extended hours)
- Split between inpatient and community mental health services means many services no longer have full clinical responsibility
- Some teams are adopting hybrid models e.g Functional ACT (Drukker et al., *BMC Psych,* 2008, 8:932008)
- Ray of hope –
  - Tariff based mental health care recognises 'difficult to engage' clients
  - Ongoing investment in Early Intervention Services, which use an ACT approach (though not high fidelity)
  - Resurgence in community mental health rehabilitation teams – increased from 15% of NHS Trusts to 56% in last 10 years


Thank you for your attention