Measuring fidelity and improving quality in crisis teams:
A report from the CORE Study

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www.core-study.ucl.ac.uk

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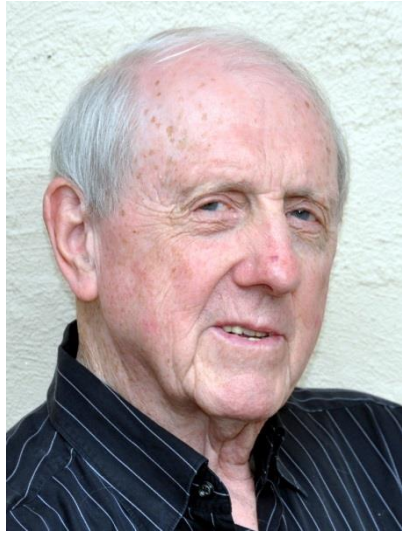
Plan

- Why a need for quality improvement?
- Why a fidelity scale approach?
- The CORE study at UCL
- Evidence on ingredients of good practice
- Development of the CORE fidelity scale
- Trial of a resource pack for improving fidelity in crisis teams.

What was the pioneering vision for crisis teams?

- Pioneers with variety of rationales
- Some common themes:

- Avoiding hospital: expensive, stigmatised and unpopular, better to be able to invest resources elsewhere
- Therapeutic relationships may be stronger and more equal on patients' home ground
- Social networks can be mobilised more effectively
- Working in community makes social triggers to crisis more visible
- More likely to acquire sustainable coping skills



Crisis resolution and home treatment teams: essential features of the original model

Intended to:

Operate 24 hours

Focus only on people at risk of admission

Gatekeep all acute admissions aged 18-65: no one admitted without their agreement

Use assertive engagement strategies to prevent admission

Visit intensively for limited period: 3-4 weeks

Deliver range of medical, psychological, social interventions to resolve crisis

Strong focus on network – systems meetings to address social triggers, mobilise network (Open Dialogue features?)

Advice from John Hoult: CRT pioneer

- **Make 3 phone calls**

(To key involved others before initial assessment: information gathering and early engagement with social systems)

- **Meet “survival needs”**

(CRTs must address someone’s immediate, urgent concerns before expecting engagement with/benefit from treatment. A first CRT visit may involve: buying food, fixing the door lock, unblocking the sink etc)

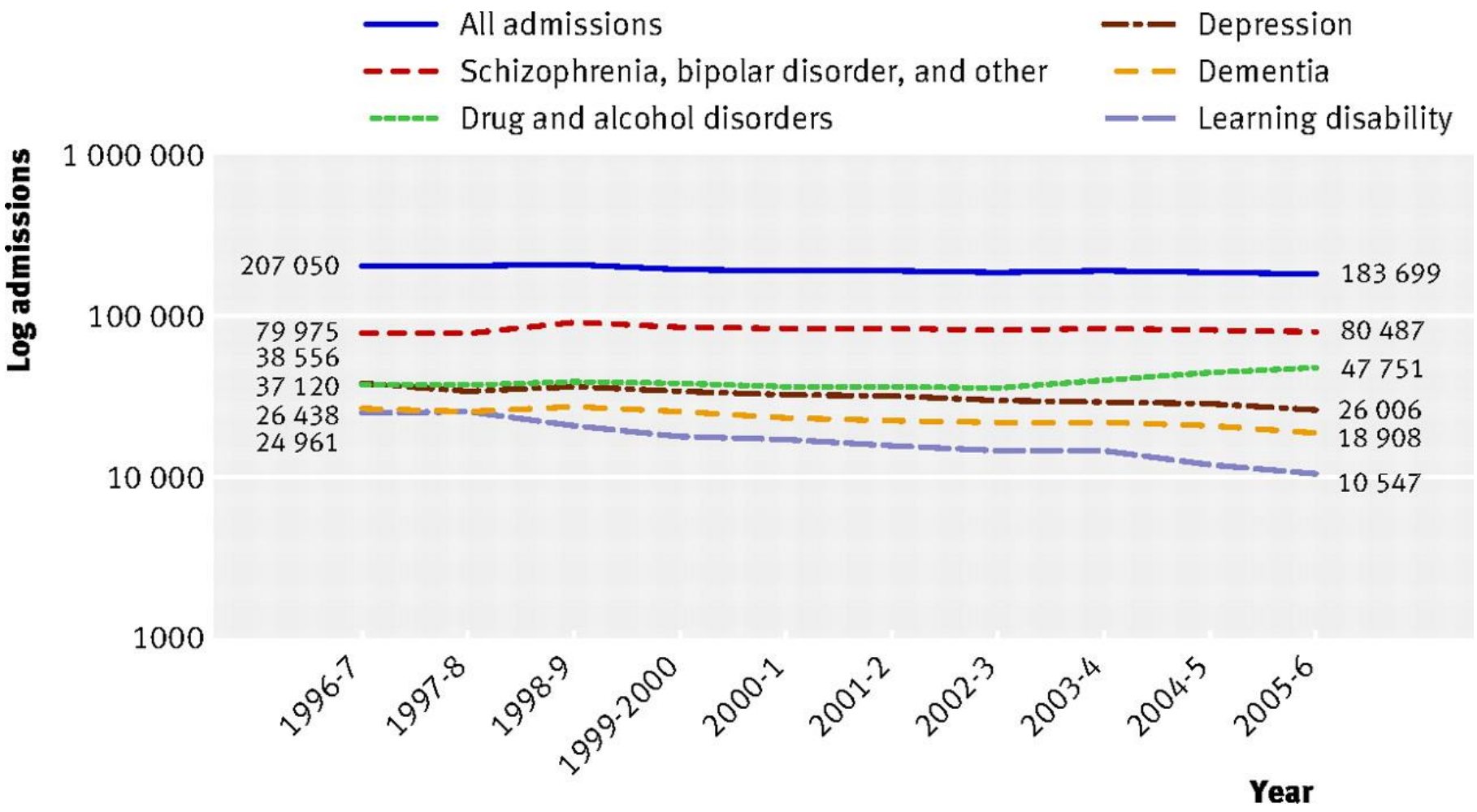
CRTs – achievements and cause for concern

A nationwide shift in resources, staff, treatment focus Research – fall in admissions, good satisfaction achievable (e.g. in trials)

BUT some cause for concern:

- Uncertainty as to whether fall in admissions uniformly achieved (NB current bed crisis)
- Compulsory admissions still rising
- Significant service user and carer dissatisfaction e.g. MIND Acute Care report, #crisisteamfail
- Is risk management adequate? Average of 150 suicides per year for CRT patients: now higher than for inpatient wards (Hunt et al. 2014)
- High readmission rates? Approx 50% in 1 year in Candi

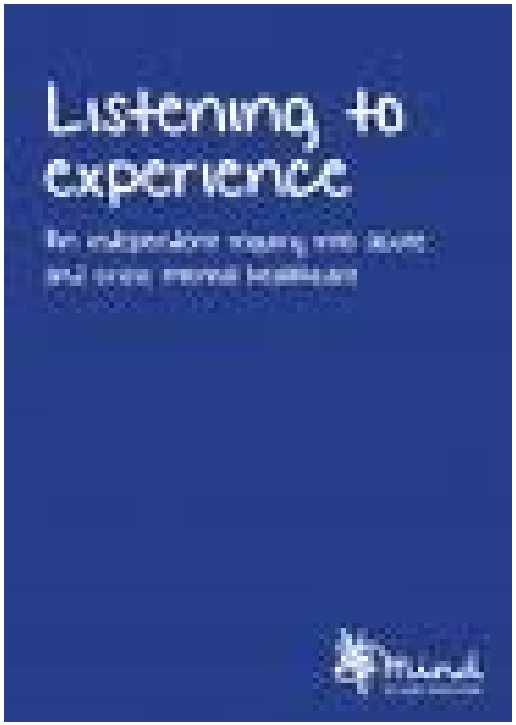
Changes in admission rates (on logarithmic scale) to NHS hospitals for different diagnostic groups of mental disorders, 1996-2006.



Keown P et al. BMJ 2008;337:bmj.a1837

While there were some very positive experiences of CRHTs, there were also major frustrations and problems to do with the capacity of teams, their responsiveness, the effectiveness of their help and their role in gatekeeping acute hospital admissions. To some extent problems were attributed to understaffing, but the threshold at which they accept people into their own or hospital care is another critical factor.

Many of the problems we heard about arise from the working practices, culture and dynamics of crisis and inpatient teams. Lack of humanity, depersonalised care, treating the illness or managing the crisis rather than supporting or healing the individual, and emphasising risk rather than needs, were all themes that arose.



CRT optimisation: a policy priority

- NHS England ***Crisis Care Concordat***
- CQC: ***Right Here Right Now***
- MIND ***Acute Care Campaign***

The CORE Programme

- A 5-year research programme : 2011 - 2016
- Funded by a DH NIHR Programme Grant
- Managed by Camden and Islington NHS FT/UCL

Aims:

- **Develop evidence about how to optimise CRTs**
- **Test a service improvement programme for CRTs**

(Other workstream – trial of peer supported self-management in CRTs)

The CORE Team

Study Lead: Sonia Johnson

Study manager: Bryn Lloyd-Evans.

Deputy manager: Danni Lamb

Co-applicants and site leads: David Osborn, Fiona Nolan, Wendy Wallace, Steve Pilling, Nicola Morant, Steve Onyett, Gareth Ambler, Louise Marston, Rachael Hunter, Oliver Mason, Claire Henderson, Alison Faulkner, Tim Weaver, Richard Gray, Sarah Sullivan, Nicky Goater

Researchers and volunteers:

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Past: Hannah Istead, Sarah Fahmy, Emma Burgess, Alasdair Churchard, Claire Wheeler, Johanna Frerichs, Caroline Fitzgerald, Tom Mundy, Monica Leverton, Elaine Johnstone, Beth Paterson, Becky Forsyth

CORE Study: overview

1
- Develop a model of best CRT practice
- Evidence review, national survey, stakeholder interviews

2
- Develop a “fidelity scale” to assess teams’ model adherence
- Assess UK CRT fidelity in a 75-team survey
- Gather best practice examples and resources from CRTs

3
- Develop quality improvement resources for CRTs
- Test CRT “Resource Pack” in a 25-team cluster randomised trial

Stage 1: Identifying critical ingredients of CRTs (2011-13)

- A systematic literature review (Wheeler et al. 2015)

Quantitative studies n=25; qualitative studies n=24; guidelines n=20

- A national survey of CRTs (Lloyd-Evans et al. submitted)

Questionnaire to all CRT managers in England regarding CRT service delivery and organisation + what supports effective CRT care (n=188 – 88% response rate)

- Interviews with CRT stakeholders (Morant et al. in preparation)

Interviews with service users n=41; carers n=20, mental health staff, managers and commissioners (26 focus groups and 9 individual interviews) CRT developers n=11

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Research article

Open Access

Implementation of the Crisis Resolution Team model in adult mental health settings: a systematic review

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The electronic version of this article is the complete one and can be found online at: http://www.biomedcentral.com/1471-244X/15/74

Systematic review – critical ingredients of crisis teams

Not much evidence overall

- Quantitative studies: suggest gatekeeping, extended hours & medical cover are important to effectiveness in reducing admissions
- Qualitative studies: stakeholders value integration/continuity with other services, time to talk, not seeing too many people, rapid access and accessibility.

National survey of CRT managers

Many gaps between reality and intended model:

- 39% full 24 hour service
- 54% no upper age limit
- 30% present in person at all MHA assessments
- 33% psychologist in team
- 49% would help with shopping

Stakeholder qualitative interviews in 10 Trusts (1)

Service users & carers emphasised the importance of:

- Rapid, easy access to CRTs
- Kind staff with “time to talk”
- Opportunities to build relationships
- Continuity of care and clear information
- Choice about types of treatment
- Involving the family
- Regularity of contacts, reliability in keeping appointments

Only a small minority report wholly negative experiences, but many are mixed.

Stakeholder interviews in 10 Trusts (2)

Mental health staff also advocated:

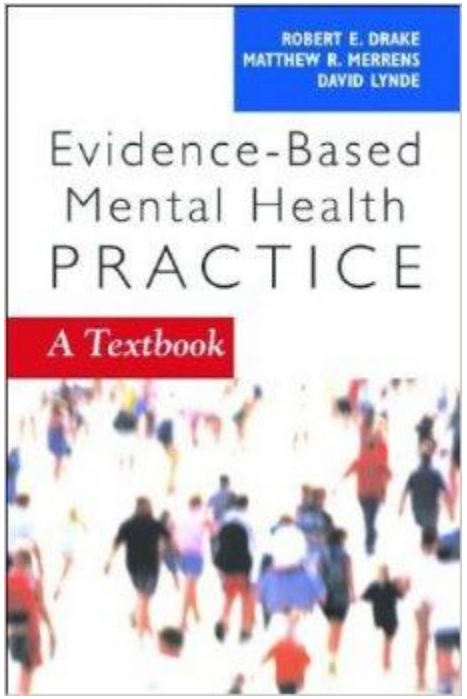
- CRT role clarity and clear care pathways
- Pressures when other services in pathways not available/functioning
- Good working relationships with: inpatient services, Psychiatric Liaison, community teams

Resource constraints (time and skills) sometimes limited:

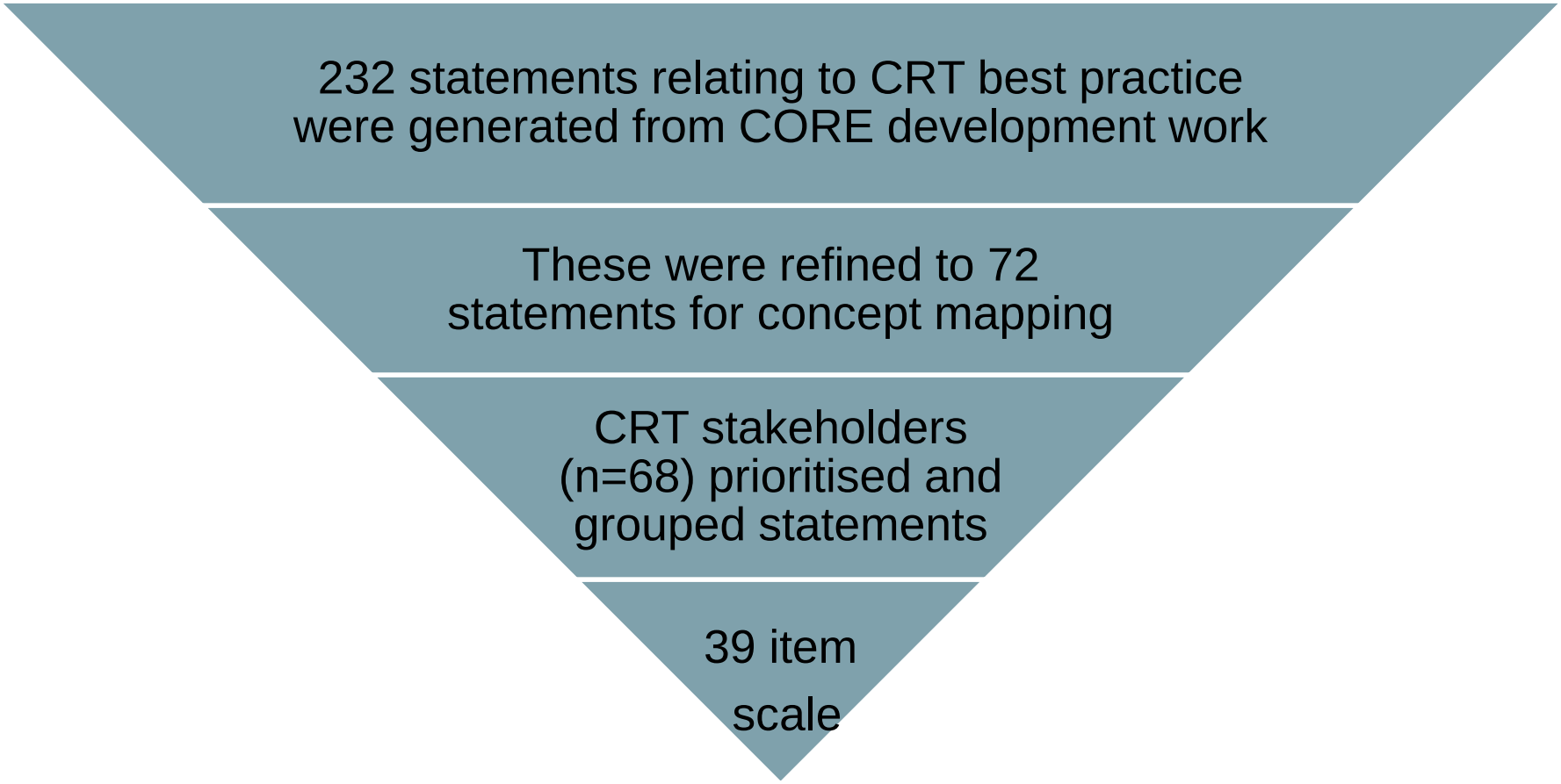
- Establishing relationships, continuity
- Working with families
- Thinking beyond the immediate crisis (relapse prevention)
- Duration of visits

The fidelity scale approach to implementation and quality improvement

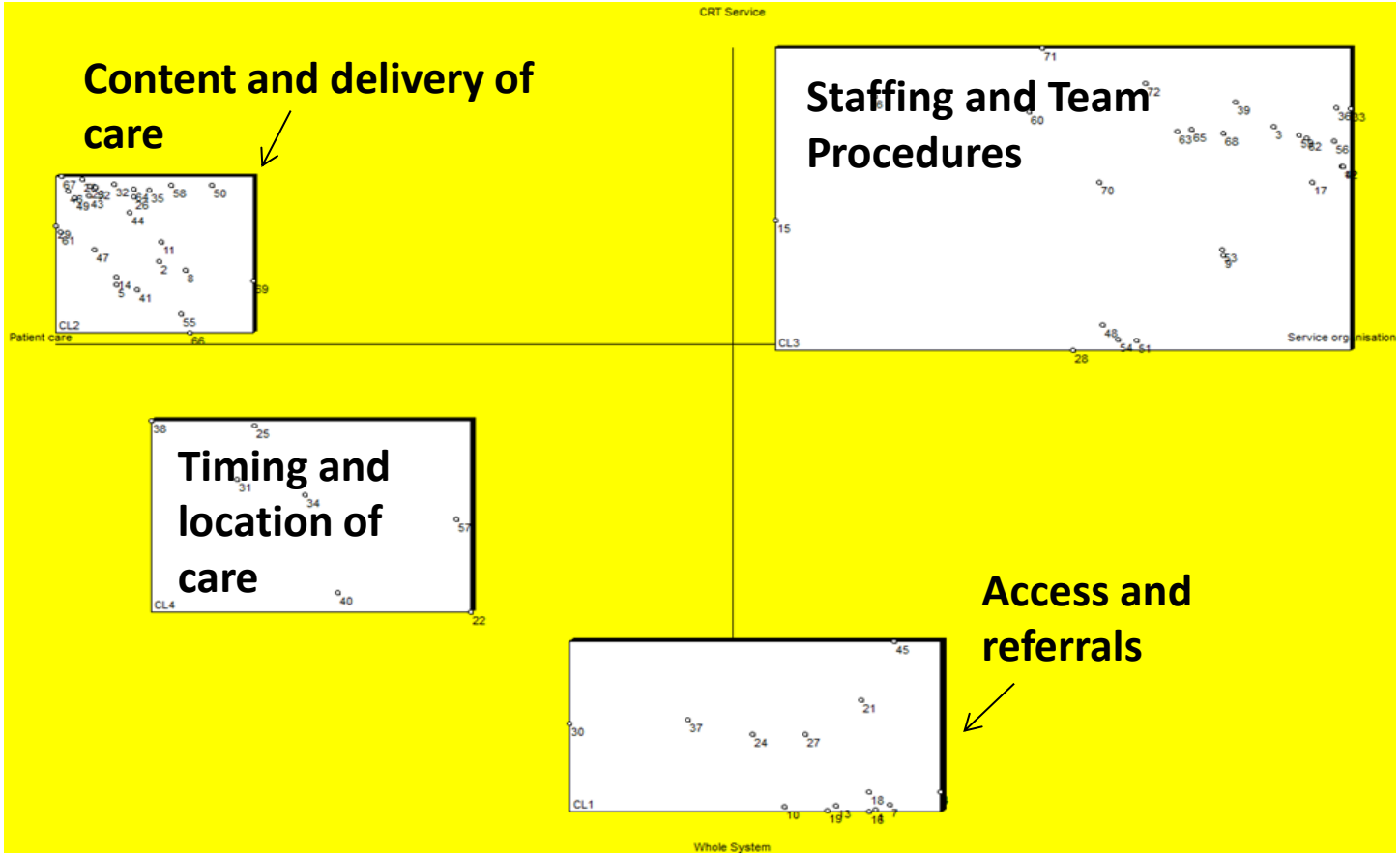
- Rooted in Evidence Based Practice program in USA
- Fidelity scales measure adherence to a model of good practice, developed from evidence, stakeholder views
- Developed for a range of models – supported employment, ACT, family intervention etc.
- Without specific monitoring, fidelity scores generally low
- Fidelity scores are sensitive to change, rise with multi-component interventions
- Relationship with outcomes demonstrated for some fidelity measures e.g. supported employment



Developing a CRT Fidelity Scale: the concept mapping process



CORE CRT Concept Map



The CORE CRT Fidelity Scale

- 39-item fidelity scale developed from concept mapping
- Each item scored 1-5
- Score of 5 = excellent fidelity; 4 = good fidelity
- Scoring criteria developed with reference to CORE development work
- Total score possible range: 39-195

- Initial piloting in 4 CRT teams

Camden and Islington NHS
NHS Foundation Trust

UCL

core Crisis Resolution Team Fidelity Scale Version 2

core
Crisis Resolution Team Optimisation and Relapse Prevention

Example fidelity item
1. Rapid response

- a) The CRT records and monitors response times to referrals and reviews breaches of response targets
- b) The CRT responds to the referrer within 30 minutes
- c) The CRT offers an assessment with the service user which takes place within 4 hours for at least 90% of appropriate referrals
- d) The CRT offers a same-day assessment for at least 50% of appropriate referrals made before 6pm
- e) The CRT offers a same-day assessment for at least 90% of appropriate referrals made before 6pm
- f) The CRT provides an immediate mobile response to requests for assessment from emergency services

Item 1

Evidence sources: C = case notes review; P = paperwork review; M = manager interview, S = staff interview; SU = service user interviews; FF = Family/carer interviews; O = interviews with staff from other mental health services

Item	Evidence	Scoring criteria	met /unmet
1. The CRT responds quickly to new referrals	P, M	a) The CRT records and monitors response times to referrals and reviews breaches of response targets	
	M, S, O (P)	b) The CRT responds to the referrer within 30 minutes	
	M, S, O (P)	c) The CRT offers an assessment with the service user which takes place within 4 hours for at least 90% of appropriate referrals	
	M, S, O (P)	d) The CRT offers a same-day assessment for at least 50% of appropriate referrals made before 6pm	
	M, S, O (P)	e) The CRT offers a same-day assessment for at least 90% of appropriate referrals made before 6pm	
	M, S, O (P)	f) The CRT provides an immediate mobile response to requests for assessment from emergency services	
Scoring		Score 5 if: 6 criteria are met Score 4 if: 5 criteria are met Score 3 if: 4 criteria are met Score 2 if: 3 criteria are met Score 1 if: 2 or fewer criteria are met	**Item score**

Item definitions and scoring guidance

Criterion A: Score as met if the CRT provides a log of the time period between receiving a referral and providing a face-to-face assessment and the CRT manager clearly describes processes used to review breaches of response times.

Criterion B: requires all-source agreement from the CRT manager, staff and managers of other services that the CRT always answers phone calls from referrers in person, or routinely responds to the referrer within 30 minutes (no more than one breach per month)

Criteria B-E: Do not include early discharge clients for % meeting response times: an immediate response is less crucial for inpatient referrals

If no log of response times, all source agreement from CRT manager, staff and other community staff is required to assess criteria as met regarding response time to referrers and time to assessment

Criterion F: requires all-source agreement from CRT staff and manager and other service managers that the CRT will go urgently to assess someone at a police station, their home or in public if requested by emergency services (e.g. police or ambulance crews) + evidence from the CRT team of at least one example of this happening within the last month

The fidelity review process

- A one-day audit
- 3-person reviewing team (including a practitioner and a service user or carer)
- Interviews with: CRT manager, staff team, managers of other services, service users, carers
- Review of case notes, service records and policies

- A written report with scores and feedback for each item provided to the CRT following a review

The CORE CRT fidelity survey

- 1-day fidelity reviews were conducted in 75 CRTs in 2013/14

- Range of total scores: 73-151 (min=39; max=195)

(average rating 1.8 – 3.8)

- Median total score: 122 (IQR 111-132) – average of 3.1
- 33 item scores ranged 1-5
- 6 item scores ranged 1-4 or 2-5

CRT Fidelity compared to DH guidelines

DH guidelines 2001	Fidelity review results
Time-limited intervention	Item 10 – 87% of teams scored 3 or higher
Multi-disciplinary team	Item 27 – 84% of teams scored 3 or higher
24/7 service	Item 5 – 75% of teams scored 3 or higher
Working with families	Item 13 – 56% of teams scored 3 or higher
Rapid response	Item 1 – 35% of teams scored 3 or higher
Intensive support	Item 38 – 24% of teams scored 3 or higher
Preventing future crises	Item 24 – 3% of teams scored 3 or higher

Conclusions from the CRT Fidelity Survey

- 75 CRT teams agreed to a voluntary audit!
- Perceived need for CRT service improvement?

- All teams are doing some things well: many examples of good practice
- Few teams are putting the whole package together (no teams with mean score of 4+ per item)

- Opportunities for learning from crises and bolstering support from social systems are not always maximised

Phase 3: The CORE Resource Pack Trial

A 1-year service improvement programme in CRTs has been developed, involving:

- Access to the CORE online resources
- 0.1 fte support from a ***CRT Facilitator*** to support the team manager
- Implementation plans informed by the US EBP program, including:
  - A team scoping day
  - A service improvement group and plans
  - Sharing learning/successes between teams

Phase 3: The CORE Resource Pack

An online resource for CRTs including:

- Resources and examples of CRT good practice from the 75-team CRT Fidelity Survey

http://www.ucl.ac.uk/core-resource-pack

- Audio and video testimonies from CRT practitioners, service users and carers

- Links to other guidance and training resources

Core Resource Pack
- Home
- About the CORE study
- News
- How to use the Resource Pack
- Resources
- Fidelity scale

Tweets Follow

Martin Webber 22 Jan
@mgoat73
Places still available at @UoYMRC event on mental health crisis care on 28th Jan: york.ac.uk/spsw/news-and-...
Retweeted by UCL Core Study
Expand

UCL Core Study 21 Jan
@corestudyucl
An excellent line-up for UCL symposium on qualitative research includes Nicola Morant on @corestudyucl qual work

CORE Resource Pack

This website provides information and online resources to help teams taking part in the CORE study a improving the effectiveness of CRT services. We hope CRT managers and staff will explore the reso most relevant to their team's service improvement priorities.

About the CORE study

Find out more about the CORE study and the research team supporting this study.

News

Find out about what's happening in the teams involved in the stu

How to use the Resource Pack

Find out about how to use this site as a service improvement tool.

CORE CRT Resource Pack Trial: 2014-2016

- 25 CRTs are taking part in a cluster RCT
- 15 receive the Resource pack over 12 months; 10 controls
- Primary outcome: **service user satisfaction** with the CRT
- Secondary outcomes include: inpatient **admissions** and bed use; **readmissions** to acute care; **staff morale**

Experimental teams	Pre	Post	
London suburb	93	111	18
Inner London	*94*	*77*	*-17*
Home countries city	101	135	34
SW city	107	91	-16
SE coastal city	107	131	14
Home counties mixed	*108*	*134*	*26*
SW rural/mixed	116	95	-21
Inner London	119	124	5
SE mixed	120	131	11
SW rural/mixed	129	130	1
London suburb	130	124	-6
SE coastal town	130	148	18
Home counties mixed	134	155	21
SE coastal town	140	153	13
London suburb	144	126	-8

Control teams	Pre	Post	
London suburb	101	94	-7
Inner London	107	104	-3
Home counties mixed	112	109	-3
London suburb	113	99	-14
Home counties mixed	122	106	-16
SW rural/mixed	127	109	-18
SW rural/mixed	132	119	-13
SE coastal town	134	120	-14
SE mixed	141	127	-14
London suburb	146	144	-2

Results in italics are provisional.
Unblinded fidelity ratings pre- and post-resource pack intervention – preliminar findings.

Some key questions remaining:

- Is the CRT fidelity scale valid? [Do higher fidelity scores correspond to better service outcomes?]
- Can the CRT Resource Pack improve CRT fidelity and improve service outcomes?

CORE: linking research to policy and practice

CORE work has contributed to the Crisis Care Concordat, CQC and MIND Acute Care Campaign:

- Literature review findings
- Fidelity scale
- Benchmarking data from managers' survey and fidelity survey
- Case examples of good practice

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The views expressed are those of the author and not necessarily those of the NHS, the NIHR or the Department of Health.

Further information

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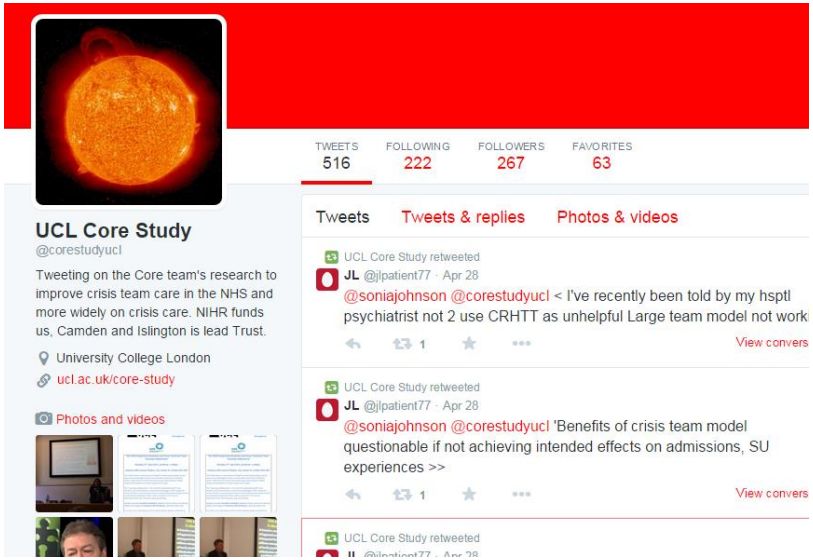

Study website: www.ucl.ac.uk/core-study
Resource pack: www.ucl.ac.uk/core-resource-pack

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