

# **Optimising team functioning, preventing relapse and enhancing recovery in crisis resolution teams: the CORE programme (CRT Optimisation and RElapse prevention)**

## **An audit of model fidelity in Crisis Resolution Teams.**

### **Protocol – Version 1, 10/01/2013**

#### **Background**

Crisis Resolution Teams (CRTs) – sometimes called home treatment or crisis assessment teams - provide rapid assessment in mental health crises and offer intensive home treatment as an alternative to acute admission if feasible<sup>1</sup>. The introduction of CRTs, mandated by the NHS Plan in 2000<sup>2</sup>, has been an extensive change in the UK national community mental health care system. In 2000, few areas had such teams. Now they are available in every Trust in the country and several thousand mental health professionals have migrated into them<sup>3</sup>. When CRTs first became national policy, their evidence base was criticised as scanty<sup>4,5</sup>. However, some positive findings have now been reported, suggesting CRTs reduce inpatient admissions<sup>6-10</sup> and healthcare costs<sup>11,12</sup> and increase service user satisfaction with acute care<sup>6,9</sup>.

Despite these indications of CRTs' potential effectiveness, considerable reservations have emerged about the model's delivery in routine settings, especially in two recent reports by the National Audit Office and Healthcare Commission<sup>13,14</sup>. Both ward managers and CRT leaders still view a significant minority of hospital admissions as unnecessary<sup>15</sup>. Impact on bed use appears to vary considerably between areas<sup>10,13</sup> and reductions in bed days tend to be less marked than those in admissions<sup>8,10</sup>. Service users and carers, whilst in the main positive about being able to receive care in their own homes, report important areas of dissatisfaction with CRTs<sup>13,16</sup>, especially regarding continuity of care, the quality of relationships with staff and a narrow range of support on offer focusing too exclusively on medication and short term symptom control. The CRT model is currently loosely specified, with only limited evidence available regarding critical ingredients and specific interventions associated with good outcomes<sup>17</sup>. A survey of CRTs in 2005/6<sup>18</sup> reported considerable variation in CRTs resources, organisation and service delivery. This was confirmed by a

recently completed service evaluation of all CRTs in England conducted in 2012 for an earlier phase of the CORE study.

The US National Evidence Based Practice Project<sup>19</sup> offers a model for evaluating complex service-level interventions and promoting quality improvement in mental health settings. Two key elements of the EBP approach are: service reviews using a fidelity measure which assesses how far services are achieving a model of good practice; and utilisation of an implementation resource kit consisting of guidance, training materials and coaching and support for service managers and staff, designed to help services address areas where high model fidelity has not been achieved. The EBP programme has successfully developed fidelity measures which have helped specify interventions, understand mechanisms affecting service outcomes and promote quality improvement for a range of service-level interventions including Supported Employment, Assertive Community Treatment and Integrated Treatment for patients with dual diagnoses<sup>20,21</sup>. CRTs are comparable with models in the EBP project in that we have some evidence for their efficacy in the right conditions, but a CRT fidelity measure has not been developed. We therefore lack an evidence-based and tested method of assessing and improving CRT model fidelity, so a key tool needed for widespread implementation of an optimal model are still lacking.

As part of the CORE Study, a research programme funded by the UK Department of Health through the National Institute for Health Research Programme Grants for Applied Research (RP-PG-0109-10078), we are developing a CRT fidelity measure, following development work including a review of research evidence and government and expert guidelines, interviews with all key CRT stakeholder groups and a survey of CRTs in England regarding service organisation and delivery. We aim to use the CRT fidelity measure to survey CRT model fidelity across CRT teams in England. This survey will provide immediate feedback to participating services about service performance and targets for quality improvement. It will also inform the development and evaluation of a CRT implementation resource kit to support model fidelity: ethical approval will be sought separately for an evaluation study of the resource kit at a later date.

The CORE Study Team is in close contact with The Home Treatment Accreditation Scheme (HTAS), a programme organised by the Centre for Quality Improvement at the Royal College of Psychiatrists. HTAS are currently developing a set of standards for Crisis Resolution Teams. The pilot version of these standards is publically available<sup>22</sup>. The final version is due in early 2013; HTAS plan to recruit CRT teams across England to participate in HTAS accreditation reviews, conducted as audit not research, in the latter half of 2013. The CORE

team aim to collaborate as much as possible with HTAS. We hope that most if not all CORE CRT fidelity reviews could be conducted alongside an HTAS review at participating services and a number of the CORE Research Team are training as HTAS reviewers, to be able to fulfil both roles. This would be an efficient way to complete the CORE reviews and would minimise the burden on participating services.

## **Aims**

In this stage of the CORE study, we aim to:

- 1) Investigate how far a large sample of CRTs in England adhere to a defined model of high quality crisis care model fidelity
- 2) Provide reports for participating services highlighting their overall fidelity score, areas of current good practice, and areas where high model fidelity is not being achieved
- 3) Use the survey results to explore the psychometric properties of the CRT fidelity measure, including feasibility and acceptability, inter-rater reliability, face validity to participating service staff, discriminant validity and its internal structure

## **Methods**

### **Setting and sample**

We will conduct a fidelity review in up to 75 CRTs, geographically accessible to the CORE research team (based in London and Bristol) and located where possible within four Mental Health Research Network Hubs (North London, South London and South East England, the Heart of England and West of England). We will also review up to 10 other community mental health services commonly part of local mental health service systems (e.g. Community Mental Health Teams, Assertive Outreach Teams, Early Intervention Services): this will allow us to explore how other service types score on the measure and thus how sensitively it can discriminate CRTs from other service types.

### **Measures**

We will use the CRT fidelity scale developed for the CORE Study to review participating services. Our measure will follow the established format of EBP Programme fidelity measures – i.e. consisting of 12-20 items, each rated on a scale of 1-5, assessing key elements of service staffing, organisation and service delivery. The measure includes detailed guidance regarding the criteria with which each item should be scored. The measure generates one overall score of model fidelity, which indicates whether the service is achieving high, moderate or low model fidelity. It also provides scores for each individual

fidelity item. Fidelity scores are agreed collaboratively by reviewers and provided to services with an accompanying report, which explains item scoring and highlights priority areas for improving model fidelity.

## **Procedures**

Following local NHS approvals, the CORE study team will contact the service manager of participating CRTs to arrange a date and allow preparation for a fidelity review. The CORE researchers will provide the CRT manager with: a list of the people and documents and materials the review team would like to see on the day of the review; a brief summary explaining the purpose of the fidelity review and what is involved for service staff, service users and carers; and a draft letter of invitation to send out to service users and carers inviting them to help with the review. The CRT fidelity review will be conducted on a single day by a team of at least three reviewers. Reviewers may include researchers, clinical academics or service user-researchers from the CORE Study team and senior clinicians from other CRTs, to include a variety of perspectives within each group of reviewers. Wherever possible, we will collaborate with the Royal College of Psychiatrists HTAS reviewers, so individual reviewers can fulfil both HTAS and CORE roles. Training/guidance will be provided in advance to all reviewers. Reviews will include the following elements:

- Introductory meeting with the CRT manager and team, introducing the reviewers and explaining how the day will work and its purpose
- Meeting with as many of the clinical staff as possible from the service (covering working practices and interventions, availability of supervision and training, staff awareness of service policies)
- Meeting with the service manager (interview covering working practices and interventions, service organisation and policies, staff supervision and training and service evaluation)
- Meeting wherever possible or consulting by phone with representatives from other key local services which work closely with CRTs (e.g. a local acute ward manager or Community Mental Health Team manager)
- Meeting with a group of service users invited in advance and convened by the participating service (covering service users' experience of the service, the types of support available and extent of choice offered, the provision of information regarding, for example, complaints procedures, how to contact the service again following discharge; other help available)
- Meeting with a group of carers invited in advance and convened by the participating service (covering similar topics to the service users' meeting and asking about the extent of contact and support available to carers from the CRT service)
- Review of service policies, protocols and procedures, staff training or induction materials

- Review of available routine service data (e.g. regarding staffing levels, caseload size, duration of episodes of care)
- Review of anonymised case records (e.g. examples of provision of specific interventions or structured assessments)
- Brief feedback meeting with the CRT manager and team at the end of the review, seeking feedback about the process, providing summary findings and impressions from the review and clarifying when the full report and score will be provided)

Following the review, reviewers will discuss and collaboratively agree a fidelity score for each item and, for items where a top score was not obtained, identify the reasons why and what would be required to achieve high fidelity. The CORE Study Team will liaise with The Home Treatment Accreditation Scheme (HTAS), to provide joint feedback wherever possible for services jointly reviewed by HTAS and CORE.

### **Analysis**

The lead reviewer at each review will compile and send a report to the participating service manager. The report will present the service's overall fidelity score and score for individual items, explain where relevant why top scores have not been achieved on items and summarise the service's areas of good practice and targets for service improvement highlighted by the review. This report will be confidential: the information will not be shared more widely with the study team, the study funders or others in a form which identifies the participating service.

The research team will enter summary scores and initial scores from each reviewer into an electronic database (with services identified by ID number only). This data will be used to explore with simple statistical tests the inter-rater reliability of fidelity scores, the range of scores and the measure's ability to discriminate between CRTs and other services, and the internal properties of the measure.

### **Timescale and Outputs**

We aim to conduct the first five fidelity reviews in NHS Trusts already associated with the CORE study (Camden and Islington and Avon and Wiltshire NHS Partnership Trust) in April-June 2013. We will then review the measure and review procedures and amend them if necessary, before aiming to complete the CORE CRT fidelity audit between July and December 2013.

Participating services will be provided with fidelity review reports as soon as possible and not more than one month following reviews. Following its completion, the CORE study team will report the overall findings of the audit, without identifying individual services, in reports to the study funders (the National Institute for Health Research) and scientific journals and/or publications widely read by mental health professionals or service users.

## Approvals

The CORE CRT fidelity measure defines service standards; fidelity reviews using the measure are designed to promote quality improvement in services. We believe our survey of CRT model fidelity therefore constitutes audit rather than research. It meets all the criteria for definition as audit set out by the National Research Ethics Service and National Patient Safety Agency<sup>23</sup>, in that:

- It is designed and conducted to produce information to inform delivery of best care
- It is designed to answer whether or not a service reaches a predetermined standard
- It measures against a standard
- It involves an intervention in use only: the choice of treatment is that of the clinician and patient and is chosen before the audit
- It involves analysis of existing data and administration of simple interviews
- It involves no allocation to intervention
- It involves no randomisation

We will seek confirmation from the London Camden and Islington Research Ethics Committee (the local REC for the lead NHS Trust for the CORE Study) for our categorisation of the CORE CRT fidelity audit as an audit. If forthcoming, our project would then not need REC review. We would seek local NHS permissions before conducting fidelity reviews through participating services and Trusts' audit procedures.

## References

1. Department of Health. Crisis Resolution/Home Treatment Teams. The Mental Health Policy Implementation Guide. London: Department of Health; 2001.
2. Department of Health. The NHS Plan: a plan for investment, a plan for reform. London: The Stationery Office; 2000.
3. Glover G, Johnson S. The crisis resolution team model: recent developments and dissemination. In: Johnson S, Needle J, Bindman J, Thornicroft G, editors. Crisis Resolution and Home Treatment in Mental Health. Cambridge: Cambridge University Press, 2008.

4. Pelosi AJ, Jackson GA. Home treatment--engimas and fantasies. *BMJ*. 2000; 320(7230):308-309.
5. Johnson S, Thornicroft G. The Classic Home Treatment Studies. In: Johnson S, Needle J, Bindman J, Thornicroft G, editors. *Crisis Resolution and Home Treatment in Mental Health*. Cambridge: Cambridge University Press; 2008.
6. Johnson S, Nolan F, Hoult J, White IR, Bebbington P, Sandor A et al. Outcomes of crises before and after introduction of a crisis resolution team. *Br J Psychiatry*. 2005; 187(1):68-75.
7. Keown P, Tacchi MJ, Niemiec S, Hughes J. Changes to mental healthcare for working age adults: impact of a crisis team and an assertive outreach team. *Psychiatr Bull*. 2007; 31(8):288-292.
8. Jethwa K, Galappathie N, Hewson P. Effects of a crisis resolution and home treatment team on in-patient admissions. *Psychiatr Bull*. 2007; 31(5):170-172.
9. Johnson S, Nolan F, Pilling S, Sandor A, Hoult J, McKenzie N et al. Randomised controlled trial of acute mental health care by a crisis resolution team: the north Islington crisis study. *BMJ*. 2005; 331(7517):599.
10. Glover G, Arts G, Babu KS. Crisis resolution/home treatment teams and psychiatric admission rates in England. *Br J Psychiatry*. 2006; 189: 441-445
11. McCrone P, Johnson S, Nolan F, Pilling S, Sandor A, Hoult J et al. Impact of a crisis resolution team on service costs in the UK. *Psychiatr Bull*. 2009; 33:17-19.
12. McCrone P, Johnson S, Nolan F, Pilling S, Sandor A, Hoult J et al. Economic evaluation of a crisis resolution service: a randomised controlled trial. *Epidemiologia e Psichiatria Sociale*. 2009; 18:54-58
13. National Audit Office. *Helping People through Mental Health Crisis: the Role of Crisis Resolution and Home Treatment Teams*. 2007; London: National Audit Office
14. The Healthcare Commission. *The Pathway to Recovery: a review of acute inpatient mental health services*. 2008. London, The Healthcare Commission.
15. Morgan, S. *Are crisis teams seeing the patients they are supposed to see?* London: National Audit Office; 2008.
16. Clark, S, Khattak, S and Nahal J. *Crisis Resolution and Home Treatment: The Service User and Carer Experience*. London: National Audit Office; 2008.
17. Onyett S, Linde K, Glover G, Floyd S, Bradley S, Middleton H. Implementation of crisis resolution/home treatment teams in England: national survey 2005-2006. *Psychiatr Bull*. 2008; 32:374-377

18. Johnson S, Needle J. Crisis resolution teams: rationale and core model. In: Johnson S, Needle J, Bindman J, Thornicroft G, editors. Crisis Resolution and Home Treatment in Mental Health. Cambridge: Cambridge University Press; 2008.
19. Torrey, W.C. Drake RE, Dixon L, Burns BJ, Flynn L, Rush AJ, Clark RE, Klatzker D. Implementing evidence-based practices for persons with severe mental illnesses. *Psychiatric Services* 2001; 52(1): 45-50.
20. Torrey, W. C., Lynde, D. W., & Gorman, P. (2005). Promoting the implementation of practices that are supported by research: The National Implementing Evidence-Based Practice Project. *Child and Adolescent Psychiatric Clinics of North America*, 14, 297–306.
21. McHugo, G. J., Drake, R. E., Whitley, R., Bond, G. R., Campbell, K., Rapp, C. A., et al. (2007). Fidelity outcomes in the National Implementing Evidence-Based Practices Project. *Psychiatric Services*, 58, 1279–1284.
22. Cresswell, J. and Hodge, S. (2012) "Home Treatment Accreditation Scheme (HTAS) – Standards for Home Treatment Teams – Pilot Edition" Royal College of Psychiatrists College Centre for Quality Improvement  
<http://www.rcpsych.ac.uk/pdf/HTAS%20Standards%20Pilot%20Edition%202012.pdf>
23. National Patient Safety Agency (2010) "Defining research: NRES guidance to help you decide if your project requires review by a Research Ethics Committee" National Patient Safety Agency, London <http://www.nres.nhs.uk/applications/guidance/research-guidance/?entryid62=66985>