Crisis resolution and home treatment teams: an evolving model

Sonia Johnson

SUMMARY
Crisis resolution and home treatment teams have been introduced throughout England as part of a transformation of the community mental healthcare system. They aim to assess all patients being considered for acute hospital admission, to offer intensive home treatment rather than hospital admission if feasible, and to facilitate early discharge from hospital. Key features include 24-hour availability and intensive contact in the community, with visits twice daily if needed. This article describes the main characteristics and core interventions of these teams, and reviews the impact of their nationwide introduction. The model has evolved as a pragmatic response to difficulties in the acute care system, and its adaptation continues. Key challenges include achieving close integration with the rest of the mental health system and delivering continuity of care and effective therapeutic relationships despite the involvement of multiple workers in each crisis.

DECLARATION OF INTEREST
None.

Crisis resolution and home treatment teams aim to provide rapid assessment in mental health crises and, where possible, to offer intensive home treatment as an alternative to acute admission (Department of Health 2001). Their introduction throughout England, mandated by the NHS Plan (Department of Health 2000) alongside assertive outreach and early intervention teams, has been an extensive change in the national mental healthcare system. In 2000, few areas had such teams. A decade later, they were available in every trust in the country and several thousand mental health professionals had migrated into them. National Health Service (NHS) investment in these services has increased every year between 2002 and 2011, rising from £38 million to £268 million (Department of Health 2011). The policy driving their introduction was remarkable for its prescriptiveness and for the degree of performance management associated with its implementation, including nationwide reporting of activity levels and their relationship to centrally set targets (Kingdon 2011).

More than a decade on from the NHS Plan, a new UK government is less disposed to detailed specification of required local service configurations; assessment of the outcomes of the policy and of desirable directions for the future development of acute care in the NHS and elsewhere is thus timely. This article aims to provide a context for this by summarising the current status of the crisis resolution team (CRT) model. I will describe the development of this model up to the point of nationwide adoption in the UK, its core characteristics, and the evidence so far accumulated on its effectiveness and the extent of its implementation. I will conclude by commenting on next directions in development.

A note on terminology
I use the term crisis resolution team in this article to refer to teams that aim to:
- assess all patients being considered for admission to acute psychiatric wards;
- initiate a programme of home treatment with frequent visits (usually at least daily) for all patients for whom this appears a feasible alternative to hospital treatment;
- continue home treatment until the crisis has resolved and then transfer patients to other services for any further care they may need;
- facilitate early discharge from acute wards by transferring in-patients to intensive home treatment.

The terms crisis resolution team, crisis resolution and home treatment team, crisis assessment and treatment team, and intensive home treatment team are currently used roughly synonymously in the UK. Crisis intervention team is an older term, which originally referred to services that applied crisis intervention theory to a broad range of psychosocial crises, not only those in which admission seemed imminent. My discussion regarding implementation is mainly about the UK, where it has been largest in scale and best documented, but Australia and the USA were both forerunners in the introduction of this model, and Norway and Flanders (in Belgium) are among the countries where it now forms part of national mental health policy.

Sonia Johnson is a Professor of Social and Community Psychiatry at University College London and a consultant psychiatrist in the Camden and Islington NHS Foundation Trust Early Intervention Service for Psychosis. Her main research interests are in description and evaluation of innovative services, including crisis teams, residential alternatives to hospital, assertive outreach teams and in-patient services. Correspondence Professor Sonia Johnson, Mental Health Sciences Unit, UCL, Charles Bell House, 67–73 Riding House Street, London W1W 7EY, UK. Email: s.johnson@ucl.ac.uk

doi: 10.1192/apt.bp.107.004192
Origins of home treatment in crises

In describing the origins of home treatment in crises, I will draw both on the referenced literature and on a series of interviews I conducted for the purposes of recording CRT history with key experts who have contributed to the model's development, including John Hoult, Leonard Stein, Alan Rosen and Paul Polak (Johnson 2008a).

Early pioneers of admission diversion: Arie Querido and Joshua Carse

The wider context for CRTs is the deinstitutionalisation movement, the quest for effective alternatives to hospital in-patient care that has dominated mental health policy, service planning and service research for much of the past half century. Diversion from acute hospital admission has been an element in deinstitutionalisation from its beginning: the first admission-diversion service to stimulate widespread interest and discussion was that established by the psychiatrist Arie Querido in Amsterdam in the 1930s (Querido 1935). Querido instituted a city-wide system of home visiting by a psychiatrist and a social worker whenever a patient was referred for admission, with an alternative treatment plan, sometimes involving follow-up home visits, implemented whenever possible. In the UK, community visits in crises were instituted in some areas as early as the 1950s, as in the Worthing experiment: initiated in 1956, this involved home visits by a psychiatrist and a social worker to all those referred for acute admission, and was reported to result in falls in admissions to two local hospitals of 55% and 79% (Carse 1958).

The Madison and Sydney teams

Some of the working practices of current CRTs can be traced back to two services that share the somewhat confusing distinction of being cited in support of two different innovative models: CRTs and assertive outreach teams (AOTs). The Training in Community Living service established by Leonard Stein and colleagues in Madison, Wisconsin, in the late 1970s (Stein 1980) and the service established by John Hoult and his colleagues in Sydney in 1979 (Hoult 1991) resembled current CRTs in recruiting patients at the point of acute admission during a crisis and diverting them wherever possible to home treatment. However, like AOTs and unlike CRTs, the initial Madison and Sydney teams continued to treat people intensively in the community once the initial crisis had resolved, with the long-term goals of improving their stability in the community and their social functioning.

Following these initial experiments, Stein and Hoult both concluded that the crisis treatment function would be better split off from continuing care, as it seemed to them difficult for a single team to have both roles (Johnson 2008a). The Dane County, Wisconsin, crisis teams were established by Stein in the 1970s and have continued to operate ever since, with 24-hour availability, screening of all patients prior to admission, and provision of visits several times a day if needed over a short period of treatment lasting until the crisis has stabilised and the patient is discharged. Similar teams were established in Australia from the early 1980s and some have survived long term, especially in the state of Victoria, which introduced a requirement for such teams in 1994, prefiguring the NHS modernisation (Carroll 2001).

Early UK acute home treatment services

In the UK in the late 1980s and 1990s, community mental health teams were the primary providers of crisis response in the community. Most, however, operated only during 'office hours' (09.00 to 17.00),...
five days a week, which considerably limited their capacity to respond to crises and substitute for acute admission.

Experimentation with models involving more intensive and specialised crisis care began in a few centres. For example, Christine Dean and colleagues established an innovative home treatment service in Birmingham focused especially on the local Asian community. They found that it reduced admissions and was preferred by relatives (Dean 1993). At around the same time at the Maudsley hospital in London, the Daily Living Programme was a replication of Stein's and Hoult's original combined crisis and longer-term care models and demonstrated reduced bed use and some clinical benefits over an 18-month follow-up (Marks 1994).

In 1995, John Hoult, recently arrived from Australia, established the Yardley Psychiatric Emergency Team (Minghella 1998). This can be seen as the first full UK implementation of the CRT model, in which Hoult drew on his observations regarding the organisational features associated with greatest effectiveness in Australian crisis teams. The model was replicated in a variety of centres, including Bradford and Islington, London, before it was adopted in 2000 as national policy in the NHS Plan (Department of Health 2000). This and the subsequent Mental Health Policy Implementation Guide (Department of Health 2001) mandated the development of 335 CRTs across England. Each was expected to carry a case-load of 20 to 30 at a time, to see around 300 people a year in total, and to be available 24 hours a day, 7 days a week.

**Principles of CRTs**

Some innovative service models have a clear theoretical basis: for example, early intervention services are explicitly based on theories regarding the damaging effects of long duration of untreated psychosis and the prognostic importance in schizophrenia of an early ‘critical period’ (Birchwood 1997). In contrast, the theoretical framework underpinning CRTs has tended to be less explicit, with many of the major research papers dedicating little space to this: the early intensive home treatment teams seem often to have been developed by energetic pioneers as a pragmatic response to difficulties encountered in the service system in which they worked.

A literature review and a series of interviews with pioneers of CRTs and their precursors that I carried out a few years ago suggests considerable divergence among these pioneers in their theoretical frameworks (Johnson 2008b). Some have described home treatment as rooted in Caplan’s (1964) crisis intervention theory, which conceptualises crises as periods of transition that everyone encounters, in which professionals have a potential role in promoting an adaptive way of coping and psychological growth. Others question the relevance of this model to the severely mentally ill. More radical pioneers of home treatment such as Bracken and his Bradford group argue that it presents an opportunity to implement an entirely revised ‘post-psychiatric’ understanding of mental illness, in which the ‘expert’ view of the doctor is no longer privileged (Bracken 2001). Others still, such as Smyth & Hoult (2000), present a more pragmatic view in which the interventions used to treat mental illness in the community are not substantially different from those used in hospital.

Notwithstanding these substantial divergences, there are some principles on which leaders in the development of this model seem to agree (Johnson 2008b). These may be summarised as follows.

- Hospital admission has harmful as well as therapeutic effects, is unacceptable to many patients and carries a heavy stigma (Rose 2001). It should therefore be avoided whenever possible.
- Crises have important social and environmental triggers (Polak 1970). Treatment in the home allows these to be better assessed and addressed.
- Coping skills are most effectively applied in the context in which they have been learnt (Stein 1980). Thus, after home treatment, patients are more likely to be able to apply skills learnt to pre-empt or reduce the severity of future crises.
- Relationships between patients and professionals are different and less dominated by inequalities of power when crises are managed in the patients’ own homes (Mezzina 1995).

Although ideas and values such as these have shaped home treatment services, the role of economic and political pressures in the development and dissemination of this model should not be overlooked: deinstitutionalisation has throughout its history been driven by both idealism and a wish to be parsimonious in expenditure on costly hospital services, and this also applies to CRT implementation.

**The core model**

The range of theoretical models and styles of intervention that are feasible within the CRT model is wide, but a substantial consensus supports a set of core organisational characteristics and interventions (Minghella 1998; Department of Health 2001; Crompton 2007; Johnson 2008b). Box 1 summarises organisational principles of CRTs on which there is substantial consensus.
The focus exclusively on severe crises that would otherwise result in admission is seen as crucial if the CRT is to have the resources to divert patients from hospital: these guidelines are influenced by previous experiences of community crisis intervention services that have tended to drift towards mainly recruiting a ‘worried well’ population who might not otherwise be seen by secondary mental health services (Katschnig 1991). This criterion can sometimes, however, result in uncertainties and even disputes, in that referrers may understandably argue that home treatment needs to be initiated a little before admission has become inevitable for it to have a good chance of succeeding. In practice, most CRTs appear to carry out a certain amount of pre-emptive work, accepting patients who appear very likely to meet the threshold for hospital admission in the near future unless a highly intensive intervention such as CRT treatment is instituted (Bindman 2008a).

The remit of CRTs

The original Mental Health Policy Implementation Guide (Department of Health 2001) suggested that CRTs should be available for adults of working age (18 to 65 years), and also that people with learning disabilities (the term commonly used in UK health services to mean intellectual disability) and primary diagnoses of personality disorder should not be included. However, this raises issues of equity as there is no evidence that these groups would not benefit. Some CRTs extend their client age range beyond 65, and specialist home treatment services for elderly people have begun to develop, with some evidence that they can prevent admissions (Dibben 2008). Preliminary evidence suggests that CRTs can also prevent admission among people with personality disorders, and many services do work with this group (Cotton 2007).

Gatekeeping and around-the-clock help

A gatekeeping role, with patients admitted to acute beds only if the CRT has assessed them and agreed that this is necessary, is considered key to success in reducing admissions (Glover 2006). The question arises of whether the CRT should ever agree to the admission of a patient whom they have not seen face to face: the default should be that they see every patient, though in practice some flexibility is likely to be needed from time to time if insisting on this would introduce an unacceptable delay in a situation of high risk.

Twenty-four-hour availability is also important if severely ill people are to be managed at home, as carers need to be confident that help is available at any time. However, keeping a community office open 24 hours a day may be impractical if the volume of night-time work is low. To overcome this problem, some CRTs provide night-time cover by small number of staff located in a hospital, often in or near the accident and emergency department, or arrange for staff to be on call from home. Further evidence on the impact of different policies on gatekeeping and 24-hour cover would be useful.

The composition of the team

A full multidisciplinary team seems desirable if a full range of psychological, social and biological perspectives on assessment and interventions is to be available, although in practice some professions (nurses, support workers and doctors) seem to be much better represented than others (occupational therapists and psychologists) (Onyett 2008). Many of the skills required by CRT staff are in any case specific to the CRT worker role rather than to a particular profession (Ramsey 2008). In
some CRTs, consultant psychiatrist input comes from senior doctors who are also responsible for local community mental health teams and/or patients on the wards; in other cases dedicated CRT consultants are embedded within the team. The former arrangement has some advantages for continuity of care, but dedicated CRT consultants are favoured by many experts, with some evidence that their integration in the CRT may help effective gatekeeping and good joint working with other parts of the system (Middleton 2008).

**Integration with other healthcare services**

Given that they intervene short term with patients whose mental health needs are often very long term, a key challenge for CRTs is to achieve good integration with other parts of the service system. Good communication and working relationships with in-patient services, community mental health teams, casualty department liaison teams and specialist services such as assertive outreach and early intervention are essential.

Crisis resolution teams need to maintain clear delineation of their role, and of admission and discharge protocols and thresholds, but at the same time they must avoid unnecessary conflict and be perceived by other mental health services as helpful and useful (Flowers 2008). This is more easily achieved if CRT staff have a very clear concept of what their main tasks and target groups are, and explain their decisions about these as clearly as they can to other professionals.

The position of CRTs in the service system means that they are well placed for identification of perceived failings of other components of the service: when they identify these, they need to resist being unduly critical, but instead work constructively with other services to achieve smooth and effective care pathways. Good relationships with in-patient services are important in order to identify ward patients who are still symptomatic but are now more cooperative and less ‘risky’, making them candidates for early discharge.

**Core interventions**

Expert consensus and various guidelines on CRTs identify a core range of interventions that they should deliver, although the details of many of these are not highly specified (Minghella 1998; Department of Health 2001; Crompton 2007; Johnson 2008b). Box 2 summarises these interventions.

**Assessment**

Assessment is necessarily a core task for CRT practitioners: teams need to have members who are confident in assessing and re-assessing risk, suitability for home treatment, symptoms and their response to treatment, substance misuse, social difficulties that may have triggered or perpetuate the crisis, and psychological and social resources for coping with the crisis.

No diagnosis or type of risk is necessarily an exclusion criterion for successful home management, but lack of engagement despite considerable persistence by CRT staff, very chaotic behaviour that does not resolve quickly when treatment is started, and severe and persistent substance misuse problems often result in hospital admission; people with a history of compulsory admission are also more likely to be admitted despite the availability of a CRT (Cotton 2007).

**Engagement**

Talking through difficulties with patients and members of their social networks and offering emotional and practical support is another essential component in the role of CRT staff. A particular challenge is the need to maintain warm relationships and conversations that make some
progress when shift systems mean that several different people will usually be visiting each CRT client. However, the intensity of contact, with most CRTs offering twice-daily visits if needed, can help in establishing a therapeutic alliance. Simple psychoeducation about mental health problems and their management will usually be included in meetings with both patients and carers.

Practical help
Help with practical problems is a further important focus for many teams, although opinions vary about the extent to which team members should themselves help with practical tasks (Bindman 2008b). Home treatment requires an acceptable home environment, access to food and money, and freedom from serious social pressures such as the threat of eviction or harm from others living with or close to the patient. For some, hospital admission may in fact be the best short-time respite from a very unsuitable home environment; for others, advocacy with issues such as benefits and housing problems, help tidying up and getting food, and placement in temporary accommodation or in a community residential facility such as a crisis house may facilitate home treatment.

Medication monitoring
Since CRTs focus on people with severe mental health problems, medication will often be an important intervention, especially in trying to reduce quickly the severity of initial symptoms and disturbance. As well as initiating or adjusting prescriptions, an important role for CRTs is in administering and monitoring medication, which is generally feasible on a twice-daily basis when needed.

Wider interventions
Beyond these simple but essential activities of engaging, assessing, monitoring, supporting, educating, and ensuring that appropriate medication is received, a standard array of CRT interventions has not been established, and practice appears to vary depending on the skills, interests and approaches of clinicians and managers in each team. As already discussed, the idea that the antecedents to crises are often social and can more readily be addressed in patients’ own homes has been important in the development of CRTs. Many CRTs therefore aim to intervene with patients’ social networks in some way, identifying and addressing some of these social triggers.

Bridgett & Polak (2003a,b) describe a relatively structured approach to social systems intervention, involving the early convening of meetings of key individuals in the patient’s social system so that problems in the system can be identified and the participants encouraged to find solutions.

Other types of intervention that may be useful within CRTs include brief psychological interventions focusing on symptoms or substance use, structured work on relapse prevention or developing crisis plans to be implemented in any future crisis, and interventions focusing on problem-solving or medication adherence.

Initiating complex interventions
An important question is when CRTs should initiate an intervention themselves and when request that it be provided by another professional or agency (Hurcom 2008). The very short duration of most periods of CRT treatment make it difficult for CRTs to deliver treatment of any complexity themselves, although there may be scope for them to collaborate with other teams on interventions such as relapse prevention. More evidence on what interventions and ways of working are most effective within a CRT framework would be useful; currently, the model is in many ways a vehicle for service delivery rather than a specific treatment approach.

Evidence, implementation and evolution
As described at the beginning of this article, the nationwide introduction of CRTs has been one of the swiftest and most extensive changes in the organisation of community mental healthcare in England. Given the large national investment in the model and the considerable international interest that it has attracted, there is a pressing need for evidence regarding the impact of this policy.

Evidence: the positive
When CRTs first became national policy, they were criticised for their scanty evidence base (Pelosi 2000), derived mainly from older studies in which neither experimental nor control groups were very comparable with current models. What do we now know about their impact? Some positive findings can be reported. When the model is implemented with relatively high fidelity, including 24-hour cover and gatekeeping, congruent evidence from national bed-use data (Glover 2006), naturalistic investigations of the effects of implementing the model within catchment areas (Johnson 2005a; Jethwa 2007; Keown 2007; Barker 2011) and a randomised controlled trial (Johnson 2005b) shows that reductions in numbers of admissions occur, with accompanying falls in costs (McCron 2009a,b). Greater satisfaction among service
users has also been reported in some CRT studies (Johnson 2005a,b; Winness 2010; Barker 2011), although we know little about the views of carers regarding the current UK model. Where they have been examined, other outcomes, such as symptoms and social functioning, appear similar after an episode of acute care with or without a home treatment team involved. The workforce implications of this reorganisation of the acute care system are also important: a survey of London CRT staff was reassuring, suggesting fairly good satisfaction and low burnout (Nelson 2009), subsequently confirmed in a national investigation of staff morale (Johnson 2012).

…and the not so positive

Alongside these accounts of reasonably successful services, considerable reservations have emerged regarding the nationwide implementation and impact of the model. Two reports on the national picture by bodies with responsibility for monitoring public sector provision have suggested considerable variation between trusts in ways of working and effectiveness (National Audit Office 2007; Healthcare Commission 2008), and recent reports by the national mental health charity Mind (2011) and the Centre for Social Justice (2011), an influential think tank, have questioned the effectiveness of these teams in meeting service users’ needs.

Implementation of the gatekeeping principle appears to have varied greatly between trusts. Discontinuities of care are reported at various points in the acute care system, and service users and carers, although in the main positive about the possibility of receiving care at home, also report some unsatisfactory experiences of CRT care. These relate especially to relationships with staff, with reports that contacts are fleeting and superficial and that too many staff are involved in each episode of care (Hopkins 2007), and to the range of interventions offered, with complaints that teams focus too much on prescribing and dispensing medication and too little on emotional and practical support (Lyons 2009).

A common feature of the cited national reports is an emphasis on the need to develop integrated acute care pathways within catchment areas, with good continuity between components in the system. In Norway, the other country where CRT introduction has been national policy for several years, implementation studies suggest both substantial divergence from the English model, with a greater focus on less severe disorders, and considerable variation between Norwegian teams (Hasselberg 2011).

Recent innovations

The variable implementation of this model and the doubts that persist about it are not surprising, given the speed at which this innovation has been introduced nationwide, its origins in many areas in government policy rather than local enthusiasm or assessment of needs, and the limited evidence about how best to implement CRTs and what interventions to deliver within them. Innovative service development work in various parts of the country indicates that the model is still evolving.

Linking the model closely with community residential accommodation is a fairly common innovation: capacity to manage relatively severe crises outside hospital may be substantially greater when a 24-hour staffed residential facility and a full multidisciplinary CRT work closely together (Johnson 2010). Integration of day services and CRTs has also been described and may address the criticism that patients receiving CRT care may be spending much of their days alone between team visits and may have relatively little structure to their days or activity (Allen 2009). Strengthening links with the in-patient ward, for example by rotating staff between ward and CRT, is another innovation that may improve the continuity of local acute care pathways, especially in the increasing number of areas with acute in-patient assessment units that aim, whenever feasible, to achieve early discharge, often with CRT support.

What of the future?

Following a decade of gradually rising investment (Department of Health 2011), the establishment of a national network of CRTs has been a significant achievement. Nonetheless, there remains considerable scope for further development and evaluation of the model and methods for implementing it. Getting CRTs right is very important for the NHS if this is to remain the predominant way of delivering acute care in the community, although a new UK government and widespread changes in health policy mean that the model is no longer mandatory, and local variations and even decisions not to maintain it may in future be more widespread than before.

Given the effects of model services on admissions, costs and service user satisfaction, the model is also a promising one for implementation in other high-income countries, making it all the more important to achieve an understanding of how to optimise it within an effective overall acute care pathway. One potential way forward in further specifying and standardising the model is to adopt the methods of the evidence-based practices programmes increasingly prevalent in
the USA (Drake 2009). This involves developing a fidelity scale intended to measure adherence to best practice in delivering the model, usually accompanied by an implementation resource kit of materials and methods to support achieving high fidelity on the fidelity scale. A current research programme, Crisis Team Optimisation and Relapse Prevention (CORE), on which I am the lead, aims to develop and test a fidelity scale and implementation resource kit of this kind: it is hoped that this will support implementation of GRT in its most effective form, both in the UK and internationally.

References


Rose D (2001) Users’ Voices: The Perspectives of Mental Health Service Users on Community and Hospital Care. Sainsbury Centre for Mental Health.


MCQs

Select the single best option for each question stem

1 Crisis resolution teams:
   a do not generally assess people thought by community mental health team staff to require admission
   b focus on preventing admissions rather than on arranging early discharge from wards
   c always exclude people with a sole diagnosis of personality disorder
   d may be effective for the over-65s as well as for younger adults
   e are not usually able to work with people with bipolar affective disorders.

2 Gatekeeping by crisis resolution teams:
   a is believed to be essential if teams are to be effective in reducing admissions
   b involves ensuring that all patients who are candidates for admission are sent to the local hospital casualty department for assessment
   c is not usually necessary if patients are experiencing a relapse of psychosis
   d is unnecessary when patients have just been reviewed by community mental health team staff
   e can only be carried out by a psychiatrist.

3 Regarding the development of crisis resolution and home treatment services:
   a the first community services intended to reduce admissions were established in the 1970s
   b the NHS Plan in the year 2000 required crisis resolution team introduction throughout England
   c the earliest crisis teams developed from pioneer early intervention services for psychosis
   d John Hoult established the first crisis resolution teams in the USA
   e since 2010, all NHS trusts in the UK have been required to set up services that combine the functions of crisis resolution teams, crisis houses and acute day hospitals.

4 Regarding the evidence for crisis resolution teams:
   a it has been demonstrated that their introduction has reduced admissions in over 90% of English mental health trusts
   b randomised controlled trial evidence suggests that recovery from symptoms is worse in people to whom crisis resolution teams are available than in controls treated by traditional services
   c randomised controlled trial evidence suggests that functional improvement is greater in people admitted to hospital than in those treated by crisis resolution teams
   d randomised controlled trial evidence and other evidence from model services suggests that model crisis resolution teams can result in lower bed use and costs than more traditional control services
   e the suicide rate in the UK appears to have risen as a consequence of crisis resolution team introduction.

5 The generally recommended range of interventions delivered by crisis resolution teams does not include:
   a assessment of potential social triggers for crises
   b monitoring of adherence to medication
   c support in resolving practical problems such as lack of food and poor living conditions
   d supported employment
   e brief psychoeducation for family members.