Continuity of care in a crisis resolution home treatment team

Daniel Titheradge MRCPsych, Adrian Galea MD, MSc, MRCPsych

Staff consistency is recognised nationally as an issue for crisis resolution home treatment (CRHT) teams. Here the authors discuss their evaluation of a CRHT team to establish the number and consistency of staff contacts with service users during a typical CRHT care episode. They propose initiatives to improve the continuity of patient care and highlight a need for further research in this model of care.

Crisis resolution home treatment (CRHT) teams provide 24-hour gatekeeping of inpatient psychiatric beds, supported discharge and home treatment as an alternative to admission. Local and national data suggest that overall patients and carers prefer home treatment to admission, however, continuity within the care episode is a recognised challenge of the CRHT model.

The Five Year Forward View for Mental Health advises that ‘24/7 community-based mental health crisis response is available in all areas across England and that services are adequately resourced to offer intensive home treatment as an alternative to an acute inpatient admission.’ This is to be delivered through the expansion of crisis resolution and home treatment. However, implementation of the CRHT model has been inconsistent, and systematic reviews have struggled to identify the critical components of care in the model.

Difficulties with continuity of care can impact the establishment of a therapeutic relationship with service users, carers, and their support system. Evidence from analysis of stakeholder views demonstrates the primary importance of emotional support to patients and carers, and this can only be facilitated through predictable contact of staff and development of the appropriate therapeutic relationship. Service users also report having to repeat themselves with different professionals.

Continuity of care also has important implications for patient safety: repeated handovers and communication of clinical information between staff increases the potential for incidents. Service users under the care of CRHT teams accounted for 16% of all suicides in the period of 2005 to 2015 and occur at higher rates than in the inpatient setting. There are a number of reasons that may account for this including the acuity of illness, earlier discharge from hospital and a high prevalence of known risk factors for suicide on CRHT caseloads. Ensuring good communication is best practice for risk management, with communication issues consistently identified as a contributor to service user suicide, and patient safety incidents.

Local implementation of the CRHT model

The CRHT based in Eastbourne, East Sussex, is one of six CRHT services managed by Sussex Partnership NHS Foundation Trust. It serves a weighted population of approximately 220 000 adults aged 18 years and over in a mixture of urban and rural, coastal and inland towns and villages. It receives 1460 referrals annually, mostly but not exclusively from primary care (including directly from general practitioners), mental health liaison teams, inpatient psychiatric wards and secondary community psychiatric services. While there is no upper age limit, it does not take service users with primarily dementia-related needs.

Following referral service users are normally assessed face-to-face by two clinicians. The home treatment to admission ratio is 4:1. If the outcome of assessment is for home treatment, then the service user is then reviewed.
face-to-face daily for the first three days. After three days the care plan is reviewed so that the frequency of ongoing contact can be agreed. A medical review by a psychiatrist would be arranged for all service users as quickly as is feasible by default.

In 2015 the CRHT team received 1262 referrals. Outcomes of referrals were direct admission to hospital for 147 cases (11.6%), and home treatment for 571 cases (45.3%), with the remaining cases discharged back to the referrer or appropriate team. The average caseload was 25 at any given time. The percentages of patients admitted, home treated, and discharged at assessment remained stable between 2015 and 2017.

The service has access to a seven-bedded crisis house and a day-treatment programme, both shared with another CRHT service. The multidisciplinary team employed the services of 16 nurses and occupational therapists, four support workers and two senior nurse practitioners working overnight, supported by a full-time consultant psychiatrist, a 0.4 whole-time-equivalent specialty grade doctor and a full-time core psychiatry trainee. At the time of the data collection the service did not have a dedicated psychologist or social worker.12,13

Current best practice

The crisis resolution team optimisation and relapse prevention (CORE) study group has developed a best practice model of CRHT care and a fidelity scale to measure adherence to this best practice model.13 Continuity of care is addressed in item 36 of the CORE Crisis Resolution Team (CRT) Fidelity Scale, which states that ‘the CRT has systems to provide consistency of staff and support to a service user during a period of CRT care’.14 Within the scoring for this item it is suggested that named workers are allocated; that service users and carers are made aware who their named worker is; that the CRT has an effective system to limit the number of staff seen during an episode of care, and that the CRT staff have up-to-date information about service users to avoid duplication of questions and provide a coherent treatment approach.14

In this paper we use a prospective quantitative approach to evaluate the local CRHT service in Eastbourne, East Sussex, to understand current practice with respect to consistency of staff within a care episode, key worker allocation, and the types of staff contact provided to service users.

Methods

Prospective data collection of 151 consecutive care episodes from the Eastbourne CRHT team took place between November 2014 and February 2015. Data on all service users that were taken on to the CRHT caseload during this period were included for analysis. Data were usually collected daily at morning handover and on occasions data were collected retrospectively through review of the electronic case note system.

For each care episode the following data were collected: date of assessment; names of assessors; date and names of allocation of key workers, and date of discharge from CRHT. For each service user on the caseload, the following data were collected on a daily basis: name and grade of staff member allocated, and the type of contact planned. Contacts were coded as face-to-face contact with a service user; a planned supportive telephone call, day hospital attendance, and ‘respond to phone call’ (RTPC). The service users coded as RTPC were able to contact the CRHT service as required but would not proactively be contacted on that day.

Data were inputted contemporaneously on a Microsoft Excel spreadsheet. Data were extracted from the spreadsheet and analysed on R version 3.2.2. Spearman’s correlation was performed to determine the correlation between the duration of the care episode and the number of different staff members seen during the care episode. A two-sided one-sample T-test was used to compare the mean duration of our care episodes to comparable data from CRHT teams in a Norwegian study.15

Data presented in this paper were collected with the approval of the audit department of Sussex Partnership NHS Foundation Trust.

Results

Between November 2014 and February 2015, a total of 151 service users were taken on to the caseload of the Eastbourne CRHT team. The mean duration of a CRHT care episode was 14.6 days (SD 10.2, range 2 to 54) with a median duration of 13 days (see Figure 1). There was a mean of 8.9 total contacts during a care episode (SD 5.6, range 1 to 31).

The mean number of different staff members a service user saw during a care episode was 5.1 (SD 2.4, range 1 to 13) (see Figure 2). Spearman’s correlation showed a strong positive monotonic correlation between the duration of the care episode and the number of different staff members seen during the care episode ($r_s=0.84$, $n=151$, $p<0.001$).

One or more key workers were allocated to a service user in 71% of care episodes. Service users were allocated one (42%) or two (28%) key workers with a mean time from assessment to key worker allocation of 1.8 days (SD 2.95, range 0 to 17). Key workers made a mean of 1.6 visits to each allocated service user (SD 1.75, range 0 to 10) during the care episode. Overall, key workers...
accounted for 21% of face-to-face visits during the period of data collection.

Face-to-face contacts made up the majority of the CRHT care episodes (mean 63%, SD 18.7, range 19 to 100%). The remainder of contacts during the care episode were ‘respond to phone calls’ (mean 23%, SD 16.2 range 0 to 60%), and scheduled phone calls (mean 11% SD 11.3, range 0 to 60%). Day treatment was used by six service users under the CRHT team for a mean of 8.2 sessions (SD 3.43, range 3 to 12) (see Figure 3).

Most visits by the CRHT team were made by band 5 and band 6 staff; at 43% and 36% respectively. Band 4 support workers made up 11% of visits. Face-to-face contacts were undertaken by substantive staff (98%) and agency staff (2%) 60% of patients were seen by a psychiatrist, accounting for 9% of visits. A one-sample T-test demonstrated that the duration of our care episodes (n = 151, mean 14.7, SD 10.3 days) was significantly shorter (p<0.001) than comparable data from a Norwegian study (n=455, mean 29.38, SD 24.8 days).15

Discussion
There are several reasons why continuity of care within a CRHT care episode is challenging. Nationally agreed contractual limits and the requirement for CRHT staff to work shifts covering a 24/7 service means that the same member of staff will not always be available on consecutive days. Work is distributed between staff members depending on their specialist skill sets meaning they may need input from specific grades of staff, eg a psychiatrist or occupational therapist. In our service qualified members of nursing staff are also required to review a patient’s risk and care at key points in the care episode, and when clinically indicated placing additional limitations on staff allocation. For our service these issues are confounded by the wide geographical area covered, which can limit the ability of individual staff members to visit different parts of the catchment area in a single day.

The CRHT model is widely used within the UK and internationally, however, there is substantial variation in the implementation of the model. Data from a large 2017 survey of CRHT teams in the UK reports that the typical CRHT team has a median of 20 full-time equivalent staff and supports a caseload of 27 patients.11 This suggests that the Eastbourne CRHT team is typical of provision in the UK with 25 members of staff, and an average caseload of 25 patients at any given time. The median duration of a care episode from the 2017 survey data was 21 days, while our service offered a shorter than average intervention with a median care episode of 13 days.11 Shorter care episodes allow the service to meet greater demand than would be possible with a longer episode of care with the resources available. The duration of our care episodes was significantly shorter than comparable data from a Norwegian study of CRHTs but the intensity of our contact with service users was far greater.15

We found substantial variation in the duration of CRHT care episodes, ranging from 2 to 54 days. We demonstrate a strong correlation between the duration

Figure 2. Histogram of number of staff seen during care episode

Figure 3. Box and whisker plot of contacts by care episode

Percentages represent the proportion of contacts of each time within an individual service user’s care episode. F2F (face-to-face): Either receive home visit or seen in the department. PC (phone call): Pro-actively contacted by an allocated team member. RTPC (respond to phone call): Patient can contact CRHT team as required, not pro-actively contacted on that day. DT (day treatment): Patient under day treatment seen on behalf of CRHT team.
of care episodes and the number of staff members seen during the care episode. While in part this represents the limitations on staff continuity due to rostering of a 24/7 service, we believe this also reflects the need for a greater range of staff expertise in complex cases that require longer periods of home treatment. Our CRHT team offers briefer interventions than those services for which we have comparable data. Continuity of care may present a greater issue in services with longer care episodes as our data suggest this results in greater numbers of staff involvement. A shorter, more intensive approach to the care episode has several benefits, including reduced numbers of staff involved in each case, reduced service user and carer dissatisfaction regarding continuity of care, more focussed interventions, and release of resources enabling the service to meet greater demands. We have not identified any evidence of patient concern regarding the duration or intensity of care episodes in our service.

In our service a typical care episode includes contact from up to four different professional groups and a patient will meet an average of five CRHT staff members during a two-week care episode. Our local CRHT team comprises a psychiatric nurses, occupational therapists, support workers and psychiatrists, with each group bringing a specific set of skills. A balanced multidisciplinary approach is advantageous and reductions in the number of staff members seen in the average care episode are likely to result in a reduction in the range of professional groups being involved in the care episode. This is likely to result in a narrower repertoire of interventions being delivered to each individual patient. Improvements in continuity of care may require a more bespoke response to each crisis presentation with early high-quality care planning to ascertain which members of the multidisciplinary team need to be involved in each case. This will have an even greater impact in CRHT services where additional professional groups (eg social workers or psychologists) are represented in the multidisciplinary team. Care is needed in balancing continuity verses the risk of compromising the multidisciplinary approach immediately after assessment.

Poor continuity of care is more widely felt in secondary mental health services as a consequence of the fragmentation of services in the functional model, as well as within the wider health and social care system. A sector-based model has been shown to be preferred by patients due to improved continuity of care, with staff echoing concerns of poor continuity of care in the functional model. Over the longer term a good proportion of patients have multiple episodes of care under the same CRHT service. Maintaining a stable workforce within the CRHT service allows pre-existing relationships with members of staff to be reactivated, providing continuity of care over the longer term. Where this is possible it is preferable to patients than having to get to know new staff members and adds consistency to the culture and practice of the team. Retaining our members of staff is a priority, and to this effect staff are supported through ongoing conversation around staff wellbeing.

The work of the CORE study group suggests that allocation of a key worker is one approach to improve continuity of care. In our local practice we identified that despite most service users being allocated at least one key worker, fewer than a quarter of face-to-face contacts were made by the allocated workers. As a result of these findings our local service has placed a greater emphasis on the role of the key worker in the local CRHT team and looked at ways to improve rates of key worker visits. One approach our service has used in response to the local geography has been to recreate a sector-based model within the CRHT team for the purposes of key worker allocation. By consistently allocating specific staff as key workers for service users in a specific area visits can be carried out by key workers more consistently as staff members are more likely to be working in the corresponding geographic area on any given day.

Local service feedback has highlighted that as a result of seeing multiple staff members service users may feel like they are repeating themselves or that they had not been listened to on previous occasions. While our CRHT team is supported by an electronic patient information system, different clinicians attending a service user nonetheless results in verification of information and the understanding of it by the individual clinician. To minimise repetition and ensure clear communication within our local CRHT we have a multidisciplinary handover meeting every morning during which the current risks, issues and care pathway are discussed. Staff are encouraged to explain to patients and carers the strengths and limitations of our practice, including exposure to different members of staff and aims at minimising distress arising from the unexpected, particularly in distressed and vulnerable patients at the beginning of their care episode. Staff are also encouraged to find ways of summarising and verifying clinical information that has already been obtained and to explain why it is necessary to do so.

Given the requirements for CRHT services at a national level the approach of our service has been to optimise the organisation of work within the service to aim for more consistency. This has included forward planning of contacts over several days through the use of a public staff scheduling board to optimise allocation of work to given staff members for up to a week ahead and
supporting the shift coordinator through stronger clinical, operational management and administrative support.

There is little, if any, published quantitative data beyond the service under study. The paucity of comparative published work restricts the ability to interpret our findings more widely. We believe that the lack of quantitative data limits the conversations that can be undertaken around continuity of care. Potential questions to be addressed would include ascertaining clinician and patient views on ideal or acceptable numbers of staff to work with during a care episode, and how continuity of care relates to the skill mix within CRHT teams. In the future the service intends to set up its own patient and carer forum as an additional source of feedback and to allow us to further understand and improve patient/carer experience.

Some studies have suggested that CRHTs may not reduce admissions as previously thought.\(^1\)\(^9\) Despite this the Five Year Forward View for Mental Health calls for ongoing expansion of CRHT resources, and so it is increasingly important that we understand the role and function of the CRHT and further explore how continuity of care relates to clinical performance.\(^2\) Apparent limitations in continuity of care within the CRHT model may also carry unrecognised potential benefits, for example, in providing a greater breadth of therapeutic approaches to service users during the care episode, or by preventing staff burnout. Given the recognised variation in CRHT implementation the limitations of the CRHT model are likely subject to local circumstances, and further study is required within the context of other CRHT services.

**Conclusions**

Continuity of care within the CRHT model has been consistently identified as an issue at a national level. In this paper we present quantitative data and analysis on continuity of care within a single CRHT team. A lack of quantitative data limits the ability for comparison between CRHT services, and thus limits the conversation around optimisation of continuity of care. There is a need for further study of CRHT services with a view to understanding continuity of care in the model within the local and national context. Our data suggest that continuity of care is best achieved with focussed brief crisis interventions and we believe that this is best facilitated by early high-quality care planning to ensure the right professionals are involved in the care episode. We believe our approaches to ensure continuity of care and the interventions we have implemented following service evaluation will be of benefit to other CRHT service providers.

**Declaration of interests**

No conflicts of interest were declared.

Dr Titheradge is an ST4 Higher Psychiatry Trainee, 2gether NHS Foundation Trust, Severn Deanery and Dr Galea is a Consultant Psychiatrist, Clinical Tutor, Sussex Partnership NHS Foundation Trust and Honorary Senior Lecturer, Brighton and Sussex Medical School.

**References**

2. Galea A. Service feedback analysis, unpublished local data. 2015.
5. The Mental Health Taskforce. The five year forward view for mental health. February 2016.