Supervised community treatment in Birmingham and Solihull: first 6 months

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Aims and method To describe the first 6 months of the newly introduced community treatment orders (CTOs) in Birmingham and Solihull mental health services; to establish a clearer picture of patterns of use and some early outcomes. Computerised note systems were used to collect a range of sociodemographic and clinical data using a specially designed data collection tool.

Results We observed higher than expected numbers of CTOs compared with previous use of Section 25 supervised discharge. Our results were consistent with international studies in showing that CTOs are typically used in males aged around 40 with a primary diagnosis of psychotic illness. Compared with the census population, Black and minority ethnic groups were overrepresented in our sample. There were high recorded rates of comorbid alcohol or substance misuse and violence. The majority of patients on CTOs were being followed up by community mental health teams or assertive outreach teams.

Clinical implications It is difficult to draw firm conclusions at this early stage of implementation. However, there are likely to be resource implications in view of the high numbers of CTOs applied compared with Section 25 discharge. Service providers, clinicians and commissioners need to ensure CTOs are backed up by high-quality care. Further research is required into the impact of CTOs on a range of outcomes and to understand differential rates of CTO across different ethnic groups.

Declaration of interest None.

Community treatment orders (CTOs), under the new provision for supervised community treatment, were arguably the most controversial aspect of the 2007 reform of the Mental Health Act 1983. The CTO allows for specific conditions to be associated with continuing community treatment following discharge from hospital, such as adherence to medication or place of residence, among others. Strong opposition was expressed from within the psychiatric profession, user groups and carers. Opponents argued that there was lack of evidence of efficacy, that CTOs were unethical, that use of compulsion would increase and that CTOs would be used as a substitute for adequately resourced care in the community. Proponents countered that CTOs would allow treatment in the least restrictive setting: 'There is no compelling reason for involuntary treatments to be linked indelibly to particular buildings anymore.'[1]

Community treatment orders allow for involuntary treatment in the community for anyone who has been detained under Sections 3 or 37 of the Mental Health Act 1983 as amended by the 2007 legislation. Individuals placed on CTOs may be recalled to hospital by the responsible clinician if there is evidence that they need hospital treatment for a mental disorder and there would be risk of harm to the health or safety of the individual or to other persons if they were not recalled. Once in hospital, treatment may be given, including use of force. The responsible clinician, with the agreement of an independent approved mental health practitioner, also has the option to revoke the CTO if criteria are met for a Section 3 detention, in which case the person becomes subject to detention again in hospital, under the original Mental Health Act section, and a new 6-month period starts from the date of revocation.

Following the advent of the new legislation, and more specifically, the introduction of the community treatment order, there was a 6-month period during which patients who had previously been subject to the provisions of Section 25a (supervised discharge) could be placed on a CTO without having had to have been readmitted to hospital.

The powers available under Section 25a supervised discharge were more limited than those of the CTO. Individuals subject to the former were liable to be conveyed to a suitable place where a formal Mental Health Act assessment could be undertaken to determine whether they needed to be detained once more. They were not subject to the possibility of formal recall to the same section of the Act

under which they were previously detained, without the need for a full new assessment, as are those now placed on a CTO.

We sought to gain a clearer understanding of patterns of use in Birmingham and Solihull and compare results with CTOs in other jurisdictions. We also measured some early outcomes data including recalls, revocations and discharges.

Method

The study was approved as a clinical audit by the Birmingham and Solihull Mental Health NHS Foundation Trust's clinical governance department. The Trust's IT department provided a list of all new CTOs from 3 November 2008 to 3 May 2009. They also obtained a record of all recalls, revocations and discharges from 3 November 2008 until 24 May 2009.

Computerised notes systems were used to collect sociodemographic data including age, gender and ethnicity, as well as duration of admission, Section 17 leave, recalls and revocations for all patients made subject to a CTO during the relevant period (3 November–3 May). Discharge summaries provided information on clinical diagnosis, use of depot antipsychotics, alcohol and substance misuse, risk history and community team (e.g. community mental health, assertive outreach, early intervention teams).

Results

In the 6-month period studied (3 November–3 May) a total of 104 patients were discharged on a CTO; 80 were males (76.9%) and the majority were White (37.5%) (Table 1). The mean age for the total sample was 40.6 years (range 19–85). Overall, 92 patients were previously detained under Section 3 (88.5%), 4 under Section 37 (3.8%) and only 8 were converted from Section 25 supervised discharge (7.7%).

During the 6-month period, 20 patients were recalled, and of these 14 were revoked to either Section 3 or 37. Of these 14 patients, 12 were still detained in hospital at the end of the 6 months. Only two patients were discharged from CTO: one by a mental health review tribunal and one by the responsible clinician. There were three deaths. Hence, at 6 months there were a total of 99 patients still under a CTO (including the 12 who had been revoked and were detained in-patients).

Table 1 shows ethnicity of patients on CTOs. For clarity, subcategories such as White British, White Irish, White Other have been collapsed into the broad categories of White, Asian and Black.

All but three patients ($n = 101$, 97.1%) had a history of psychotic illness, either schizophrenia or related disorders or bipolar disorder with psychotic symptoms (Table 2). The non-psychotic group comprised two patients who had bipolar disorder without psychotic symptoms and one patient with anorexia nervosa. In terms of risk history, criteria were fairly broadly defined, for instance, patients were recorded as having a history of violence if there was mention in clinical notes (discharge summaries, correspondence, care programme approach documents) of a history of violence or physical aggression. For practical purposes we did not set a threshold for severity of actual violence or require objective evidence such as arrests or convictions.

We attempted to ascertain how many patients on CTOs had previously been managed by use of extended periods of Section 17 leave (as opposed to, for example, Section 25). We looked at total duration of consecutive Section 17 leaves preceding the CTO. Unfortunately, a large number of patients ($n = 53$, 51%) had not had any Section 17 leave recorded on the computerised database. Given that it would be unusual not to have had any overnight leave before discharge from Sections 3 or 37, we felt this was most likely due to inaccurate recording. Nevertheless, in those cases where consecutive periods of Section 17 had been recorded, they ranged from 1 to 243 days. Furthermore, a large number of this subgroup ($n = 21$, 41.2%) had been granted over 28 days consecutive Section 17 leave before the CTO. Table 3 summarises other aspects of service use and early outcomes.

Discussion

Birmingham and Solihull Mental Health NHS Foundation Trust serves a geographically large and culturally diverse estimated population of 1.2 million. Given that the Trust has a total of 99 people still subject to a CTO, this is equivalent to 8.25 people per 100 000 population under a CTO after the first 6 months. This compares with 3.2 people per 100 000 population under a CTO after the first 6 months in Scotland.[2] A study by the King's Fund estimated that numbers of CTOs would build over a period of some years to between 15 and 30 per 100 000 population.[3] The same

Table 1 Ethnicity of patients on community treatment orders in Birmingham and Solihull in the first 6 months after implementation ($N = 104$)

Ethnic background	CTO *n* (%)	All detentions[a] %	All service users[b] %	2001 census[c] %
White	39 (37.5)	54.0	75.4	74.5
Asian	25 (24.0)	19.0	13.3	16.6
Black	28 (27.0)	19.0	6.6	5.2
Other	12 (11.5)	8.0	4.7	2.7

CTO, community treatment order.
a. All detentions within Birmingham and Solihull Mental Health NHS Foundation Trust from January to December 2008.
b. All service users seen in the Trust between 1 April 2008 and 31 March 2009.
c. Office of National Statistics, 2001 Census, Birmingham.

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Table 2 Clinical characteristics of the study sample

	n (%)
Clinical diagnosis	
Schizophrenia/related disorders	81 (77.9)
Bipolar affective disorder[a]	22 (21.1)
Anorexia nervosa	1 (1.0)
Alcohol/substance misuse	64 (61.5)
Risk history	
Violence	96 (92.3)
Neglect	83 (79.8)
Self-harm	45 (43.3)

a. Including patients with and without psychotic symptoms ($n = 20$ and $n = 2$ respectively).

Table 3 Service use and early patient outcomes

Previous admissions, *n* (%)	
1	6 (5.8)
2	15 (14.4)
3–5	46 (44.2)
>5	36 (34.6)
Missing data	1 (0.96)
Duration of admission pre-CTO, days	
Mean	195.4
Range	3–1449
Depot medications, *n* (%)	68 (65.4)
Community team, *n* (%)	
CMHT	36 (34.6)
AOT	34 (32.7)
EIS	16 (15.4)
Forensic	7 (6.7)
Other	11 (10.6)

CMHT, community mental health team; AOT, assertive outreach team; EIS, early intervention team; CTO, community treatment order.

report predicted significant regional variations in the use of these orders. In our own Trust, use of CTOs has been much higher than previous use of Section 25 supervised discharge as reflected by the relatively low number ($n = 8$) of Section 25 orders that were converted to CTO.

Sociodemographic characteristics

Our study is remarkably consistent with international studies of other forms of CTOs, which have shown a preponderance of males (mean 52%; range 53.8–71.8), with mean ages ranging between 36 and 41.3 years.[4]

Our study shows important differences in use of CTO in different ethnic groups (Table 1). Compared with the census population, Black and minority ethnic groups, especially the Black service users, are overrepresented in the CTO group. These results replicate other UK studies, which also have shown elevated rates of detention under the Mental Health Act for Black and minority ethnic groups.[5] Similar findings have been reported in other countries. Current US census data recorded 21.6% of the North Carolina population as being Black or African American but 66.2% of patients on a CTO in that state were African American.[6]

No studies have unambiguously explained the differential in rates of detention in minority ethnic groups. Possible mechanisms include confounding factors such as social or economic deprivation, culturally determined models of illness, differences in help-seeking behaviour and biases in assessment of risk and dangerousness.

Clinical characteristics

Schizophrenia and related disorders were the main diagnoses for those placed on a CTO in the present study (77.9%). This is consistent with international data across a range of jurisdictions, where rates of schizophrenia were reported as ranging from 34.8 to 93% for individuals subject to supervised community treatment orders.[4] Rates of alcohol and substance misuse, however, have varied widely; for example, in the USA, from 17.2% in Iowa[7] to 57% in North Carolina.[8] In New Zealand, rates of comorbid substance use were 19.3% for illicit drugs and 28.2% for alcohol.[9]

The present study also mirrors findings of international studies in showing that the majority of patients on a CTO have had multiple previous admissions. Although targeted at so-called 'revolving door patients', a randomised controlled trial[10] and review of the literature[11] have failed to demonstrate a significant reduction in bed days between patients subject to CTO and controls. In the UK, the study by Burns *et al*[12] (Oxford Community Treatment order Evaluation Trial, OCTET) is a randomised controlled trial of CTO *v.* voluntary out-patient treatment. This is likely to provide more detailed information about the question of whether CTOs offer any advantages over voluntary community treatment (with or without short periods of Section 17 leave preceding discharge) on a range of outcome measures. What these empirical trials cannot answer, however, are the equally important values-based questions. Even if CTOs can be shown to reduce bed occupancy, what is the relative value that society places on this as an outcome *v.* other outcomes such as loss of autonomy, quality of life, public protection, etc?

Risk history

Our study shows very high reported rates of previous violence among patients subsequently made subject to a CTO (92.3%), albeit the criteria used were fairly broad. Surprisingly, few studies have reported on this area. In North Carolina, Swanson *et al*[8] reported that 51% had a history of violence in the 4 months before being placed on a CTO, whereas in New Zealand only 38.2% were recorded as having a history of aggression.[9] What is not known is the extent to which violence was the deciding factor in whether CTOs were used in individual cases in our sample. A study of English consultant psychiatrists' willingness to recommend a CTO concluded that non-adherence and disengagement were the most important considerations, whereas criminal charges or dangerousness were not.[13] Similarly, in New Zealand, psychiatrists reported that reduction in violence risk was less important when deciding whether to use a CTO than other factors such as authority to treat without consent and protection of the patient from the consequences of their illness.[9] These findings are important, although they might reflect differences in practice, in the legislation, or possibly even a reluctance on the part of psychiatrists to admit to the use of compulsion in an attempt to reduce risky behaviours.

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Previous Section 25 and long-term Section 17 leave

There are far more patients described here subject to CTOs since their introduction than there were on supervised discharge orders. The reasons for this are unclear and warrant further investigation. It may be that clinicians feel more confident that the CTO provides a better structured and increasingly powerful form of intervention, in particular in relation to the possibility of recall to hospital, which did not previously exist other than for conditionally discharged restricted patients. Conversely, they may have had little faith in the value or usefulness of supervised discharge. There may also possibly have been the perception that it is easier to implement the CTO than it was to use supervised discharge. In addition, clinicians might feel that they have a clearer understanding of which patients should be considered for a CTO. Last, the discrepancy in the figures between those previously on Section 25a and those now on a CTO may be accounted for by a relatively large number of patients who were previously managed on long-term Section 17 leave from hospital and, therefore, still liable to detention, being placed on a CTO once the new legislation came into force. This latter group has not been captured accurately in our study due to poor rates of recording of Section 17 leave on the electronic database (49%).

Community services

We found higher than expected numbers of CTOs within community mental health teams (CMHTs) ($n = 36$, 34.6%) compared with assertive outreach teams ($n = 34$, 32.7%). It is unclear to what extent this reflects the higher number of patients under CMHTs compared with assertive outreach teams or, possibly, different thresholds for use of compulsion. Given that the typical characteristics of patients under CTO in our study overlap considerably with criteria for assertive outreach, one might have expected the majority to be under assertive outreach teams. Notwithstanding the lack of evidence for assertive outreach in reducing admissions in the UK,[14] it remains to be seen whether CMHTs are sufficiently resourced to supervise and deliver high numbers of CTOs in the long term. From an ethical perspective, the principle of reciprocity states that restriction or removal of civil liberties for the purpose of care must be matched by adequate quality of service. The available literature also suggests that if CTOs are to work, they will need to be backed up by high-quality, adequately resourced services. A secondary analysis of outcomes in the randomised trial by Swartz *et al*[15] in North Carolina demonstrated favourable results in terms of readmissions and occupied bed days for a subgroup of patients who had been on a CTO for at least 6 months and had had three or more clinical contacts in the past month. Further studies are required to look into the impact that community services have on the likelihood of being placed on a CTO and, if so, the success or failure of the CTO thereafter.

Limitations

As this was a study of electronic patient records, the quality is dependent on accuracy of data recording. There is likely to have been variation in the accuracy of data entry across different sites. The sample is likely to be unrepresentative of future CTOs. A significant number were already being treated under a form of *de facto* CTO and may be more 'difficult' than future CTOs.

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