

# The subjective experience of community treatment orders: Patients' views and clinical correlations

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## Abstract

**Background:** There is little objective evidence to support the use of community treatment orders (CTOs) from randomized controlled trials. Qualitative research indicates more negative than positive responses to the use of CTOs. Nonetheless, the use of CTOs is growing internationally. There is no research to identify for whom CTOs may be a positive experience.

**Aim:** To assess patients' perspectives of CTOs, assessing for correlates with clinical and demographic variables.

**Methods:** Patients currently or previously subject to a CTO were assessed quantitatively to identify their experience. Demographic data, the experience of coercion, views of detention, satisfaction with care, social functioning and psychopathology were correlated using SPSS.

**Results:** Fifty-three per cent of patients felt that they were, on balance, better off when treated informally in the community. Patients described greater coercion and less satisfaction with care when subject to a CTO. These factors, and being in employment, identified patients whom felt harmed by CTOs 61% of the time.

**Conclusions:** This paper highlights that more than half of patients under a CTO consider it negatively. This group is identified by patients who work, experience coercion and are unsatisfied with care. This has implications for the application of CTOs.

## Keywords

Community treatment orders, community mental health teams, ethics, psychiatry and law, capacity and consent

## Background

Community treatment orders (CTOs) are court orders that provide a legal mechanism for compulsory treatment in the community (Mental Health (Compulsory Assessment and Treatment) Act 1992) and have been widely introduced internationally in line with the significant reduction in psychiatric hospitalization for mental disorder. CTOs require patients to accept treatment and, should they refuse, gives the responsible clinician (an approved psychiatrist) the power to recall them to hospital to enforce treatment. By implication, patients, if choosing autonomously, would not accept such treatment, the basis of the CTO being the conflict in values between the patient and psychiatrist as to what is in the patient's best interest. Although such conflicts occur in medicine regularly, CTOs represent an overt expression of this conflict.

Opposition to CTOs has come from both professional and community groups and arguments against their adoption are both philosophical and evidence based. From a bioethical perspective, CTOs reduce a patient's autonomy, effectively limiting their choices to accepting treatment in

the community or being recalled to hospital to accept treatment. This is coercive and the qualitative literature identifies this as not for the patient's benefit (Newton-Howes & Mullen, 2011). CTOs also potentially harm the patient, both by infringing on their freedoms and also by requiring them to likely accept medication irrespective of their capacity to refuse, which is likely to be intact (Okai et al., 2007). The balance to this is the benefits implicit in coercive treatment, identified quantitatively in randomized controlled trials and qualitatively in understanding the patient experience.

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Two major international randomized controlled trials have been conducted in the USA to assess outcomes of CTOs in New York (Steadman et al., 2001) and North Carolina (Hiday & Scheid-Cook, 1989; Swartz et al., 1999; Swartz, Wagner, Swanson, Hiday & Burns, 2002). Both report negative findings in their primary outcome of readmission. This is also the finding of a recent large-scale trial in England (Burns et al., 2013). This evidence does not support the use of CTOs to minimize 'the revolving-door syndrome' (Appelbaum, 2001), although other analyses find improvements in medication adherence (Vaughan, McConaghy, Wolf, Myhr & Black, 2000), violence (Swanson et al., 2000) and contact with community mental health teams (Hiday & Scheid-Cook, 1989). The Cochrane review of CTOs was unable to find positive outcomes in the research literature to support their use (Kisley, Campbell & Preston, 2011), mirroring these trial findings. These quantitative data are objective and on balance do not strongly support the benefits of CTOs from this perspective.

The major qualitative study into the views of patients detained under CTOs collected data from 42 patients in early 2000 (Dawson & Romans, 2001). This research highlighted a number of themes associated with CTOs, both positive and negative. Positive themes were broadly based around increased access to services and advantages of CTOs over homelessness or hospitalization. Negative themes reflected the loss of autonomy experienced by patients, the coercion of medication and stigma attached to detention (Gibbs, Dawson, Ansley & Mullen, 2005). Qualitative research generally reflects these mixed views in patients about CTOs, although it is more negative than positive. The coercive nature of CTOs is a repeated theme. This evidence would not appear to reflect personal benefits on CTOs from a subjective perspective, although it suggests that some patients may have positive experiences as well as negative. Due to the methodologies employed to date, it is not possible, however, to identify, using statistical approaches, the characteristics of those who might experience such subjective benefit.

The wider psychiatric literature on coercion has relevance as CTOs are a reflection of hospital-based coercion, such as forced admission or medication. Much of the literature suggests that enforced community treatment is preferable to patients and 'least restrictive', although there is large inter-country variation in patients' views of enforced hospital care (Priebe et al., 2010). The patient perspective is also recognized as a potential prognostic factor in coercive treatment (Priebe et al., 2009) and therefore important to assess.

Despite the lack of evidence that CTOs meet their primary objective of minimizing readmission and are reported to be experienced in a largely negative fashion by patients, legislation for their use is expanding internationally. In jurisdictions such as New Zealand where CTOs have 'bedded in' (Dawson, 2005), it is apparent that their use is increasing despite the lack of quantitative or qualitative

evidence. In New Zealand the use of CTOs has risen by 30% in the last six years (Ministry of Health, 2012) and early reported rates of use in England and Wales far exceed expectations (Care Quality Commission, 2009). It is unlikely that CTOs will be written out of law, nor their use stopped by psychiatrists, although their implementation has been argued to be highly variable across and within jurisdictions (Dawson, 2007). This makes identifying patients who find the application of CTOs as beneficial increasingly important. This would enable CTOs to be used in a targeted fashion, in patients whom are most likely to endorse their use. The methodology of previous research does not allow statistical correlation between subjective experience and clinical or demographic variables. This project was designed to do this, using quantitative measures to assess subjective experience of CTOs in order to identify correlations between clinical and demographic variables and a positive experience of CTOs.

## Methodology

### Study design

Bearing in mind the difficulties of the project, both in terms of assessing patients' subjective experience of CTOs and endeavouring to quantify these, focus groups with patients were arranged to discuss the nature of the project and how to take this forward. A collaborative approach between patients and researchers was used to appropriately capture the subjective experience of coercion, and the elements of the experience in the New Zealand context. The elements of mental disorder, social morbidity, coercion, satisfaction with care and the structure of CTO use were identified during these focus groups and guided the selection of instruments to administer. Patients considered the research important, expressing a hope that it would enable the best use of CTOs. Patients felt that any questionnaire should be completed by the patient to best reflect their view, using a self-report measure as opposed to research-completed measures. With respect to the process of data collection, it was considered important that 'professional patients' be involved in supporting patients to complete the questionnaires. By this the focus groups identified patients working in the role of patient supports or advocates, with a mixture of personal and professional experience of mental disorder. The reason expressed for this approach was to minimize the risk of patients feeling coerced in their responses. For this reason, the patient-run service Whatever It Takes (WIT) agreed to take on the role of assisting patients to complete questionnaires with appropriate training. WIT is a publically funded non-government organization that supports patients through the process of recovery. The need to emphasize to participants the anonymity of the study and its purpose as separate to clinical care was made explicit. The study was approved by the Southern Regional Ethics Committee.

## Sample

All patients subject to a CTO on 1 May 2010 for at least six months, and any patient who had been subject to a CTO for a minimum of six months prior to this date and cared for by secondary care services, were identified as potentially appropriate to complete the questionnaire. This population was similar to that of the Otago study.<sup>1</sup> One hundred and three patients were detained on CTOs on this day. It was not possible to identify the total number of potentially eligible previously detained patients as a snowball approach was used to identify these patients (King et al., 2003). Previous research identifies that the experience of coercion is not affected by timing of interview (Newton-Howes & Stanley, 2012) and timing of detention was therefore not considered to be an exclusion criterion. All patients included in the study were under the care of a psychiatrist and had the capacity to complete the questionnaires. All patients were adults. Although childhood community detention was not an exclusion criterion (and allowed under law), no children were identified.

## Study tools

A number of tools were used to collect information based on the criteria as defined in consultation with patients. These tools were designed to appropriately assess clinical and social variables that could potentially be used to statistically identify individuals for whom a CTO may be experienced positively. In conjunction with these, a 14-question Likert scale was developed based on the Otago CTO study's semi-structured interview. This tool was used as the starting point for the discussion as to the relevant aspects of the experience of CTOs as: it is a New Zealand study and culturally appropriate; it provides subject domains of experience garnered from qualitative research; it covers multiple social interactions related to the application of CTO use; and it is widely quoted in the literature. The tool underwent a number of iterations in focus groups until a set of questions acceptable to patients as reflecting the experience of CTOs and in line with the Otago study were agreed upon. These questions reflected the major themes of the Otago study in New Zealand where this the present study was conducted (see Appendix 1). Coercion was measured using the MacArthur Perceived Coercion Scale (MPCS) (Swartz et al., 1999) and patient satisfaction with services was measured using the Client Satisfaction Questionnaire (CSQ) (Atkinson & Zwick, 1982). Personality disorder was screened for using the Standardised Assessment of Personality – Abbreviated Scale (SAPAS-R) (Moran et al., 2003), a brief tool, acceptable to this group of patients with a positive predictive value in secondary care for personality disorder of 80%. Psychopathology was measured using the Hopkins Screening Checklist (SCL) (Derogatis, Lipman & Cori, 1973). Finally, social functioning was measured using

the Social Functioning Questionnaire (SFQ) (Tyrer et al., 2005). Information with respect to primary diagnosis was checked in the patient file. The MPCS, SAPAS-R, SCL-R and SFQ are all peer-reviewed published tools with validity for use in a secondary care setting.

## Analysis

All analysis was carried out using SPSS version 18. Univariate associations were calculated between previously detained and currently detained patients to assess the difference in respect to views of coercion, satisfaction with care and social functioning. Similarly, univariate associations between the degree of coercion and the patients' view of CTOs with the variables diagnosis, functioning and demographics were undertaken. Statistical significance was set at  $p = .05$  for comparative analysis.

Discriminate analysis was undertaken to assess how the experience of CTOs varied compared to the most commonly identified characteristics of patients under a CTO – gender, ethnicity, age and diagnosis – and those variables identified in this study group in correlational analysis. This approach was used to model the factors most commonly associated with a positive view of CTOs independent of each other. It was hypothesized a priori that this analysis would enable a number of variables to be identified that would predict subjective benefits of CTO use and this would be of clinical significance.

As no other quantitative data on the subjective experience exist in the literature, no benchmarks exist from which to adequately assess sample size. From this perspective, this study can be considered exploratory. Nonetheless, a rule-of-thumb approach was used and more than 30 participants was considered necessary in each sample group for association analysis and more than 50 participants for the discriminant analysis (Carmen, Van Voorhis & Morgan, 2007) to give an 80% power to detect a medium to large effect size.

## Results

### Demographic and clinical variables

Seventy-nine patients participated in the study. Fifty-eight per cent were male with an average age of 42 years. Socially the group had an average of 10 years' schooling with 18% in current employment. Twenty per cent were in a relationship and 42% identified as Maori, 38% Pakeha and 9% did not identify their cultural group. This compared to 53% male, 19% in employment and 34% Maori in the secondary mental health service as a whole. As such, the sample group was largely comparable to the population of the mental health service where the study was undertaken.

Clinically, all patients were engaged in secondary care services, 13% by specialized kaupapa mental health services

**Table 1.** Univariate correlation comparing subjective experience of detention with demographic and clinical variables.

	Preference for CTO	Preference for informal treatment	<i>p</i>
<b>Demographics</b>			
Male	22	16	<b>.05</b>
Age (years)	41	44	.37
Working	3	10	.06
Maori	16	12	.22
Years of education	16	16	.21
Partner	7	7	.81
<b>Diagnosis</b>			
Schizophrenia	19	19	.46
Bipolar affective disorder	4	7	
Psychosis	4	5	
Personality disorder	14	16	.96
Coerced <sup>a</sup> ( <i>M</i> )	1.75	3.18	<b>&gt; .01</b>
Satisfied with care <sup>b</sup> ( <i>M</i> )	26.38	20.29	<b>&gt; .01</b>
Social function ( <i>M</i> )	8.90	7.92	.34
Currently detained	24	14	<b>.01</b>

<sup>a</sup>Coercion scores are the mean of the MPCSC. Lower scores indicate lower perceived coercion.

<sup>b</sup>Satisfaction scores are the mean of the SFQ. Higher scores indicate better social functioning.

Note: Correlations were measured using Spearman's  $\rho$  (non-parametric assumptions). Figures are absolute numbers of patients for demographic and diagnostic parameters. Coercion satisfaction with care and social functioning are the means of the MPSC, CSQ and SFQ, respectively. Eleven patients did not answer the question as to whether they were better off detained under a CTO.

(cultural-specific services). Schizophrenia was the most common diagnosis (58%) with bipolar affective disorder (17%) and other psychotic disorders (11%) accounting for the majority of mental state disorder. Fifty-six per cent of patients screened positive for a personality disorder, although this diagnosis was rarely made clinically. Most patients were supported by a psychiatrist and second health professional. All but three patients were taking psychotropic medication, 83% using a supervised or enforced method, 32% in injectable form and 51% supported by a worker monitoring medication adherence on a daily basis.

### Patients' views on CTOs

Coercion was measured using the MPCSC. The mean MPCSC score for the whole sample was 2.5 (SD = 1.6). Unlike other samples studied using the MPCSC this sample was not bimodal in distribution with little skew. No correlation was found between current detention and MPCSC score when compared to previously detained patients ( $p = .88$ ).

Of the 14 structured questions asked to ascertain the views of patients (see Appendix 1) with respect to CTOs, the statements most endorsed were 'I take my medication because of my CTO', 'I (dis)like being under a CTO' and 'I find going to court upsetting'. Patients did not, however, report CTOs as interfering with the therapeutic alliance, this being the statement with least endorsement. All 14 questions produced bimodal distributions, with the majority of patients either strongly agreeing or disagreeing with the question's content.

Forty-seven per cent of patients reported being 'better off', according to their own criteria, when managed under a CTO, considered as a unitary construct. Table 1 displays the characteristics that correlate with the patients' perspective of whether use of a CTO is, on balance, in their interest. Table 1 shows that gender differentiates the two groups, with men more likely to view CTOs positively. Interestingly, currently detained patients considered themselves better off under a CTO when considered as a unitary concept, compared to previously detained patients. Patients who considered themselves better off when not under a CTO reported significantly more coercion, and less satisfaction with their care when placed on a CTO. Patients who felt that they were better off treated informally were more negative in response to 11 of the 14 questions asked to ascertain their views with regard to the specific domains of CTOs. There was a significant correlation between the subjective experience of CTOs as unhelpful and coercion ( $p < .01$ ).

### Comparative analysis of patients subject to a CTO currently vs previously

As currently detained patients reported their CTO in a more positive fashion, comparison between currently and previously detained patients was undertaken. At the time of completing the questionnaire, 60% of the sample was under the care of a CTO. Comparison between these groups did not identify clinical or demographic differences other than in work status, with more currently detained patients unemployed. No difference in coercion, social functioning or

**Table 2.** Univariate correlations comparing currently and previously detained patients with demographic and clinical variables.

	Currently on CTO	Previously on CTO	<i>p</i>
<b>Demographics</b>			
Male	26	20	.53
Age (years)	41	44	.23
Working	3	11	<b>.01</b>
Maori	19	13	.93
Years of education	16	16	.33
Partner	9	7	.77
<b>Diagnosis</b>			
Schizophrenia	31	15	.13
BPAD	6	7	
Psychosis	5	4	
PD	21	13	.66
Coerced ( <i>M</i> )	2.45	2.53	.88
Satisfied with care ( <i>M</i> )	23.32	22.81	.65
Social function ( <i>M</i> )	8.50	8.52	.98

Note: Correlations were measured using Spearman's  $\rho$  (non-parametric assumptions). Figures are absolute numbers of patients for demographic and diagnostic parameters. Coercion satisfaction with care and social functioning are the means of the MPSC, CSQ and SFQ, respectively.

satisfaction with care was identified between the two groups (Table 2). Of the 14 structured questions asked to identify the specific domains of CTOs, currently detained patients were more likely to state 'I only take my medication because of my CTO' ( $p = .049$ ).

### Canonical discriminant analysis of the variables associated with CTOs

Age, gender, ethnic grouping and schizophrenia, the variables most commonly associated with CTOs in the literature, were entered into the analysis with those variables associated with CTOs in this sample (coercion, satisfaction with care and employment status) in order to model which patient characteristics would predict a negative view of CTOs. The assumptions of discriminant analysis were assessed and the sample considered appropriate. Box's *M* was not significant ( $p = .07$ ) while Wilk's  $\lambda$  was significant ( $p = .001$ ), indicating that the discriminant equations were statistically relevant.  $R^2 = 0.46$ , identifying that this analytic approach accounted for 46% of the variance in the data set. The variables decreased coercion, satisfaction with care and work were associated with the view that it was better not to be under a CTO, taking each other variable into account. Gender was no longer a predictor of grouping. The model predicted those who considered themselves better not under a CTO 61% of the time and those who considered themselves better under a CTO 88% of the time (Table 3).

## Discussion

This study was designed to assess the subjective experience of CTOs in patients and to allow for statistical modelling to predict who may experience this as a positive component to

**Table 3.** Discriminant analysis.

	Structure matrix
Satisfaction	0.74
Coercion	-0.65
Work	0.32
Ethnicity	-0.18
Social functioning	0.17
Gneder	0.08
Schizophrenia	0.03
Age	0.01

Note: The accepted cut-off score for relevance is 0.3.

recovery. To the authors' knowledge, this is the first time that a study has been undertaken to assess personal experience of patients subject to CTOs using quantitative measures to inform clinical experience. This is important as there is little objective evidence that CTOs are beneficial and clear ethical problems remain with their use. This study was designed to better understand the subjective experience of patients and assist with clinical decision-making as to the likely benefits in the application of a CTO in individual patients.

As in previous research, the experience of coercion is related to CTOs but in this study it did not have a bimodal distribution. The reasons for this are unclear; however, most research into the use of CTOs are in the initial stages of their implementation for both patients and clinicians, and it may be that patients experience less negative affect with a treatment strategy they are familiar with either personally or within their social network. Indeed, remarkably almost half of the patients given the 'forced choice' stated that they were better off on a CTO rather than off it. This

shows that for these patients in a well 'bedded in' system, many recognized a personal benefit associated with the CTO. Juxtaposing this is the strong negative associations reported with attending court; however, this only occurs every six months for the first year and then ceases. From a values perspective, it may be the obvious loss of autonomy that the court process entails that leads to this finding, although this assertion has not been considered in the literature to date. It is also possible that, for a significant proportion of the patients in this study, the constant requirement of medication adherence drives the experience of coercion, although it is argued that adherence is one of the positive feature of CTOs (Muirhead, Harvey & Ingram, 2006). There is a clear association with poor adherence to medication and poor outcomes for some psychiatric groups, and the balance between the patient's right to choose to be medication free, even if this is likely to lead to a poorer outcome, and the requirement to comply with treatment is beyond the scope of this paper, although it is an important bioethical consideration.

The Otago study completed in New Zealand a decade ago concluded: 'The usefulness of community treatment orders is accepted by most patients under them in New Zealand, as well as by most psychiatrists. Critical factors include the quality of therapeutic relationships and the structure provided for community mental health care' (Gibbs et al., 2005, p. 357). Of all domains related to the use of CTOs in New Zealand, in this study the therapeutic alliance was considered most separate. This would suggest that this is in fact of the least importance. Interestingly, however, almost half of this sample considered themselves better off when managed with a CTO, which would in part support the assertion that many patients accept that CTOs have a utility for them. This adds weight to the need to clearly identify for whom CTOs may provide subjective benefit.

Patients who identified CTOs as impairing their day-to-day functioning expressed greater coercion and less satisfaction with care. Although this is perhaps unsurprising, for this group of patients there can be little doubt that, from a patient perspective, detention 'harms' them and this factor requires clinical consideration when a CTO is used.

Discriminant analysis was used with an a priori design to attempt to develop a model to assist clinicians with decision-making as to which patients might most benefit from a CTO. This model poorly predicts those who would prefer not to be detained, correct only two thirds of the time. It identifies patients who are generally satisfied with care, have a low experience of coercion and are in work as likely to subjectively support the use of a CTO. These questions could be used to guide clinical practice in using CTOs in a positive way. However, this model accounts for only half of the statistical variability of this data set and is at best a guide to clinical practice.

## Limitations

Like all studies there are a number of limitations in the findings. First, this is a relatively small sample from a single jurisdiction, one for which type II error cannot be ruled out. Although this potentially limits the generalizability of the study, the sample is almost twice the size of the influential Otago study and the rule of thumb used in psychological statistics suggests that statistical error due to chance is unlikely. Second, the use of self-reported instruments potentially limits the objectivity of the study. The intention of the study was to understand community detention from the patient's perspective. Therefore, in the study's conception, self-report research instruments were considered important to appropriately measure this. They also potentially reflect the patient's opinions more clearly than objective measures. Third, the study did not gather the views of all patients placed on CTOs, although the surveyed sample matched the clinical sample of the area in basic demography. Finally, this study did not use qualitative methods to more fully inform the quantitative findings and such mixed methodology may provide a richer picture of the subjective experience of care under a CTO.

## Conclusion

Previous authors have concluded: 'The precise impact of community treatment orders on patients' quality of life remains an open question. Until that matter is more clearly resolved, New Zealand law should continue to authorize compulsory outpatient care; provided it is carefully targeted and adequate community services are available' (Romans, Dawson, Mullen & Gibbs, 2004, p. 836). Since this time, three randomized controlled trials have been conducted with negative primary findings. The present study suggests that from a patient perspective, there is a split between those who find CTOs of benefit and those who find them detrimental to their lives. More importantly, it may be possible to identify those patients who find CTOs to be of value. This has both clinical utility and ethic relevance. Similar research, with a larger sample and using mixed methods, is needed to more clearly identify these sub-populations to improve the clinical use of CTOs.

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## Appendix I

### Questions asked in relation to CTOs

Do you find a CTO 'traumatic'?	Yes	A little	No opinion	Not Really	No
Are your rights violated by a CTO?	Yes	A little	No opinion	Not Really	No
Does a CTO give you a 'safety net'?	Yes	A little	No opinion	Not Really	No
Does a CTO make it more difficult to get on with your doctor?	Yes	A little	No opinion	Not Really	No
Does a CTO make it harder to trust your doctor?	Yes	A little	No opinion	Not Really	No
Does going to court upset you?	Yes	A little	No opinion	Not Really	No
Do you like being on a CTO?	Yes	A little	No opinion	Not Really	No
Do you only take your medication because of the CTO?	Yes	A little	No opinion	Not Really	No
Does the CTO interfere with your social life?	Yes	A little	No opinion	Not Really	No
Does the CTO stop you working?	Yes	A little	No opinion	Not Really	No
Does the CTO make you unhappy?	Yes	A little	No opinion	Not Really	No
Does the CTO help with your care?	Yes	A little	No opinion	Not Really	No
Does the CTO protect you?	Yes	A little	No opinion	Not Really	No