

# A pilot study of the utilisation and outcome of community orders: Client, carer, case manager and Mental Health Review Tribunal perspective

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## Abstract

*Mental health problems are a major public health concern due to their prevalence and impact at a personal, family, social and economic level. Compulsory community treatment is being utilised as a health care approach, despite much disagreement and lack of Australian research demonstrating its effectiveness. This pilot study investigated the utilisation and outcomes of community orders from the perspective of a client, carer, case manager and Mental Health Review Tribunal member. The findings indicate that compulsory community treatment had a positive impact upon hospital readmission rates and medication usage. All groups of respondents rated community orders as being of benefit in a number of areas. Further controlled studies are required.*

## Introduction

Mental health problems constitute a major public health problem and are associated with a substantial level of disability in terms of personal distress and suffering, and disruption in occupational and social functioning. They also have a significant economic and humanitarian impact on families and the community. Relapse and chronicity are common, with risk of ongoing morbidity and mortality (Sartorius et al. 1993). The tabling of the New South Wales *Mental Health Act 1990* has allowed mental health services, through health care agencies, to intervene with compulsory community treatment as an alternative to hospitalisation. One of the principal objectives of the Mental Health Act is that

care received by patients with a mental illness or mental disorder be not only effective, but also of the least restrictive kind. Interference in a person's rights, dignity and self-respect is to be kept to a minimum in providing this care. The intent of compulsory community treatment in the form of Community Counselling Orders and Community Treatment Orders is to compel people with a mental illness who, due to the nature of their condition ordinarily refuse, to comply with treatment. Community orders may thus assist in ensuring access to effective treatment.

The adoption of compulsory community treatment has generated much disagreement and concern about its nature – that it is intrusive, disempowering, and breaches trust and confidence. There are concerns over civil liberties – a person's right to self-determination, the right of mental health professionals to enforce treatment, and the potential for abuse without appropriate review mechanisms and patient advocacy. Its effectiveness as a treatment approach needs to be demonstrated and whether it may have a negative impact on the therapeutic alliance. Finally, there are service issues – it may obscure service inadequacy, or be used as a substitute for adequate community care and to reduce cost (Swartz et al. 1995; Ford & Rigby 1996).

Mental health problems have significant negative impacts upon family processes and resources. Family members or carers of people with a serious mental illness may experience a great deal of distress and disruption to their lives. They are burdened with the responsibility of care, dealing with family conflict and with the emotional and psychosocial problems arising from their family member's mental illness. Any change in mental health care practice is going to affect not only the client but also their family. McFarland et al. (1990) surveyed 260 family members of mentally ill clients, asking their opinion on their experiences with compulsory community treatment. Fifty-seven per cent of respondents agreed with compulsory community treatment and medication but requested more information about the illness and the legal processes, and to be assigned a mental health professional. Further research is needed on the impact of community orders on families.

Assertive community mental health treatment for people with serious mental illness has been associated with improvements in clinical status, independent living, social functioning, sheltered employment, medication compliance and quality of life, reduced hospitalisation, and cost-effectiveness (Drake & Burns 1995). Arguments have been put forward that effective assertive community treatment may lead to improved outpatient compliance and care without the need for compulsory community treatment (McGrew et al. 1995; Swartz et al. 1995; Ford & Rigby 1996).

Although there is a lack of controlled studies into the effectiveness of compulsory treatment, the current literature indicates that it has had a positive impact on reducing re-hospitalisation rates and length of stay, increasing medication compliance, and reducing levels of dangerousness and, to a lesser degree, after care programs and service to clients (Greeman & McClellan 1985; Hiday & Scheid-Cook 1989; Fernandez & Nygard 1990; Sensky, Hughes & Hirsch 1991a; Swartz et al. 1995). There is less emphasis in the above research on the impact of compulsory community treatment on psychosocial functioning, quality of life, client and carer satisfaction, burden of care, perceived distress and rehabilitation outcomes.

Australian research is needed to evaluate the effectiveness of compulsory community treatment as a form of mental health care, taking into account local factors such as models of service delivery, availability of resources, differing socio-demographic variables and differences in legislation.

The purpose of the pilot study reported in this paper was to determine the utilisation and outcomes of community orders from the perspective of a client, carer, case manager and Mental Health Review Tribunal member.

## Method

A structured database form was used to record demographic information, psychiatric history and information about community orders, including date of first order, nature of order, and treatment plan and objectives, and medication and admission information. Admission information was collected for each patient for two separate periods – 12 months before being placed on their first community order and for the same period after.

The nature of the treatment plan was recorded in the following categories: medication; appointment with care manager and treating doctor; involvement in rehabilitation activities; support, education and counselling to client; support, education and counselling to family/carer; ongoing monitoring of mental health status and assessment of progress; education regarding substance use; and an 'other' category.

Community order objectives were recorded in the following categories: compliance; attend regular appointments with case manager and treating doctor; support and education to client; support education to family; reduce relapse and hospitalisation; improve quality of life; improve family and social relations and communication; improve mental and physical health status; education regarding substance abuse; rehabilitation; and an 'other' category.

An objective was recorded as being achieved if it was clearly documented as being so in health records and/or community order documentation. The authors collected all information from health records and community order documentation.

## **Subjects**

Bankstown Mental Health Service is located in the south-west of Sydney. The service provides comprehensive inpatient and community mental health care for the Bankstown Local Government Area, which has a culturally diverse population.

Of the 74 consumers with a serious mental illness placed on community orders between September 1993 and June 1996 at the Bankstown Mental Health Service, a random sample of 46 consumers were studied. Thirty-five of the consumers had current community orders. A total of 141 community orders were included in the study. Case managers ( $n = 14$ ) of the 46 patients were asked to complete questionnaires for each of their clients. They were asked to engage clients currently on a community order and their carers to complete questionnaires. Participation of clients and carers was voluntary. Mental Health Review Tribunal members ( $n = 14$ ) attending the Bankstown Community Health Centre for community order hearings were also asked to complete questionnaires.

## **Questionnaires**

Questionnaires were designed by the authors to elicit the impressions of people on community orders as well as those of their carers, case managers and members of the Mental Health Review Tribunal. The respondents were asked to rate the usefulness of community orders in helping people with serious mental illness and their family/carer deal better with the illness. Questionnaires utilised a Likert scale indicating 1 = not at all, 2 = a little, 3 = somewhat, 4 = moderately and 5 = very much.

Items on the questionnaires for persons on a community order, their carer and case manager included items about the family (family conflict, family distress, family coping ability) and about the person on a community order (whether they were having regular medication, contact with case manager and treating doctor, their distress, attention and concentration, symptoms of their illness, their perception of control and ability to deal with the illness, ability to work, participation in social, leisure or rehabilitation activities), overall benefit of community order and relapse prevention.

The questionnaire completed by members of the Mental Health Review Tribunal included items about the community orders – manner of presentation and whether the treatment plans and objectives were consistent with good mental health care – and items about the benefit of community orders in terms of medication compliance, mental health status, quality of life, client and family distress, client coping, and access to mental health care.

## **Results**

### **Demographics**

Of the 46 persons on a community order involved in the study, 31 (67 per cent) were male and 15 (33 per cent) female, average age was 36 years (sd = 13.74 years), 31 were single (67 per cent), 31 were born in Australia (67 per cent), and 39 spoke English (85 per cent). The majority depended on government benefits for income (78 per cent). The primary diagnoses recorded were schizophrenia (89 per cent), bipolar disorder (2 per cent), schizo-affective disorder (4 per cent) and other (4 per cent). The average age of onset of illness was 24.98 years (sd = 12.86 years).

### **Community orders**

Of the 46 subjects, 1 was on a first order, 18 on a second order, 1 on a third order and 26 on a fourth order. Thirty-five were on current orders, with 8 on a second order, 1 on a third order and 26 on a fourth order. Overall, 141 community orders were included in the study. Of these, 140 were Community Treatment Orders and 1 was a Community Counselling Order. All subjects first order was a Community Treatment Order. Fifty-two per cent were issued by the magistrate and 58 per cent by the Mental Health Review Tribunal. Ninety per cent of community orders were renewed, with 1 per cent being breached.

### **Treatment plan and objectives of community orders**

Treatment/management plans most frequently included in community orders were medication (100 per cent) and appointment with care manager and treating doctor (99 per cent). Support, education and counselling to client (46 per cent) and family (16 per cent), involvement in rehabilitation activities (30 per cent), education regarding substance use (4 per cent) and other approaches (4 per cent) were less often identified as part of the treatment plan.

The major objectives for community orders were to ensure medication compliance (100 per cent), attend regular appointments with care manager and treating doctor (99 per cent), reduce relapse and hospital admission (53 per cent) and support and education to client (43 per cent). These objectives were identified as being achieved 88, 79, 88 and 77 per cent of the time. Objectives less often cited for community orders include support, education and counselling to family (11 per cent), improve quality of life (31 per cent), improve family and social relationships (25 per cent), improve mental and physical health status (6 per cent), education about substance use (6 per cent) and other objectives (23 per cent). The majority of objectives set for the community orders are recorded as having been achieved (71, 91, 69, 100, 63, 81 per cent), except for rehabilitation, with it being set as an objective in 23 per cent of community orders and having been achieved 33 per cent of the time.

## Medication

Medication information available for 44 of the patients indicated an overall trend for neuroleptic medication dosage to be reduced while the person remains on a community order. Analysis of variance (repeated measures) of the data for patients ( $n = 26$ ) who are on their fourth or later order indicates that there is a significant reduction in the average dosage of neuroleptic medication used from the first to the fourth order ( $F = 3.43$ ;  $df = 25$ ;  $p < 0.05$ ) (Table 1).

**Table 1: Average dosage of neuroleptic medication used expressed as Chlorpromazine equivalents per day (mg)**

	First order	Second order	Third order	Fourth order
<b>Total sample</b>	n: 44 Mean: 386.41 (sd: 190.41)	n: 44 Mean: 338.45 (sd: 178.95)	n: 27 Mean: 288.30 (sd: 127.20)	
<b>Patients on fourth or more order</b>	n: 26 Mean: 372.69 (sd: 210.126)	n: 26 Mean: 318.68 (sd: 183.21)	n: 26 Mean: 293.62 (sd: 126.62)	n: 26 Mean: 285.92 (sd: 119.45)

Source: *Pharmabulletin* 1990.

## Admission

Admission information available for 41 patients indicated that during the 12-month period before their first community order they had a total of 62 admissions, 6 of which were voluntary and 56 involuntary. The average

number of admissions per person was 1.51 (sd = 0.75). The average length of admission was 21.70 days (sd = 16.33). Of the 41 patients, 7 were readmitted to hospital after their first community order, with a total of 13 admissions, 3 voluntary and 10 involuntary. Average number of admissions per person was 1.86 (sd = 1.07) and length of stay 12.50 days (sd = 7.51). These results indicate that there is a significant reduction in the number of people being readmitted to hospital (chi-square = 17.78; df = 1;  $p < 0.05$ ). Patients who were readmitted after the first community order had as many admissions during this period as they had before the order, with 13 admissions in total. Their average length of stay is not significantly different to their average length of stay before the first community order, which was 13.36 (sd = 7.23;  $t = 0.18$ ; df = 6;  $p > 0.05$ ).

## Questionnaire results

### Client/case manager/family

Case managers returned 37 of the 46 questionnaires distributed. Sixteen of the 35 active clients and 10 of the 19 carers completed questionnaires (Tables 2 and 3). Analysis of variance of the questionnaire results indicates that case managers and family members tended to rate significantly higher the overall benefit of community orders ( $F = 12.70$ ; df = 2;  $p < 0.05$ ), their helpfulness in reducing family conflict ( $F = 3.59$ ; df = 2;  $p < 0.05$ ), client distress ( $F = 3.56$ ; df = 2;  $p < 0.05$ ), and hospital readmission ( $F = 21.90$ ; df = 2;  $p < 0.05$ ) than did patients.

Patients on average rated community orders as being little to somewhat helpful in reducing family conflict, client distress and hospital readmission, with case managers and family rating them as being somewhat to very helpful. All three groups of respondents rated community orders as being somewhat to moderately helpful in reducing family distress, having regular medication, contact with mental health worker and doctor, improving ability to work, thinking and concentration and participation in social activities. The value of community orders in improving participation in leisure activities and reducing symptoms of the illness was rated on average as being of little to moderate help, while of no to little help in improving participation in rehabilitation activities. Patients on average rated community orders as being little to somewhat helpful in improving their control and ability to cope with the illness. Family members and case managers rated community orders as being somewhat to very helpful in improving the ability of family members to cope.

**Table 2: Client average ratings of the degree of helpfulness of community orders (n = 16)**

<b>Item</b>	<b>Mean and standard deviation</b>
I feel better able to cope with my illness	2.81 (1.76)
I have my medication more regularly	3.38 (1.41)
I experience less symptoms of my illness	2.81 (1.68)
Overall the community order has been of benefit to me	2.69 (1.92)
I feel less distressed	2.88 (1.54)
I have less conflict with my family	3.12 (1.68)
My family is less distressed	3.12 (1.59)
I feel better able to work	2.81 (1.64)
My thinking, concentration and attention is better	3.00 (1.67)
I feel I have more control over my illness	2.81 (1.68)
I spend more time with friends, family or on outings	3.19 (1.47)
I attend living skills programs more often	2.13 (1.63)
I spend more time doing leisure activities	2.88 (1.41)
Community order has helped keep me out of hospital	2.62 (1.54)
I have more regular contact with my treating doctor	3.06 (1.34)
I have more regular contact with a mental health worker	3.44 (1.31)

*Note:* Ratings made on a five-point scale (1 = not at all, 2 = little, 3 = somewhat, 4 = moderately and 5 = very helpful).

**Table 3: Primary carer (n = 10) and case manager (n = 37) average ratings of the degree of helpfulness of community orders**

Item	Primary carer Mean and standard deviation	Case manager Mean and standard deviation
I feel there is less conflict at home	4.30 (0.82)	4.00 (1.15)
# I feel less distressed	3.90 (1.20)	3.94 (1.08)
* I feel the family is less distressed		
# I feel better able to cope	4.10 (0.99)	3.91 (1.01)
* I feel the family is better able to cope		
He/she is having medication more regularly	3.70 (1.89)	4.30 (1.05)
He/she is less distressed	3.90 (0.88)	3.81 (1.10)
He/she experiences/complains of less symptoms	3.70 (0.95)	3.73 (1.17)
He/she is better able to do work	3.60 (1.26)	3.43 (1.28)
His/her ability to concentrate is better	3.30 (1.42)	3.49 (1.02)
He/she spends more time attending living skills program	2.20 (1.62)	1.95 (1.37)
He/she spends more time with friends/family outings	3.70 (1.42)	3.03 (1.09)
He/she spends more time doing leisure activities	3.20 (1.14)	2.97 (1.26)
He/she has more regular contact with mental health worker	4.30 (0.95)	3.78 (1.03)
He/she has more regular contact with treating doctor	4.00 (1.25)	3.11 (0.97)
Community order has helped keep him/her out of hospital	4.70 (0.67)	4.51 (0.80)
Overall the community order has been of benefit	4.20 (0.42)	4.41 (0.77)

Notes: Ratings made on a five-point scale (1 = not at all, 2 = little, 3 = somewhat, 4 = moderately and 5 = very helpful).

# = item rated by family; \* = item rated by case managers.

He/she refers to person on a community order.

## **Mental Health Review Tribunal**

The ratings made by the Mental Health Review Tribunal members ( $n = 14$ ) of the benefit of community orders in helping people with serious mental illness and their family/carer deal with the illness indicate that tribunal members believe that the community orders presented to them were professional in manner (93 per cent) and that the management plans (77 per cent) and objectives (93 per cent) of the orders were consistent with 'good' mental health care. They also rated the benefit of community orders as being very helpful in medication compliance (100 per cent), preventing hospital readmission (93 per cent), improving mental health status (92 per cent), quality of life (86 per cent), clients' coping ability (79 per cent), access to mental health care (93 per cent) and regular monitoring and review of care (93 per cent), and reducing client (57 per cent) and family (100 per cent) distress.

## **Discussion**

The interpretation of this study needs to take into account its retrospective design, reliance on community order documentation and health records and the use of self-report inventories. Despite its limitations, the study has provided valuable information and insight into the utilisation and the impact of community orders as perceived by patients, carers, mental health professionals and the members of the Mental Health Review Tribunal.

The majority of persons being placed on a community order were Australian-born males with schizophrenia. Previous researchers have indicated that people from a non-English-speaking background are more often detained on temporary orders and are subject to proportionally more community treatment orders (Ovadia & Boerman 1992). The percentage of patients from a non-English-speaking background being placed on community orders in this study (33 per cent) is comparable to the proportion of people from a non-English-speaking background with a schizophrenia or bipolar disorder being provided care by the mental health service (35 per cent).

The significant proportion of males to females being placed on a community order indicates a gender bias. Proportionally, males with a schizophrenia or bipolar disorder make up 52 per cent of the persons with such conditions being cared for by the mental health service. Studies into the gender prevalence of schizophrenia indicate that men are more likely to have the onset of symptoms between the ages of 14 and 24, and women are at highest risk between the ages of 25 and 34. When groups are not separated by age of onset, there is a male to female ratio of close to one (Karno & Norquist 1989). The authors of the

present study are uncertain of the reason for the gender bias but believe that it may be related to the nature and course of the disorder experienced by males being different to that experienced by females. Males may experience more severe positive and/or negative symptoms, engage in high risk or dangerous behaviour, are resistant to and non-compliant with intervention and follow-up care, and thus are more likely to relapse and have admissions to hospital. Future research needs to explore this bias to elucidate its causes and stability over time and across health care agencies.

All first community orders applied for and granted were Community Treatment Orders, with subsequent renewals being for continuation of the same. The lack of utilisation of Community Counselling Orders may indicate the lack of confidence of mental health professionals in such orders as an intervention approach. Given that the major identified treatment approach and objective of community orders were for compliance with treatment, the inability to enforce such a compliance with a Community Counselling Order may account for its lack of use. Further investigation needs to focus on identifying the reasons for the lack of use of Community Counselling Orders. If these orders are perceived as being of limited clinical value, then changes may need to be made.

Large proportions of the patients in this study (26/35) on current community orders were on their fourth or more community order. Community Treatment Orders were intended to be a less restrictive care alternative to hospitalisation. It is, however, not the least restrictive form of care. Current legal criteria under the Mental Health Act define who may be placed on an order. The criteria, however, have a number of limitations in clinical settings. They are broad-based, leaving it open to wide interpretation and application. Sensky, Hughes and Hirsch (1991a, 1991b), in a controlled study, attempted to identify the characteristics of patients likely to be treated with a community order, whether psychiatrists would use specific criteria to determine the need for community treatment, whether or not such criteria would be consistently applied and, finally, whether compulsory community treatment could be effective in psychiatric care. 'Life time' histories of psychiatric admissions, substances misuse, criminal charges or dangerousness were not significantly different between patients who were treated with extended leave – compulsory community treatment – and a control group. Patients treated with compulsory community treatment more often had a history of recent dangerousness and non-compliance with treatment. A psychiatrist's decision to recommend a patient for compulsory community treatment depended upon specific criteria related to the patient's recent past, in particular, non-compliance with treatment. The use of compulsory community

treatment was reported to have improved treatment compliance, reduced time spent in hospital, and reduced levels of dangerousness.

The lack of specific clinical criteria on who would benefit from a community order as opposed to assertive community treatment, and when is a person with a mental illness 'well enough' to have treatment no longer enforced upon them, creates various service, care and ethical issues. The scope of this paper does not allow these issues to be discussed.

Community orders appeared to have had a positive impact upon hospital readmission rates, medication compliance and health status of people with serious mental illness. The mean dosage of neuroleptic medication used during the period of the first and fourth order is significantly reduced. This may reflect or mirror a patient's improvement in mental health status, with reduced active symptoms of illness and need for higher neuroleptic medication dosage. Community orders resulted in a significant reduction in the number of people being readmitted to hospital. Case managers and carers rated community orders as helpful in improving the ability of family members to cope, and overall as more beneficial and more helpful than did patients in terms of reducing family conflict, client distress and hospitalisation. Community orders were rated by patients, family and case managers as being somewhat to moderately helpful in having regular medication, contact with mental health worker and doctor, improving ability to work, thinking and concentration and participation in social activities, and reducing family distress and symptoms of the illness.

The major focus of management approaches and objectives for community orders were compliance with medication, regular review by case manager and treating doctor, and relapse prevention. Compliance with care will undoubtedly have a positive impact upon the mental health status of the person, reduce the likelihood of relapse and re-hospitalisation, and impact positively on the distress and coping and general functioning of clients and their carers. Regular appointments with case manager and treating doctor may allow an opportunity to develop a closer therapeutic alliance and engage the client in care. Despite the focus of treatment plans and objectives on medication compliance, regular reviews and relapse prevention, these were not always identified as being achieved. It is clear that not all patients benefit from community orders. Patients who had hospital admissions after being placed on a community order had as many admissions and their length of stay was no different than before being placed on an order. Being on a community order appears to have had little positive impact on improving patient participation in rehabilitation activities.

## Conclusion

Compulsory community treatment appears to have had a positive impact upon the mental health status and well-being of people with a serious mental illness as perceived by clients, their carers, case managers and members of the Mental Health Review Tribunal. It is uncertain whether improvements observed in this study can be attributed to 'enforced' compliance with treatment or a more focused and possibly assertive treatment program being adopted by mental health workers. The current study has not addressed the issue of the possible negative impact community orders may have had on clients, carers and case managers. Future research needs to focus on these areas as well as the mechanism by which compulsory community treatment improves mental health status. The authors are uncertain about the effect of possible bias of respondents to the study outcome. Controlled studies utilising a range of outcome measures are required to evaluate the effectiveness of compulsory community treatment. Clinical criteria need to be developed that assist health care agencies to identify those persons with a serious mental illness who would benefit from being placed on a community order, and decide when the person is 'ready' to be discharged from a community order to less restrictive care.

## Acknowledgements

The authors would like to express their appreciation to clients, carers and colleagues of the mental health service for their cooperation and support for this pilot study.

## References

- Drake ER & Burns BJ 1995, 'Special on assertive community treatment: An introduction', *Psychiatric Services*, vol 46, no 7, pp 667–75.
- Fernandez GA & Nygard S 1990, 'Impact of involuntary outpatient commitment on the revolving door syndrome in North Carolina', *Hospital and Community Psychiatry*, vol 41, no 9, pp 1001–4.
- Ford J & Rigby P 1996, 'Aftercare under supervision: Implications for CMHNs', *British Journal of Nursing*, vol 5, no 21, pp 1312–16.
- Greeman M & McClellan TA 1985, 'The impact of a more stringent code of Civil commitment code I Minnesota', *Hospital and Community Psychiatry*, vol 36, no 9, pp 990–2.

Hiday VA & Scheid-Cook TL 1989, 'A follow-up of chronic patients committed to outpatient treatment', *Hospital and Community Psychiatry*, vol 40, no 1, pp 52–9.

Karno M & Norquist GS 1989, 'Schizophrenia' in HI Kaplan & BJ Sadock (eds) *Comprehensive Textbook of Psychiatry. Volume 1*, fifth edition.

McFarland HB, Faulkner LR, Bloom JD, Hallaux R & Bray JD 1990, 'Family members opinions about civil commitment', *Hospital and Community Psychiatry*, vol 41, no 5, pp 537–40.

McGrew HJ, Bond RG, Dietzen L, McKasson M & Miller DL 1995, 'A multi-site study of client outcomes in assertive community treatment', *Psychiatric Services*, vol 46, no 7, pp 696–701.

New South Wales *Mental Health Act (No 9) 1990*.

Ovadia T & Boerman B 1992, Paper delivered at the Mental Health Services Conference, Sydney, cited in *Transcultural Mental Health Centre Establishment Structure – Report*, August 1993, p 1, Cumberland Hospital.

*Pharmabulletin*, no 137, 1990.

Sartorius N, Ustun B, Costa e Silva JA, Goldberg D, Lecrubier Y, Ormel J, Vankorff M & Wittchen HU 1993, 'An international study of psychological problems in primary care: Preliminary report from the World Health Organization Collaborative Project on Psychological Problems in General Health Care', *Archives of General Psychiatry*, vol 50, pp 819–24.

Sensky T, Hughes T & Hirsch S 1991a, 'Compulsory psychiatric treatments in the community. 1. A controlled study of compulsory community treatment with extended leave under the Mental Health Act: Special characteristics of patients treated and impact of treatment', *British Journal of Psychiatry*, 158, pp 792–9.

Sensky T, Hughes T & Hirsch S 1991b, 'Compulsory psychiatric treatments in the community. A controlled study of patients whom psychiatrists would recommend for compulsory treatment in the community', *British Journal of Psychiatry*, 158, pp 799–804.

Swartz SM, Burns JB, Hiday VA, George LK, Swanson J & Wagner HR 1995, 'New directions in research on involuntary outpatient commitment', *Psychiatric Services*, vol 46, no 4, pp 381–5.