

Conditional Release: A Less Restrictive Alternative to Hospitalization?

Steven P. Segal, Ph.D.
Philip M. Burgess, Ph.D.

Objective: This study examined conditional release—that is, involuntary outpatient commitment orders upon release from hospitalization—as a least restrictive alternative to psychiatric hospitalization in Victoria, Australia. **Methods:** Records were obtained from the Victorian Psychiatric Case Register for patients who experienced psychiatric hospitalization: between 1990 and 2000 a total of 8,879 patients were given conditional release and 16,094 were not. **Results:** Compared with the group that was hospitalized but did not receive a conditional release, the group that received a conditional release was more likely to have more prior hospitalizations of greater than average duration. Patients with schizophrenia were more likely to be given conditional release. Patients given conditional release experienced a care pattern involving briefer inpatient episodes (8.3 fewer days per episode), more inpatient days, and longer duration of restrictive care—that is, combined inpatient and conditional release periods (5.1 more days per month in care). **Conclusions:** For patients at risk of long-term hospitalization, conditional release may help to shorten inpatient episodes by providing a least restrictive alternative to continued hospitalization. However, patients who were given conditional release doubled the amount of days they spent under restrictive care, compared with the amount of time they previously spent in the hospital before entering a period of combined inpatient and conditional release commitment. Additional oversight may have led to more frequent hospitalization. This consequence raises new questions regarding the possible benefits of such extended oversight and new challenges for release planning using conditional release as a least restrictive method of care. (*Psychiatric Services* 57:1600–1606, 2006)

Few studies have addressed the following questions related to involuntary outpatient commitment orders: In the system of care, are persons given involuntary outpatient commitment orders upon release from the hospital or while they are living in the community? Who is more likely to receive an involuntary outpatient commitment order? And why are orders being

used—that is, what is their desired outcome? (1,2).

Outpatient commitment provisions have been written into law around the world (3) and have been described as assisted treatment (2), a means to deliver involuntary treatment (4), a means to engender treatment compliance (5), and a means to stop “revolving-door” admissions (6). In civil commitment law, outpatient orders

are almost universally recognized as “a least restrictive alternative to psychiatric hospitalization” for persons meeting the involuntary civil commitment standard of the jurisdiction—that is, considered to be a danger to self or others, gravely disabled, or in need of protection or treatment for health and safety because of a mental disorder. Orders are terminated when patients no longer meet the standard for involuntary commitment or when the orders are not a viable least restrictive alternative and as a consequence the patient is hospitalized.

This study evaluated almost a decade of data on the use of community treatment orders as a least restrictive alternative to psychiatric hospitalization in Victoria, Australia, and examined whether persons are placed on community treatment orders upon release from the hospital or while they are still living in the community, which patients are selected for the service, and the service objective.

During the 1990s Victoria proceeded to rapidly deinstitutionalize persons with mental illness, relying to a significant extent on community treatment orders (the Australian term for outpatient commitment orders) as a least restrictive alternative to hospitalization (7). (See box on the next page for a description of community treatment orders in Victoria, Australia.) There are two primary ways such orders are used as a least restrictive alternative to hospitalization. First, in by far the oldest and most used approach (8), a patient is placed on a community treatment order as a form of conditional release from involuntary hospitalization as part of an aftercare plan and as a means to shorten the duration of a current hos-

Dr. Segal is affiliated with the Mental Health and Social Welfare Research Group, School of Social Welfare, University of California, Berkeley, 120 Haviland Hall (MC 7400), Berkeley, CA 94720 (e-mail: spsegal@berkeley.edu). Dr. Burgess is with the School of Population Health, University of Queensland, Wacol, Queensland, Australia.

pital episode (traditionally referred to as “conditional release”). Second, the patient is placed on orders while he or she is living in the community, as a way of preventing hospitalization.

Recent research on involuntary outpatient commitment, most notably three comparison group studies, has focused primarily on whether involuntary outpatient commitment can prevent hospitalizations (9–11). Two of these studies (10,11) randomly assigned patients to one of two groups (receipt of outpatient orders versus no receipt of outpatient orders) without attention to duration of the current inpatient episode (a conditional release would have originated with the intent of shortening an ongoing hospitalization, and the apparent focus of the two trials was randomization and prevention of future hospitalization). The third study (9) statistically controlled for the effects of the preceding hospitalizations. These studies considered whether involuntary outpatient commitment reduced future hospitalizations, but they did not address whether conditional release orders are effective in reducing the duration of the current episode of care. Because the nature of conditional release means that outpatient care staff see patients regularly and recognize if and when patients need additional care, patients on conditional release tend to be rehospitalized more frequently than patients who are not on conditional release (12); thus prevention of future hospitalization is only a partial objective of conditional release. Studies that have examined the duration of the inpatient episode preceding placement on outpatient orders have found significant reductions in hospital utilization associated with the use of such orders (5,13–16).

In Victoria almost all community treatment orders during the study period (92 percent of 16,568 such commitments) were initiated when the patient was in the hospital (conditional release) and thus were used as an alternative to continued hospitalization. Having established the form that community treatment orders took in the Victorian system, this study considered who was given conditional release and why orders were used—that

Characteristics of Community Treatment Orders in Victoria, Australia

Community treatment orders require individuals to comply with outpatient treatment. They are issued to individuals residing in the community and to inpatients upon early hospital release.

Eligibility criteria: all of the following must obtain

- ◆ The person appears to be mentally ill.
- ◆ The illness requires immediate treatment that can be obtained...
- ◆ For health or safety (whether to prevent a deterioration in physical or mental condition or otherwise) or for community protection.
- ◆ The person has refused treatment or is unable to consent to necessary treatment.
- ◆ No less restrictive option is available.

Implementation

- ◆ An authorized psychiatrist makes the order, and the authorized psychiatrist or his or her delegate must monitor the treatment.
- ◆ Patients may be placed on orders following hospital discharge or directly from the community.
- ◆ The order can be extended indefinitely.
- ◆ The order can be revoked by an authorized psychiatrist for noncompliance.
- ◆ Patients whose community treatment orders are revoked may be apprehended by the police and taken to an inpatient facility.
- ◆ Procedural safeguards for hospital admission are somewhat less involved than for a regular admission.

Obligations of the patient and oversight requirements

- ◆ Compliance with the order can require an individual to live in a particular apartment, to take prescribed medications, and to attend counseling sessions.
- ◆ A Mental Health Review Board hearing is held within eight weeks.
- ◆ A review by the Mental Health Review Board is held within 12 months.
- ◆ A review by the Mental Health Review Board may be held at any time upon request of the psychiatrist, an attorney, or staff of the Mental Health Review Board.

is, the functions they appeared to fulfill. Also considered was the frequently voiced concern of patients that although conditional release is less restrictive than continued hospitalization, it is more restrictive than voluntary care and has the potential, given its relatively low cost, to be used to a greater extent than hospitalization, thus making the total period of restrictive care greater than that experienced with hospitalization alone. Although the study's comparison group design does not afford the level of causal inference available in a randomized experiment, the study provides a perspective on the real-world pattern of use of conditional release that is currently unavailable in the literature, information that is essential for treatment planning.

Methods

Sample

The Victorian Psychiatric Case Register (VPCR) provides a record of the

characteristics of all clinical contacts that occur in the State of Victoria, Australia. The Victorian Department of Human Services Ethics Committee approved our access to the register data. All patients who were given conditional release between November 12, 1990, and June 30, 2000—a period when all mental health service use and community treatment orders in Victoria could be reliably mapped using the VPCR—were identified (N=8,879). A comparison group was also gathered that consisted of two subsamples, equally sized, of patients who had been hospitalized but were not given conditional release, for a total of 16,094 patients (duplicate cases were deleted). One subsample was matched on age, gender, and diagnosis to the group that had been given conditional release. The other subsample was randomly drawn (not matched) from the pool of individuals who had been hospitalized without being given conditional release. Be-

cause we obtained similar multivariate modeling results for the two subsamples, in the subsequent analyses we combined the two subsamples to form one comparison group.

Units of analysis

In documenting the patient's history of treatment, all treatment contacts were organized into episodes of care: each hospitalization (from day of admission to day of discharge) was considered to be a separate inpatient episode, and each continuous period of outpatient care without a break in service for 90 days or more was considered to be a community care episode (17). A service break of 90 days or more followed by reinitiation of care was considered the start of a new community care episode. All occasions of community service were reported as community treatment days; multiple occasions of community service on the same day were counted as one community treatment day.

Analyses

Analyses were completed by using the SPSS Statistical Package, version 13 (18). Descriptive statistics are presented, and differences were discussed by inspection in order to avoid redundant statistical testing. Statistical tests for group differences were used for the multivariate models.

Logistic regression was used in distinguishing the characteristics of patients who received conditional release from those of patients who had been hospitalized without being given conditional release (comparison group) (1,19). The model included the number of inpatient episodes a patient had during the study period, a variable indicating whether the patient had experienced an inpatient episode that was longer than average, the interaction between having an inpatient episode of longer-than-average duration and number of episodes, diagnoses (that is, schizophrenia, major affective disorder, dementia, and paranoia or other psychoses), indicators of premorbid adjustment (never married, age at entry into the mental health system, and more than an 11th grade education), current social involvements

(current marriage and employment status), age, and gender.

Ordinary least-squares (OLS) regression analyses were used to consider the relationship between whether the patient received conditional release and total inpatient days, inpatient days per episode of inpatient care, and inpatient days per 100 days in the mental health care system (the latter was included to account for time at risk for receiving mental health services). In each analysis the following factors were controlled for: age, gender, diagnoses, the number of community treatment days, and the interaction of community treatment days with whether the patient received conditional release (to account for the intensity of care offered in the least restrictive alternative intervention), the mean year the patient's episodes were initiated (as a means of accounting for the deinstitutionalization effect associated with decreasing use of inpatient care over the course of the study), time from first contact with the mental health system to study end (thus controlling for the duration of observation of the patient's history of mental health services, severity, and a possible point of illness onset), and the number of inpatient episodes a patient had.

As noted above, the combination of hospitalization and conditional release may provide greater oversight by the combined inpatient and outpatient staff than hospitalization alone. Three measures were used to determine whether use of this approach increased the oversight period: first, the difference in the number of days per month hospitalized before versus after initial placement on conditional release; second, the sum of hospitalization days and conditional release days per month; and third, the net number of days under restrictive care—that is, the difference between time under involuntary commitment (either in the hospital or in the community) before and after initial placement on conditional release. The latter was adjusted for the year of first placement on conditional release to account for possible changes in the length of hospitalizations resulting from the deinstitutionalization policy that was

implemented during the study period. OLS regression was used to determine the size of the adjustment resulting from deinstitutionalization.

Results

Tables 1 and 2 present the demographic, diagnostic, and service use characteristics of the samples. Compared with the group that was hospitalized but did not receive a conditional release (comparison group), the group that received a conditional release had a greater proportion of males (59 percent compared with 54 percent), was three years younger (42 years compared with 45 years), and was more likely to never have been married (57 percent compared with 43 percent); both groups had equivalent educational levels. The group that received a conditional release entered the system approximately five years earlier than the comparison group (at 33 years compared with 38 years of age) and was more likely to have schizophrenia (78 percent compared with 48 percent).

Table 3 addresses which patients were more likely to be selected for conditional release. When the total sample of 24,973 patients was examined, the logistic model was significant ($p < .001$) and correctly classified 74 percent of patients. The table illustrates a process of selection based on poor clinical status. Having one of the four major mental disorders was the strongest predictor of being selected for conditional release. People with schizophrenia were four times more likely to be selected. The probability of being selected for conditional release increased by 11 percent per inpatient episode and by an additional 7 percent for each inpatient episode that was of greater-than-average duration. Involvement in the community (that is, being married or employed) was associated with a reduced probability of selection (27 and 18 percent, respectively).

Table 4 shows the relationship of conditional release status to the patient's total inpatient days, inpatient days per inpatient episode, and inpatient days per 100 days in care. All three models were significant ($N = 24,973$, $p < .001$). They show that when all other control variables were

Table 1

Demographic and diagnostic characteristics of hospitalized psychiatric patients in Victoria, Australia, who were or were not placed on conditional release between 1990 and 2000

Variable	Total (N=24,973)		Given conditional release (N=8,879)		Not given conditional release(N=16,094)	
	N	%	N	%	N	%
Age (M±SD)	44.2±18.3		42.4±16.3		45.2±19.2	
Gender						
Male	13,936	56	5,275	59	8,661	54
Female	11,037	44	3,604	41	7,433	46
Education						
11th grade or less	19,030	76	6,796	77	12,234	76
More than 11th grade	5,943	24	2,083	23	3,860	24
Employment						
Employed	3,294	13	920	10	2,374	15
Unemployed	5,943	24	2,467	28	3,476	22
Not in labor force	10,879	44	3,730	42	7,149	44
Unknown	4,857	19	1,762	20	3,095	19
Marital status						
Never married	11,969	48	5,023	57	6,946	43
Currently married	6,090	24	1,563	18	4,527	28
Once married	5,021	20	1,650	19	3,371	21
Not known	1,893	8	643	7	1,250	8
Diagnosis						
Dementia or other nervous system disorder	2,333	9	872	10	1,681	10
Schizophrenic disorder	14,634	59	6,911	78	7,723	48
Paranoia and acute psychotic disorder	616	2	194	2	422	3
Major affective disorder	3,279	13	628	7	2,651	16
Other disorder	4,111	16	274	3	3,617	22

taken into account, conditional release status was associated with receipt of mental health services during the study period that included more inpatient days, shorter inpatient episodes (8.3 days on average), and fewer inpatient days per 100 days in care (7.8 days on average).

For the 8,879 patients who experienced their first conditional release during the study period, analyses ex-

amined the effects of use of this combination approach to oversight (hospitalization and conditional release). The 8,879 patients spent 4.7±10.1 fewer days per month in the hospital after receiving an initial conditional release than they did before receiving such orders ($t=43.42$, $df=8,878$, $p<.001$). The mean number of hospital days per month prior to the first conditional release was 6.4±9.1 days; af-

ter the first conditional release it was 1.8±4.1 days. The average number of days spent on conditional release per month was 9.8±9.1 and—given the absence of a significant deinstitutionalization effect with this population—the net number of days in restrictive care was the difference between the savings on hospital days and the time spent on conditional release (on average 5.1±13.8 days per month).

Table 2

Service characteristics of hospitalized psychiatric patients in Victoria, Australia, who were or were not placed on conditional release between 1990 and 2000

Characteristics	Total (N=24,973)			Given conditional release (N=8,879)			Not given conditional release (N=16,094)		
	N	M	SD	N	M	SD	N	M	SD
Age at entry to mental health system	24,973	36.5	18.9	8,879	33.3	17.2	16,094	38.3	19.6
During the study period									
Total inpatient days	24,973	133.0	197.0	8,879	131.1	282.0	16,094	77.0	254.3
Total inpatient episodes	24,973	3.0	3.9	8,879	4.7	5.1	16,094	2.1	2.7
Total community treatment days	22,368	96.3	265.7	8,778	203.9	232.0	13,590	86.9	154.8
Treatment days per community care episode	22,368	27.9	46.5	8,778	35.6	44.9	13,590	23.0	46.8

Table 3

Factors contributing to the decision to conditionally release hospitalized psychiatric patients in Victoria, Australia, between 1990 and 2000^a

Characteristic	B	SE	p	Exp(B)
Organizational factors				
Had an inpatient episode longer than the 38-day average	.04	.07	.597	1.04
Number of inpatient episodes	.10	.00	<.001	1.11
Interaction of inpatient episode greater than 38 days by number of inpatient episodes	.06	.01	<.001	1.07
Time from the first date known to the mental health system to last face-to-face contact	.00	.00	<.001	1.00
Demographic factors				
Age	-.15	.01	<.001	.86
Gender	.10	.03	<.001	1.11
Community involvement factors				
Employed	-.20	.05	<.001	.82
Currently married	-.32	.04	<.001	.73
Premorbid factors				
Age at the first date known to the mental health system	.16	.01	<.001	1.17
More than an 11th grade education	-.04	.04	.287	.96
Never married	.03	.04	.467	1.03
Diagnostic factors				
Major affective disorder	.39	.07	<.001	1.48
Dementia	.73	.08	<.001	2.07
Schizophrenia	1.38	.06	<.001	3.99
Paranoia and other psychoses	1.34	.11	<.001	3.81

^a Model characteristics: $\chi^2=6,106.094$, $df=15$, $p<.001$; Of the 24,973 cases, 74 percent (24,859 cases) were classified correctly and less than 1 percent (114 cases) had missing information and therefore were not considered in the analysis.

Discussion

Patients appear to be selected for conditional release based on their type of illness, their premorbid adjustment, and their increasing risk of long-term hospitalization—that is, patients for whom voluntary community treatment was repeatedly unsuccessful (20) and who threatened to become revolving-door patients with increasingly longer-than-average hospitalizations were placed on conditional release as a least restrictive alternative (21). Despite the fact that patients were selected for conditional release on the basis of poor clinical status, compared with patients in the comparison group, those who were given conditional release experienced shorter inpatient episodes (8.3 fewer days) and 7.8 fewer inpatient days per 100 days in care. It would appear that conditional release provides a least restrictive alternative to hospitalization by curtailing the duration of an existing hospital episode for individuals who met criteria for involuntary hospitalization, because conditional release requires that patients meet the same standard that is required for involuntary inpatient commitment.

Table 4

Regression models of variables as predictors of use of inpatient care among 24,973 hospitalized psychiatric patients in Victoria, Australia, 8,879 of whom were conditionally released between 1990 and 2000

Independent variable	Total inpatient days ^a			Inpatient days per inpatient episode ^b			Inpatient days per 100 days in care ^c		
	B ^d	SE	p	B ^d	SE	p	B ^d	SE	p
Conditional release group membership	14.85	4.39	.001	-8.32	2.55	<.001	-7.76	.49	<.001
Total community treatment days	-.04	.01	.004	-.03	.01	<.001	.01	.00	<.001
Interaction of involuntary outpatient commitment and community treatment days received per community care episode	.53	.08	<.001	.19	.04	<.001	-.03	.01	<.001
Gender	19.79	3.34	<.001	11.05	1.94	<.001	1.15	.37	.002
Age	1.44	.10	<.001	1.00	.06	<.001	.13	.01	<.001
Schizophrenia versus other disorders	28.31	4.73	<.001	17.78	2.75	<.001	-18.24	.53	<.001
Major affective disorder versus other disorders	-8.84	6.07	.145	-4.71	3.52	.181	-13.33	.68	<.001
Dementia versus other disorders	91.33	7.11	<.001	57.79	4.13	<.001	-4.83	.80	<.001
Paranoia and other psychosis	-32.95	11.14	.003	-13.27	6.47	.04	-10.61	1.25	<.001
Time from first contact with the mental health system to study's end	.01	.00	<.001	.00	.00	<.001	-.00	.00	<.001
Mean year of episode commencement	-7.20	.73	<.001	-3.95	.43	<.001	.14	.08	.096
Number of inpatient episodes	5.68	.50	<.001	-2.00	.29	<.001	-.85	.06	<.001

^a Model summary: $R=.27$; $R^2=.07$; adjusted $R^2=.07$; $N=24,973$; $F=166.73$, $df=12$ and $24,960$, $p<.001$

^b Model summary: $R=.24$; $R^2=.06$; adjusted $R^2=.06$; $N=24,973$; $F=130.10$, $df=12$ and $24,960$, $p<.001$

^c Model summary: $R=.41$; $R^2=.17$; adjusted $R^2=.17$; $N=24,973$; $F=425.89$, $df=12$ and $24,960$, $p<.001$

^d Unstandardized regression coefficient

This finding seems to validate the use of conditional release as a least restrictive alternative.

Looking at the mental health service use of patients placed on conditional release before and after their first such placement, however, raises questions as to the meaning of “least restrictive” alternative treatment. As Mumetz and Geller (21) pointed out more than a decade ago, we need to move beyond the notion that all care outside the hospital is always the least restrictive alternative. This is especially true in an era of increased capability in implementing chemical and other restrictions, such as use of electronic ankle tags. Because the same standard is used for maintaining a patient on conditional release and involuntary inpatient commitment, it seemed reasonable to assume—if conditional release were a least restrictive form of treatment—there would be no increase in the net amount of restricted treatment (involuntary hospitalization plus conditional release) after the conditional release was initially given; that is, the amount of time under restrictive care should be the same before and after the initial conditional release.

Yet the selection of patients with more severe clinical status and patients with more and greater-than-average duration of hospital stays for conditional release—patients who may pose a greater risk to themselves or to the community—may require patients to be under conditional release orders for long periods. Clinically, hospital stays have become increasingly brief—so brief, that patients’ symptoms may not have stabilized before they are conditionally released; thus they may require more extensive community care (22).

The extended oversight period may also derive from other clinical decision-making and administrative factors associated with required Mental Health Review Board hearings—the meeting at which board members determine a patient’s readiness for discharge from conditional release. Perhaps the criteria for conditional release and inpatient commitment are the same more in theory than in practice. The review board may be more ready to extend periods of required

oversight and interpret the criteria more liberally when patients are in the community. It was not possible to determine whether patients on conditional release continually met the standard for involuntary commitment. Perhaps if review board hearings were conducted more frequently, patients who no longer meet the standard for commitment but remain on conditional release because of administrative scheduling might be discharged sooner. It has been reported that there seems to be an increase in discharge just before board hearings (23), a fact pointing to the validity of the latter concern.

Future research needs to better determine the possible benefits and drawbacks as well as the mechanisms that account for the additional restrictive oversight of patients on conditional release. Such investigations must address the possibility that additional oversight is unnecessary, may lead to additional hospitalizations, is perhaps dependency producing, and is contrary to patients’ civil rights concerns. The extended period of involvement with the mental health system among patients on conditional release—despite briefer hospitalizations and fewer days in the hospital per 100 days in care (a finding facilitated by the time spent on conditional release)—adds credibility to these concerns. Although it is likely true that patients who are more severely disturbed are selected for such oversight, it is possible that conditional release makes patients “worse” or at least more likely to spend additional time in the hospital throughout treatment over their lifetime.

The patients selected for conditional release were more likely to stay in the hospital longer. Perhaps this group of patients is more dependent on services, having failed socially because of complications attributable to emotional distress, and has few other options for social survival than to become “professional patients.” Use of mental health services may be extended perhaps in a process similar to that described by Scheff (24) and reinforced by secondary gains obtained in association with increased service utilization required by conditional release.

Focus group data obtained from patients with extended experience on conditional release show that such patients demonstrate characteristics of a powerless group (22). They acknowledge a functional benefit from their conditional release and express anger and dissatisfaction at the threat of coercive action and stigma they see in their situation, but they are quite accepting of their situation. They have minimal awareness of their rights to appeal their conditional release status, seeing it as a simple decision of their treating doctor that is divorced from law and regulation—despite the fact that a doctor, board member, and a community member sit on the oversight board and the patient can request a review of his or her status anytime. These patients saw no way to improve the conditional release program and, with the exception of one out of 30 individuals in the focus group, would not see it abolished (when asked this as a hypothetical question) (22).

Do the more proactive and perhaps most aggressive patients simply exit the system, making use of whatever resources are available? A recent report indicates that some patients leave their areas to avoid being on conditional release (25). Such action would add momentum to a selection process leading to a more dependent, albeit very disabled, residual group. In fact, the process of selection for conditional release may involve a combination of patients with poor clinical status inclined toward dependency on conditional release as the best possible option for them. We don’t really know nor has research made significant progress in answering this question.

The selection process for conditional release needs to be studied, and the pattern observed in this study needs to be replicated. Is increased involvement with the mental health system, especially when it involves briefer hospitalizations and community oversight, a necessarily bad thing for those with severe mental illness? Research is needed to test for the possible benefits of protective oversight and the extended use of mental health services associated with conditional release—for exam-

ple, less violence (26), criminal behavior, and victimization (27) and better health, mental health, and social functioning (28).

The study has shed some light on the pattern of mental health service use among patients on conditional release—a pattern of briefer hospitalization associated with a net increase in protective oversight and a longer period of mental health service use.

This study has several limitations. Although it represents a first view of a population's experience with conditional release over almost a decade, the pattern of care observed in this study may be unique to Victoria and its treatment approach and resources. Results derived from a comparison group design with adjustments for available covariates do not have the causal certainty attributable to a clinical trial. Although the design protects against statistical regression as an alternative hypothesis, it remains possible that the findings represent regression to the mean (29). Although the administrative data used represents perhaps the best in this category of information, they have all the validity problems associated with administratively collected information.

Conclusions

It appears that for patients at risk of long-term hospitalization, conditional release may help shorten the duration of inpatient episodes and thus provide a least restrictive alternative to continued hospitalization. The long-term pattern of care emerging from the use of conditional release in Victoria, however, poses new challenges to research and release planning associated with using conditional release status as a least restrictive form of care.

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References

1. Rolfe T: Community Treatment Orders: A Review. Perth, Australia, Government of Western Australia, Department of Health, Mental Health Division, Office of the Chief Psychiatrist, 2001
2. Torrey EF, Zdanowicz MT: Outpatient commitment: what, why, and for whom. *Psychiatric Services* 52:337–341, 2001
3. Torrey EF, Kaplan RJ: A national survey of the use of outpatient commitment. *Psychiatric Services* 46:778–784, 1995
4. Gerrand V: Transforming Mental Health Services From 1993 to 1998 in Victoria, Australia: A Case Study of Policy Implication. Ph.D. dissertation, Department of Political Science, University of Melbourne, Melbourne, Australia 2005
5. Van Putten DA, Santiago JP, Bergen MR: Involuntary commitment in Arizona: a retrospective study. *Hospital and Community Psychiatry* 39:953–958, 1988
6. Swartz MS, Swanson JW, Hiday VA, et al: Can involuntary commitment reduce hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American Journal of Psychiatry* 12: 1968–1974, 1999
7. Commonwealth of Australia: National Mental Health Report 1997. Canberra, ACT, Commonwealth Department of Health and Family Services, 1999
8. Ridgely MS, Petrila J, Borum R: The Effectiveness of Involuntary Outpatient Treatment: Empirical Evidence and the Experience of Eight States. Santa Monica, Calif, RAND, 2001
9. Preston NJ, Kisely S, Xiao J: Assessing the outcome of compulsory psychiatric treatment in the community: epidemiological study in Western Australia. *British Journal of Medicine* 524:1244–1246, 2002
10. Swartz MS, Swanson JW, Hiday VA, et al: Can involuntary commitment reduce hospital recidivism? Findings from a randomized trial with severely mentally ill individuals. *American Journal of Psychiatry* 12:1968–1974, 1999
11. Steadman HJ, Gounts K, Dennis D, et al: Assessing the New York City Involuntary Outpatient Commitment Pilot Program. *Psychiatric Services* 52:330–337, 2001
12. Solomon P, Draine J, Marcus SC: Predicting incarceration of clients of a psychiatric probation and parole service. *Psychiatric Services* 53:50–56, 2002
13. O'Keefe C, Potenza DP, Mueser KT: Treatment outcomes for severely mentally ill patients on conditional discharge to community-based treatment. *Journal of Nervous and Mental Disease* 185:409–411 1997
14. Zanni G, deVeau L: Inpatient stays before and after outpatient commitment in Washington, DC. *Hospital and Community Psychiatry* 37:941–942, 1986
15. Munetz MR, Grande T, Kleist J, et al: The effectiveness of outpatient civil commitment. *Psychiatric Services* 47:1251–1253, 1996
16. Rohland B: The Role of Outpatient Commitment in the Management of Persons With Schizophrenia. Iowa City, Iowa Consortium for Mental Health Services, Training, and Research, 1998
17. Tansella M, Micciolo R, Biggeri A, et al: Episodes of care for first-ever psychiatric patients: a long-term case-register evaluation in a mainly urban area. *British Journal of Psychiatry* 167:220–227, 1995
18. SPSS 13.0 for Windows, Chicago, SPSS, 2005
19. Huntley DA, Cho DW, Christman J, et al: Predicting length of stay in an acute psychiatric hospital. *Psychiatric Services* 49: 1049–1053, 1998
20. Geller JL: Clinical guidelines for the use of involuntary outpatient treatment. *Hospital and Community Psychiatry* 41:749–755, 1990
21. Munetz MR, Geller JL: The least restrictive alternative in the postinstitutional era. *Hospital and Community Psychiatry* 44: 967–972, 1993
22. Segal SP, Watson M, Akutsu P: Factors associated with involuntary return to a psychiatric emergency service within 12 months. *Psychiatric Services* 49:1212–1217, 1998
23. Brophy L, Ring D: The efficacy of involuntary treatment in the community: consumer and service provider perspectives. *Social Work in Mental Health* 2:157–174, 2004
24. Scheff TJ: *Being Mentally Ill: A Sociological Theory*. Chicago, Aldine 1966
25. Fritz M: A doctor's fight: more forced care for the mentally ill. *Wall Street Journal*, Feb 1, 2006, A1
26. Torrey EF, Zdanowicz MT: Study shows that long-term assisted treatment reduces violence and hospital utilization. *Catalyst* 2:1–2, 2000
27. Hiday VA, Swartz MS, Swanson JW, et al: Impact of outpatient commitment on victimization of people with severe mental illness. *American Journal of Psychiatry* 159: 1403–1411, 2002
28. Appelbaum P: Assessing Kendra's Law: five years of outpatient commitment in New York. *Psychiatric Services* 56:791–779, 2005
29. Campbell DT, Stanley JC: *Experimental and Quasi-Experimental Designs for Research*. Chicago, R McNally, 1963