# Treatment Refusal Procedures and Service Utilization: A Comparison of Involuntarily Hospitalized Populations

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This article examines treatment refusal in a large group of hospitalized civilly committed patients. Comparison is made between those subjects whose refusal was reviewed by Oregon's administrative procedures for treatment refusal (override group) and those committed patients who more readily accepted treatment and were not evaluated by this procedure. The objective was to examine the override process and to explore potential differences between these groups in their utilization of hospital and community mental health services before and after the index hospitalization. We reviewed hospital charts on all subjects who went through the administrative override procedure and collected state hospital and community mental health services information from the statewide computerized information system on all subjects in the study. Several key differences were found between the groups. The override sample had significantly more women, and these patients spent significantly more time in the index hospitalization and had had more past hospitalizations. There were no differences between the groups in their utilization of community services before or after the index hospitalization and no difference in hospitalization rates after the index hospitalization. The conclusion is that the Oregon override procedure is functioning consistently. without undue delay in decision making. More investigation is necessary to determine whether override subjects represent a distinct subpopulation within the larger group of chronically mentally ill patients.

Issues surrounding the right to refuse treatment have been prominent in the psychiatric literature for almost two decades.<sup>1, 2</sup> The right to refuse treatment has emerged, following intense and lengthy legal battles, as a qualified right of involuntary patients committed to mental hospitals. It is qualified by emergencies that require action to protect the patient or others in the immediate environment.

When the right to refuse treatment had been established, the debate quickly shifted to procedures needed to evaluate and possibly override a patient's refusal

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in nonemergency situations. In a 1983 survey, Callahan and Longmire<sup>3</sup> described wide variations in how states approached this problem. These variations remain in effect today. In 1988, Appelbaum<sup>4</sup> categorized the various treatment refusal override procedures into two main groups, treatment-driven and rights-driven models.

Over the years, an empirical literature has examined the procedures adopted by particular jurisdictions including reports from Minnesota,<sup>5–7</sup> Massachusetts,<sup>8</sup> California,<sup>9–11</sup> Oregon,<sup>12–14</sup> and New York,<sup>15</sup> with a more recent flurry of reports,<sup>16–20</sup> following the decision in *Rivers v. Katz*.<sup>21</sup>

A companion line of research focused on comparisons of medication refusers and nonrefusers.<sup>22–26</sup> These studies separated the question of treatment refusal from the particular procedures designed to provide legal review of treatment refusal. This line of research demonstrated that treatment refusal is common among psychiatric patients and that override procedures are not consistently implemented when patients refuse treatment.

Schwartz *et al.*<sup>27</sup> asked patients who had their treatment refusal overridden whether they felt that this decision was appropriate. Those patients who felt that the override decision was not appropriate were significantly more symptomatic, grandiose, and hostile at the time of discharge from the hospital compared with those who viewed the override as having been appropriate. This study suggests that patients evaluated for an override of treatment refusal may be distinguishable from other patients in relation to the severity of their illnesses. Insight into illness is also a

critical factor in determining treatment compliance.<sup>28</sup> If these potential differences are real, we might expect to be able to distinguish between refusers and nonrefusers in relation to inpatient and outpatient treatment utilization. Although the number of subjects in the study was very small and highly selected, potential differences were not found in a recent report by Cournos *et al.*<sup>29</sup> The fact that no differences were found might relate to the fact that a treatment refusal procedure might not really discriminate actual treatment refusal among patients who go through the procedure from those who do not go through the procedure.

This article will examine a sample of patients civilly committed in one of Oregon's state hospitals in 1986. We will compare those committed patients who were evaluated through Oregon's administrative procedure for involuntary treatment with those who were not, and compare the utilization of mental health services for these two groups before and after the 1986 index hospitalization. The data will allow us to highlight the procedure used in Oregon to evaluate treatment refusal and to describe differences between these two civilly committed populations and, in particular, to focus on whether the override population can be identified as a group of high users of mental health services.

# Method

Originally adopted in 1983, then amended in 1986, Oregon's administrative rule on informed consent<sup>30</sup> includes a three-step procedure for the evaluation of a patient's capacity to give informed con-

sent to "significant treatment procedures." The process begins when the patient refuses treatment and/or when the patient's physician questions the patient's capacity to give informed consent to treatment. Once the question is raised, the physician must request an evaluation by an independent psychiatrist, who evaluates the patient's capacity to give informed consent and the appropriateness of the proposed treatment. The independent psychiatrist's findings are transmitted to the hospital's chief medical officer, who makes the final determination to approve or disapprove the proposed treatment. Approval for treatment remains in effect until the patient is discharged from the hospital up to a maximum period of one year.

The current study focused on all patients civilly committed to one of Oregon's major state hospitals in 1986 (N =901), comparing those patients who went through the administrative override process with those patients who did not. Data were obtained from three sources: (1) a review of the hospital charts for 172 patients who went through the override process during 1986; (2) a random sample of 50 charts for those patients who did not go through the override process; and (3) information from the statewide Mental Health Information System (MHIS) on mental health service utilization for all 901 individuals civilly committed to this state hospital during 1986. The MHIS is a computerized statewide information system that provides records on hospital episodes dating to the mid-1970s and on community treatment from 1981. For this project, we collected information from the MHIS dating from January 1, 1980, for hospital data, and from October 1, 1981, through November 1995 for community data. We thus had data on the mental health utilization for this cohort before and after their 1986 index hospitalization.

The majority of override requests for the 172 patients were for involuntary treatment with psychotropic medications. Two requests concerned the use of electroconvulsive therapy (ECT), and three requests were for programmed use of seclusion and/or restraints. As a result of this review, we eliminated 21 subjects for whom the override request appeared to be related to some factor other than medication refusal. Included in this group were patients who did not refuse treatment but whose physicians questioned their competency to make treatment decisions. We also eliminated subjects for whom the override request did not concern treatment with psychotropic medication. To increase comparability with the sample of patients committed to the state hospital in 1986, we eliminated subjects who were committed prior to 1986. We also eliminated multiple entries and removed subjects with missing mental health utilization data (N = 4). As a result of these steps, we reduced our sample from the initial 172 subjects to a more homogeneous sample of 123 medication refusers and 729 nonrefusers.

# Results

*Medication Refusal* We reviewed the charts of the override sample and the random sample of 50 charts of patients who did not go through the override process to

determine the number of times that patients in each group refused medications. The 123 override patients refused 51 percent of attempted administrations of medications in the time period before their refusal was overridden and 6 percent of the administrations after the override decision. The 50 comparison patients refused 4 percent of attempted administrations of medications during their entire hospitalization.

*The Override Process* As we found in previous studies, most override requests (N = 120, 98%) were approved by the independent psychiatric consultant and by the chief medical officer.

The time from admission to override request ranged from 1 to 132 days, with an average of 24 days. One-third of the requests occurred within the first week of admission. For the majority of the sample (N = 90, 73%), the decision to approve or disapprove was made within three days of the request. In only four cases did the period from request until the superintendent's decision last more than one week. The delay in these cases did not seem to be related to delays in scheduling the independent evaluation, but appeared to be the result of the treating physician making further efforts to find a treatment schedule that would encourage patient compliance without requiring an override.

Approximately one-third of the sample refused fewer than 10 percent of the medications that were attempted to be administered in the period prior to the initiation of the override request. There was a significant negative correlation between the percentage of attempted administrations of medication refused and the length of time between admission and the request for override (r = -.32, df = 122, p = .0001).

Comparison Between Override Sample (N = 123) and Those Civil Commitment Subjects Not Evaluated Through the Override Procedures (N = 729). Demographic Variables There was a significant difference in the gender distribution between the two groups. Women made up 55 percent (N = 68) of the override group compared with 41 percent (N = 300) of the comparison group ( $\chi^2$  = 8.57, df = 1, p = .0342). The groups did not differ in terms of race, with both samples being predominantly white (89%), nor were there any differences in average age at the time of admission (x =38), years of education (x = 12), or marital status (45% never married, 37% divorced or separated, 13% married, 5% unknown).

Diagnosis We created a single diagnosis based on all of the diagnostic information available for each subject from the hospital episodes. If a subject had ever received a diagnosis of mental retardation or an organic mental disorder, we classified the subject in that category. For the rest of the sample, if a subject had received a diagnosis of schizophrenia over 50 percent of the time, we classified the subject as schizophrenic. Similarly, if a subject had received a bipolar diagnosis over 50 percent of the time, we classified the subject as having bipolar disorder. The remaining subjects were classified based on the following hierarchy of diagnoses: other psychotic disorders, person-

Diagnoses		
	Override Group N = 123 (%)	Comparison Group N = 729 (%)
Schizophrenia	66 (54)	317 (44)
Bipolar disorder	41 (33)	197 (27)
Organic mental disorders	10 (8)	128 (18)
Other psychotic	4 (3)	19 (3)
Mental retardation	2 (2)	17 (2)
Substance abuse	0	15 (2)
Personality disorder	0	24 (3)
Adjustment disorder	0	12 (2)

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 $\chi^2 = 18.70208, df = 7, p = .0092.$ 

ality disorders, adjustment disorders, and substance abuse disorders.

Table 1 lists the diagnoses for the 123 override subjects compared with the 729 patients who did not go through the override process. There is a significant difference between the groups. As can be seen from the table, a majority of both groups received a diagnosis of schizophrenia or bipolar disorder. We found a similar percentage of these diagnostic groups in each cohort.

Length of Stay for Key Hospitalization There was a significant difference in the length of stay for the key hospital episode. Subjects in the override group spent an average of 161 days (SD = 354) in the hospital, significantly more than the average of 110 days (SD = 219) for the comparison group (ANOVA, F = 5.505, df = 1.850, p = .019).

Utilization of State Mental Health Services Prior to the Key Hospital Episode There was a significant difference in the number of subjects with prior state hospital experience. The refuser group had an average of 2.6 admissions prior to the 1986 hospitalization, while the nonoverride group had an average of 2.1 hospitalizations (ANOVA, F = 4.270, df =1,850, p = .039). However, there was no difference in the total number of days spent in a state hospital prior to the index hospitalization in 1986.

Unlike differences found in the utilization of hospital services, there were no significant differences between the two groups in utilization of community mental health services prior to the 1986 hospitalization. Between 1981 and the index hospitalization in 1986, approximately 46 percent (N = 393) of each group received general outpatient services. 48 percent (N = 408) were involved in crisis services, and 19 percent (N = 158) received residential services. In both groups, 62 percent (N = 528) received outpatient, residential, and/or crisis services in the period prior to the index hospitalization.

Utilization of State Mental Health Services Following the Key Hospitalization We found no differences between the groups in the number of hospitalizations following the index hospitalization, with subjects spending a mean of 315 days in the hospital in the approximately nine-year follow-up period.

In the follow-up period, 76 percent (N = 648) of the sample received outpatient, residential, and/or crisis services in the community. There were no differences between the two groups in community mental health utilization, with 63 percent (N = 537) receiving general outpatient services, 56 percent (N = 477) receiving crisis services, and 34 percent (N = 290) receiving residential services.

# Discussion

This study focused on the procedures developed in Oregon to handle treatment refusal override and on mental health services utilization before, during, and after an index hospitalization.

From the procedural point of view, Oregon's override process appears to be relatively efficient. In this study, 19 percent of those civilly committed to one state hospital in a one-year period were evaluated through an administrative procedure designed to determine competency to make treatment decisions. This rate is lower than previous reports from Oregon,<sup>12, 13</sup> but is still higher than reports from other jurisdictions, where 1 to 15 percent of the patients were evaluated in an override process.<sup>31</sup> We can only speculate as to the differences among jurisdictions in the utilization of a treatment refusal override procedure. On the one hand, these procedures are often complicated, time consuming, and discouraging to clinicians who may look for any alternative to the use of these more formalized procedures, including for example, the repeated use of medication on an emergency basis, or early discharge. On the other hand, if these procedures were truly used to evaluate competency to consent to treatment rather than treatment refusal, higher rates would be expected given the high acuity, associated with the diagnostic make-up of the population, usually found in new admissions to state facilities.

In our sample, 72 percent of the requests were settled within three days of the time of the request, and all but four were settled within one week. We would conclude that this area of the process is also efficient. This is an important issue, since data suggest that in other jurisdictions the override process can drag on for many weeks.<sup>8, 19</sup> Given this finding, we would suspect that the relatively large percentage of individuals in Oregon who go through the override procedure relates to the efficiency of the procedures as opposed to the evaluation of competency. Most requests for override in Oregon related to medication refusal. We had only 21 (12%) override requests that were initiated solely on the basis of concerns about competency.

In this study, one-third of the requests for override came in the first week of hospitalization. In a previous report.<sup>13</sup> we suggested that it would be rational and economical if a portion of treatment decision override decisions were made at the time of civil commitment. At this point in the process also would be a time to deal with the problem of incompetent assenters. The courts seem to have no trouble allowing incompetent mentally ill persons into commitment court.<sup>32</sup> However, they make little attempt to deal with

the problem of competency, which often surfaces as a major issue within hours after the patient leaves the commitment court and enters the hospital as a committed person. It is at this point that delay of treatment becomes the rule rather than the exception.

We found again that, as in most studies, regardless of the type of legal procedure in a particular jurisdiction, most contested refusals are overridden.<sup>33</sup> In our sample, 98 percent of the evaluations under this procedure resulted in the approval of treatment for the patient.

Before discussing the issue of mental health services utilization, several limitations of our study need to be addressed. As mentioned earlier there are differences between medication refusal rates and the use of administrative procedures for overriding refusal.<sup>26</sup> The rate of medication refusal will be higher than the use of the administrative procedure. We did not examine the medication refusal rates for all of the civilly committed subjects who did not go through the treatment refusal procedure. However, we did review a random sample of 50 hospital records of subjects who did not go through the override process and found a very low rate of medication refusal, 4 percent compared to 51 percent for the override group prior to the override decision. However, it is still possible that there was confounding of the groups and that some individuals with more extensive medical refusal patterns might have been included in the comparison sample.

Another confounding issue relates to our use of the statewide MHIS to determine utilization of services before and after the index 1986 hospitalization. It is certainly possible that there were episodes of service that were not recorded in this system. For example, the system does not record voluntary admissions in community hospitals and/or community services in private settings. However, there is little reason to believe that this problem would not equally affect both groups in the study.

Finally, we are limited in this study to diagnoses made by various physicians working at the state facility. No research criteria were applied to these diagnoses. Again, there is reason to believe that whatever errors there are in diagnosis will apply to both groups in the study.

Given these caveats, the data did demonstrate differences between the override sample and the comparison groups before and during, but not after, the 1986 hospitalization.

There were several differences between the override and control subjects during index hospitalization. The override subjects had a significantly greater proportion of women and differed diagnostically. This latter difference is related to the higher proportion of diagnoses other than schizophrenia and bipolar disorder in the control group. The override sample also spent significantly more time in the hospital during this index hospitalization.

Prior to the index hospitalization, override subjects had experienced significantly more hospitalizations. However, in contrast to the index hospitalization, there were no differences in the number of days that each group spent in the hospital. There were also no significant differences between these groups in their utilization of community mental health services prior to the index hospitalization. Slightly less than half of each group had received general outpatient services prior to the index hospitalization.

We found no differences between the groups after the index hospitalization. With a nine-year follow-up period, subjects experienced a mean of three more hospitalizations, spending approximately equal amounts of time in the hospital. In addition, 76 percent of the sample received some type of outpatient service in the nine-year follow-up period.

The data presented in this article shed light on two areas, the override procedure itself and the mental health service utilization of this population. There is little new information in regard to the override procedure. It is still a costly and cumbersome procedure that produces little variation in decisions. It is now so structured into mental health law that few question its true necessity or utility. The Oregon procedure works as well as others and, as a treatment-driven model, is probably more functional than those that depend on judicial decision making to effect the override process.<sup>8</sup>

Data on service utilization were presented for a period of time extending from 1981 to 1995. The sample represents a group of very heavy users of mental health services. Over the 15-year study period, subjects had an average of sixplus hospitalizations. In their lifetimes, they spent well over a year in hospital and they were heavy users of outpatient services. However, the data available for this study did not meaningfully differentiate

the groups. Several possibilities must be examined; one certainly is that there really are no meaningful differences between these groups. In this case, serious medication refusal represents a situational rather than an enduring finding. On the other hand, the groups may be confounded. Further study is needed to determine whether significant treatment refusal resulting in the use of override procedures is a characteristic of more than one hospitalization. If it is, then we may be better able to design comparison groups that will more definitively answer the question of whether we can identify a subset of the seriously mentally ill population who are prone to utilize involuntary mental health services and therefore may be more prone to enter the criminal justice system.<sup>34</sup>

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