

**SURVEY OF THE PROVISION
OF ELECTRO-CONVULSIVE THERAPY (ECT)
AT NEW YORK STATE PSYCHIATRIC CENTERS
BY THE COMMISSION ON QUALITY OF CARE
AUGUST 7, 2001**

I. Introduction

At the request of Assemblyman Martin Luster, Chair of the Assembly Committee on Mental Health, the Commission agreed to conduct a survey of the provision of Electroconvulsive Therapy (ECT) at state psychiatric centers. The purpose of this survey was to obtain information about the frequency of administration of this treatment; facilities' management of such, and the patients who undergo this treatment, but not to evaluate its efficacy. As a result, the Commission obtained information about facility-specific procedures governing the use of ECT; protocols for privileging physicians to administer the procedure; and demographic information regarding the age, gender, diagnosis, and capacity to consent for those persons receiving ECT in state psychiatric centers between June 1, 1999 and May 31, 2001. In addition, a review of individual clinical records was conducted according to a specific protocol for approximately one in three individuals identified as receiving ECT during the survey period, to develop an understanding of the patients who receive it.

ECT is currently administered in Manhattan Psychiatric Center, Creedmoor Psychiatric Center, Pilgrim Psychiatric Center, The Psychiatric Institute (PI), and Rockland Psychiatric Center.

II. Executive Summary

The Commission's survey revealed that during the two-year period of the review, 164 of the more than 10,000 inpatients received ECT in state operated facilities. At The Psychiatric Institute, almost all of the individuals receiving ECT were diagnosed with mood disorders—either Bipolar Disorder or Major Depression. Three out of four individuals at the other four facilities were diagnosed as psychotic; either having schizophrenia or schizoaffective disorder. Our record review revealed that the clinical presentation of these individuals justified the use of ECT as a treatment modality.

Further, excluding PI, where all ECT patients are voluntary participants in a research protocol, approximately two out of five individuals in state facilities receiving ECT are doing so

pursuant to a court order.

Our review of the policies and procedures for administration of ECT revealed that protocols varied in detail regarding the procedure itself, as well as in issues such as physician privileging and determining capacity to consent.

III. Overview of ECT

ECT was first introduced in 1938, and consists of the application of an electric shock to the brain, which causes a convulsive seizure. Controversial from the start, ECT was used in the 1940's and 50's to treat a variety of mental illnesses. Its popularity diminished in the 1960's with the introduction of pharmacological treatments, but again became a popular treatment for certain types of symptoms in the 1970's.

A course of treatment with ECT usually consists of six to twelve treatments given up to three times a week. ECT is generally administered in designated suites in which there is a specially equipped treatment room as well as a recovery room. The patient is given general anesthesia (without intubation) and a muscle relaxant. When these have taken full effect, a course of electricity is applied to the patient's brain through electrodes, which produces a seizure lasting approximately one minute. Due to the use of muscle relaxants and anesthesia, the patient does not convulse nor does he or she feel any pain.

Although the exact reason why ECT works is not known, it is generally believed that the biochemical events that accompany or result from the electrically induced seizure alter impaired electrochemical processes in the brain. One common theory is that ECT stimulates the long-term production of neurotransmitters. The accompanying muscle convulsions, memory loss or other neurologic effects do not contribute to the therapeutic effect. Thus, modern improvements in the technique of ECT such as sedation, anesthesia, muscle relaxation, selective electrode placements and current, have all contributed to the improved safety of the process while maintaining the beneficial aspects of the seizure itself. In essence, if properly administered, the patient experiences a brain seizure without sustaining the classic muscle convulsions typical of a seizure.

Professional literature¹ indicates that ECT has been proven effective in the treatment of major depressive disorder, bipolar disorder, schizophrenia, schizoaffective disorder, and schizophreniform disorder. The major side effect, short-term memory loss, is of great concern to many individuals. Bilateral ECT (i.e. electric current introduced at both sides of the head) is associated with greater memory loss than unilateral ECT, but with greater efficacy.

¹See for example, Hermann et al, "Diagnoses of Patients With ECT: A Comparison of Evidence-Based Standards With Reported Use." **Psychiatric Services**: 1059-1065, August 1999; or National Institute of Mental Health: Consensus conference on electroconvulsive therapy. **JAMA**: 254:103-108, 1985.

ECT is an effective treatment where the illness is characterized by behavior which is a threat to the safety and well-being of the patient or others, and which cannot be controlled by drugs or other means, or, for which drugs cannot be employed because of adverse reactions or because of the risks which their use entails.

IV. The Patients Who Received ECT

In the two year period reviewed, our survey identified 164 patients who received ETC. According to the New York State Office of Mental Health (OMH), during calendar year 2000, approximately 1.3% of the 10,000 adult inpatients in OMH operated psychiatric centers, received ETC. Of the approximately 60 cases reviewed in depth during our survey, the Commission found that all met criteria for use of ETC. Additionally, it was found that when ECT did not result in desired outcomes, it was promptly terminated.

A. Gender/Age: As can be seen below, at New York State facilities, ECT is administered to women more often than men.

Table 1. Gender

	Manhattan	Creedmoor	Pilgrim	PI	Rockland	Total
Total	23	19	45	66	11	164
Males	12 (52%)	4 (21%)	17 (38%)	21 (32%)	8 (73%)	62 (38%)
Females	11 (48%)	15 (79%)	28 (62%)	45 (68%)	3 (27%)	102 (62%)

ECT was most commonly given to those individuals between 18 and 64, and is not administered to children.

Table 2. Age

	Manhattan	Creedmoor	Pilgrim	PI	Rockland	Total
<18	0	0	0	0	0	0
18-64	22 (96%)	17 (89%)	34 (76%)	58 (88%)	11 (100%)	142 (86%)
>64	1 (04%)	2 (11%)	11 (24%)	8 (12%)	0	22 (14%)

B. Diagnosis: The diagnosis of individuals receiving ECT at PI reflects what one would expect at a typical voluntary hospital. Most people (88%) are diagnosed with either major

depression or bipolar disorder. The record reviews reveal that these individuals are all being treated with ECT after traditional pharmacological therapy has failed to lift their depressions.

However, at the other state facilities, the vast majority of individuals are diagnosed with schizophrenia or schizoaffective disorder. Most often, their ECT is designed to treat severe psychoses with much different symptomatology—severe self injury such as biting off pieces of one’s tongue or drinking household chemicals; significant assaultive behavior toward staff and peers; or severe psychosis. Typically, these individuals are either not able to tolerate pharmacological interventions, or such interventions have proven ineffective.

Table 3. Diagnosis

	Manhattan	Creedmoor	Pilgrim	PI	Rockland	Total
Major Depression	1 (04%)	4 (21%)	0	45 (68%)	1 (09%)	51 (31%)
Bipolar Disorder	2 (09%)	1 (05%)	10 (22%)	13 (20%)	1 (09%)	27 (16%)
Schizophrenia	8 (35%)	2 (11%)	10 (22%)	1 (01%)	5 (46%)	26 (16%)
Schizoaffective Disorder	10 (43%)	12 (63%)	24 (53%)	0	3 (27%)	49 (30%)
Other	2 (09%)	0	1 (03%)	7 (11%)	1 (09%)	11 (07%)

The record review at Manhattan revealed that the typical person receiving ECT is similar to Mr. MJ, a 51 year old man diagnosed with schizoaffective disorder. He has a history of more than ten hospitalizations with paranoid delusions and homicidal threats. His psychiatrist justified the use of ECT, stating that his symptoms of mental illness have persisted, despite receiving both traditional and new antipsychotic medications. He received a total of 56 treatments over a seven month period. They were eventually stopped due to a lack of response.

Mr. SS is a man diagnosed with chronic undifferentiated schizophrenia, polysubstance abuse, and antisocial personality disorder, who was noted to be paranoid and suicidal. A course of 26 ECT treatments along with high doses of Effexor, Seroquel, and Gabapentin brought his clinical picture under control.

A third individual, Mr. EC, is noted to be sensitive to certain types of medication, which caused severe extrapyramidal symptoms. Diagnosed with schizoaffective disorder and obsessive compulsive disorder, ECT was justified due to his non-response to the medication he was taking.

Similarly, Ms. BN, with a history of several past suicide attempts, was given ECT after sustaining several serious complications to medications she was taking and not responding to medications she did tolerate. ECT was justified based upon her continued significant psychosis and assaultive behavior.

At Creedmoor, 63% of individuals receiving ECT had a diagnosis of schizoaffective disorder. Ms. RP hears voices telling her she is going to die and has been in Creedmoor since 1991. She is sensitive to all neuroleptics which cause severe EPS, mimicking catatonia. The record states that she is responsive only to ETC.

Ms. YN lives in a state operated community residence and comes into Creedmoor for maintenance ECT every two weeks. Diagnosed with schizoaffective disorder, she has a long history of suicide attempts and assaultive behavior. A combination of maintenance ECT and medication have been successful in the past two years.

Ms. XL is described as withdrawn, depressed, and hallucinating. ECT was administered to treat her suicidal ideation and hopelessness. After 15 sessions, the treatment was stopped due to a lack of response. She has been placed on a different anti-depressant and anti-psychotic medication.

Nearly one-quarter of the people receiving ECT at Creedmoor have schizophrenia diagnoses. Ms. EP has had multiple hospitalizations, is noncompliant with medications, and rapidly decompensates. She is paranoid, religiously preoccupied, and delusional. She is so aggressive and assaultive that she requires secure care. She has been receiving ECT for a number of years, and the treatment decreases her preoccupation, delusions about devils, and aggressive and assaultive episodes. However, she remains floridly delusional and psychotic.

Patients receiving ECT at Pilgrim are particularly ill. For example, Ms. PS has been treatment refractory since 1986, in spite of various trials of psychotropics. She is assaultive, delusional, and has a history of past suicide attempts.

Ms. GL is paranoid, believes her food is poisoned, and will not eat. She has received naso-gastric tube feeding in the past after losing 20% of her body weight. The record indicates that ECT is the only option for this woman, as neuroleptics have not helped.

Mr. JS has a psychiatric history going back to 1948. He has received insulin shock, pre-frontal lobotomy and ETC. The record noted that Mr. JS was showing severe refractory mania, not responsive to conventional mood stabilizers. The mania is debilitating with fatigue. ECT was prescribed to prevent dangerous levels of exhaustion.

Mr. WP also has an extensive history of ECT going back to 1953. He gets severe extrapyramidal symptoms with standard neuroleptics and has had four episodes of Neuroleptic

Malignant Syndrome (NMS)² in the past five years. Most recently, ECT was justified to try to control his abusive, agitated, paranoid behavior. “Due to patient’s inability to tolerate antipsychotic medications, history of NMS, positive and favorable responses to ECT, ECT is considered the safest and the only mode of treatment to prevent further deterioration...”

Mr. JM, twenty years old, has a history of multiple psychiatric admissions, and multiple suicide attempts including: cutting his wrist, jumping off a bridge, and overdosing on insulin. At moderate risk for suicide, the record noted he was almost mute, refusing to eat or take insulin. He has a past history of successful ECT treatment.

Ms. PJ has a twenty-year history of psychiatric hospitalization, and exhibits very difficult behaviors including head banging, throwing self to the floor, and drinking household chemicals. The record notes that despite intensive pharmacological interventions, there has been no sustained improvement in her psychiatric symptomatology, and ECT is the only treatment modality left that may produce a desired outcome.

Ms. CD also has a twenty-year history of psychiatric hospitalization. She has a history of NMS and violent self injury that shows dramatic improvement after treatment with ETC.

Mr. RB, who has a twenty-plus-year history of mental illness, was most recently admitted to Pilgrim after assaulting seven staff members at Southside Hospital. On continuous one-to-one supervision since his admission, he has been restrained numerous times to prevent self injury. He bites off pieces of his tongue in response to command hallucinations, and is now missing two-thirds of his tongue. ECT was ordered after he lost 35 pounds in a month and developed stage II ulcers on his buttocks.

At Rockland, Ms. SK is being treated for a history of self-injurious behavior, severe psychosis, homicidal and suicidal ideation. She currently receives once weekly maintenance ETC. Mr. AA, with a history of 17 previous suicide attempts, was prescribed ECT after a poor response to treatment with medication.

V. Governance of ECT in State Psychiatric Centers

While all facilities have policies and procedures in place governing the use of ECT,³ policies regarding the credentialing of physicians and addressing informed consent varied widely.

²Hyperthermia with extrapyramidal and autonomic disturbances which may result in death, following the use of neuroleptic medication.

³Manhattan Psychiatric Center routinely performs ECT on patients from Kirby Forensic Psychiatric Center and Bronx Psychiatric Center. For purposes of this survey, we did not include protocols from these two facilities.

A. Policies and Procedures: Each facility visited during the survey has a readily available written procedure for administering ETC. The procedures varied from the very basic to the exceptionally detailed. All, however, were current, and contained sections detailing clinical indications for ECT, referral process, capacity to consent determinations, pre-ECT medical clearance, pre-treatment considerations, anesthesia, the actual administration of ECT, post-ECT care, and documentation requirements.

Rockland Psychiatric Center's protocol was last revised on January 20, 2000. It is a very basic, nine-page protocol. Manhattan Psychiatric Center's protocol was last revised on March 17, 1999. It runs ten pages, with over two of the ten pages devoted to special considerations and precautions. Creedmoor's protocol was issued in December, 1998 and runs fourteen pages. Although the protocol describes at some length the indications for usage, it does not define contraindications for use as do some other facilities' policies.

The Pilgrim policy is a very detailed 58 pages, last revised on February 20, 2001. While the protocol states that there are no "absolute" contraindications to ECT, it recognizes that there are situations in which ECT is associated with an appreciable likelihood of serious morbidity or mortality. "Those situations associated with substantial risk are not treated at PPC and would require transfer to a general medical facility for treatment." PI's policy was revised on January 22, 2001 and is a very detailed thirty pages, plus a number of appendices.

B. Physician Privileging: Each facility devotes a portion of its protocol to defining the manner in which physicians are privileged to conduct ETC. At Rockland, to be credentialed to perform ECT, a psychiatrist must successfully complete a five-day ECT fellowship program or a preceptorship; perform a minimum of five supervised ECT treatments; be Intermediate Response EMS trained every six months; and be approved by the Privileging Committee and the Clinical Director.

At Manhattan Psychiatric Center, to be ECT certified, a psychiatrist must pass a written examination on ECT, observe five administrations of ECT, and perform five supervised ECT treatments.

At Pilgrim, a psychiatrist must have completed an accredited ECT training course and/or performed at least 20 supervised ECT treatments. Additionally, re-privileging requires "relevant CME credits related to ECT."

At Creedmoor, a psychiatrist must have completed 50 hours of theoretical and practical training in ECT, which meets with the approval of the head of the ECT program.

At PI, the medical director of ECT recommends psychiatrists for privileging. The recommendation is reviewed in turn by the Medical Staff Credentialing and Privileging Committee, the Medical Staff Executive Committee and the Governing Body. Privileging is based upon an assessment of the general competency of the psychiatrist and specific experience

with and knowledge of ETC. Supervised administration at PI of at least 20 ECT treatments is required before a physician will be considered for privileging.

C. Informed Consent: Obtaining a patient's informed consent for ECT, among other specified treatments which require informed consent, is the subject matter of 14 NYCRR §27.9. This provision is part of the body of regulations promulgated before the Department of Mental Hygiene was reorganized in 1978 into three autonomous offices: OMH, OMRDD, and OASAS. Since that reorganization, these offices, including OMH, have promulgated regulations specific to their own functions which have superceded in part the earlier provisions. Section 27.9 is one of those earlier regulations which has been superceded, though only in part.

Section 27.9 provides as follows (in non-emergency situations):

- If an adult patient has the requisite capacity to consent to ECT treatment and does so, the treatment may proceed;
- If the patient has the requisite capacity to consent to ECT treatment but objects, the treatment may not proceed;
- If it is not clear whether the patient has the requisite capacity to consent to ECT treatment, an independent opinion about the patient's capacity must be obtained from a qualified consultant who is not an employee of the facility; and,
- If the patient does not have the requisite capacity to consent to ECT treatment but does not object, the treatment may only proceed if substituted consent is obtained from a surrogate decision-maker such as the spouse, a parent, an adult child, or a court of competent jurisdiction.

Section 27.9 also provides that if the patient does not have the requisite capacity to consent to ECT treatment but does object, the objection may be overridden administratively by the hospital. However, this provision of Section 27.9 has been superceded as a result of the Court of Appeals' 1986 decision in Rivers v. Katz. OMH promulgated Section 527.8 to supercede this provision in order to clarify that an incapacitated patient may be treated over objection only by court order.

Only Pilgrim's policy operationally defines capacity to consent. It is defined as being able to comprehend the nature and seriousness of the illness for which treatment is offered, to understand the information provided concerning the treatment modality, and to form a rational response based upon this information. PI indicates that, in their view, patients are considered to have the capacity to consent for ECT unless the evidence to the contrary is "compelling."

For a patient who has sufficient mental capacity to give informed consent to ECT, according to policy at PI, Pilgrim and Creedmoor, only the patient can give consent, and if the patient refuses to give consent, ECT will not be administered and the hospital will not go to court. If ECT treatment is deemed necessary for a competent patient who refuses ECT, Rockland and Manhattan policy allows them to go to court to obtain an order for treatment over objection.

Policies generally define the length of time a consent is valid. At PI, informed consent is good for up to 25 treatments of a single course of ETC. For maintenance ECT, consent is good for 25 treatments or six months, whichever comes first. At Pilgrim, consent is good for 25 treatments or three months, whichever comes first. For maintenance ECT, new consent must be obtained every six months. Except for patients receiving maintenance ECT, a gap of more than 14 days requires that a new consent be obtained at both PI and Pilgrim. Creedmoor requires a new consent every three months. Rockland requires that consent be updated every six months. Manhattan has no written requirement for the renewing informed consent, but does require that MHLS be notified before anyone, consenting or not, receives ETC.

Policies at PI, Pilgrim, Creedmoor indicate that legally designated surrogates or a court of competent jurisdiction can give consent to ECT if the patient lacks capacity to give informed consent, but does not object. Creedmoor mandates that two psychiatrists, neither associated with the ECT unit, must certify that a patient lacks the capacity to give informed consent because of impaired mental ability to comprehend the nature of the need for ECT, and they must further certify that the patient does not object. At Manhattan and Rockland, court orders are required before ECT can be given to anyone who is determined to lack the capacity to give consent.

In cases where a patient lacks capacity to give informed consent, and does object to ECT, all five facilities require that ECT be administered pursuant to court order.

Table 4. Consent Status

	Manhattan	Creedmoor	Pilgrim	PI	Rockland	Total
Has Capacity	6 (26%)	13 (68%)	31 (68%)	66 (100%)	10 (91%)	126 (77%)
Lacks Capacity	1 (4%)	0	1 (02%)	0	0	1 (1%)
Court Ordered	16 (70%)	6 (32%)	14 (30%)	0	1 (09%)	37 (22%)

Because in most cases the provision of ECT at PI is part of a research protocol, all patients receiving ECT there are considered to have the capacity to consent. If PI is thus excluded from this discussion, approximately two in five patients at the remaining four facilities are receiving ECT as a result of a court order.

Table 5. Consent Status (Excluding PI Patients)

	Manhattan	Creedmoor	Pilgrim	Rockland	Total
Has Capacity	6	13	31	10	60 (61%)
Surrogate Consent	1	0	0	0	1 (01%)
Court Order	16	6	14	1	37 (38%)

At Rockland Psychiatric Center, Ms. SK did not object to treatment, but because she was determined to lack capacity, the hospital successfully sought a court order. At Pilgrim, doctors wrote that Ms. LB had “no factual understanding” of the treatment. The ECT procedure was explained to Ms. PS, , but she “did not seem to understand.” “The proposed treatment benefits and risks have been explained,” to Ms. GL, but, “she does not have the capacity to give or withhold consent.” Mr. JS was declared to not have capacity because, “he is unable to concentrate due to acute mania, racing thoughts and is unable to process information given to him.” For Manhattan patient PC, “...the patient’s ability to make a reasoned decision relative to the proposed treatment, its risks, benefits and alternatives, is considered to be poor.”

Family gave consent for ECT for Mr. RB. “I have tried several times to explain to the patient about ECT and its benefits and complications...(he) does not have capacity to sign permits...”

Notes justifying an individual’s ability to give consent were similar to this: “ECT was discussed with (Pilgrim patient CD) and she is aware of ECT need, side effects. Is capable of signing consent. Feels ECT will help her.” At Creedmoor, Ms. YN signed consent as she “has capacity and understands risks/benefits.”

VIII. Summary and Recommendation

The Commission’s survey revealed that during the two-year period of the review, 164 individuals received ECT in state-operated facilities. Our record review revealed that the clinical presentation of these individuals justified the use of ECT as a treatment modality.

With respect to consent, excluding patients at PI, approximately two out of five individuals in state facilities are receiving ECT pursuant to court order.

Our review of the policies and procedures revealed differing protocols. Not only were

they varied in detail regarding the procedure itself, they varied regarding physician privileging and discerning consent issues.

Accordingly, the Commission recommends that the Office of Mental Health establish a blue ribbon task force charged with the responsibility of developing ECT protocols that can be applied consistently in state facilities administering ECT and which promote the application of best practices while ensuring strict adherence to statutory and regulatory standards for safeguarding patient rights. The Commission would welcome the opportunity to assist OMH in this regard.

VIII. Addendum

In his response to this survey, OMH Commissioner James Stone indicated that his agency has been at work since last January developing a set of guidelines based upon the recently revised American Psychiatric Association's ECT standards. These guidelines will soon be forwarded to groups such as the APA and HANYS for comment.