



Electroconvulsive Therapy Annual Report

**As Required By
Chapter 578, Texas Health and Safety Code**



**Department of State Health Services
March 2016**

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Introduction

Texas Health and Safety Code, Section 578.008, requires DSHS to use information received from a mental hospital or facility to analyze, audit, and monitor the use of electroconvulsive therapy, psychosurgery, pre-frontal sonic sound treatment, or any other convulsive or coma-producing therapy administered to treat mental illness. DSHS is required to file annually with the Governor and the presiding office of each house of the Legislature a report summarizing, by facility, the information received.

Background

Texas Health and Safety Code, Title 7, Subtitle C, Chapter 578 outlines the requirements of providers who offer electroconvulsive therapy. The statute:

- Requires that treatment be provided only by a physician
- Prohibits use in children under age sixteen
- Outlines the process for obtaining proper consent for treatment from patients
- Requires that electroconvulsive equipment be registered
- Requires providers to submit specific data elements to DSHS

Fiscal Year 2015 Report Summary

Electroconvulsive therapy is given as a series of treatments. Providers are required to submit to DSHS a quarterly report reflecting all treatments received by a patient during that quarter.

Because patients receive treatments throughout the year and the reports are submitted quarterly, the annual aggregate total may reflect patients who received treatment in more than one quarter. There were 2,649 aggregate quarterly reports in fiscal year 2015, an increase of 7.5 percent from fiscal year 2014.

Table 1 summarizes the number of aggregate quarterly reports over the last seven years.

Table 1: Aggregate Quarterly Reports from facilities performing treatments

Fiscal Year	Reports
2009	1,918
2010	2,202
2011	2,126
2012	2,079
2013	2,243
2014	2,466
2015	2,649

In fiscal year 2015, 25 facilities in Texas had registered equipment (see Appendix A for list of facilities). Twenty-four of these facilities performed treatments and provided the required patient reports. DSHS reviewed the submitted reports and identified several points of interest:

- The average number of treatments (6.2) received by a patient as part of a series remained the same from last year
- There were 2,629 (99.24 percent) voluntary patients consenting to ECT treatments reported, 5 (.19 percent) were involuntarily hospitalized patients that gave consent for ECT treatments, and 15 (.57 percent) reflected treatments where guardian consented for patient
- Patient demographics, such as age, gender, and race and ethnicity were similar to prior years
- There were 1,412 (53.30 percent) where private third party insurer was reported as primary source of payment for ECT, and 1,191 (44.96 percent) public third party as primary source of payment for ECT reported.
- The number of people served using public sources of payment decreased slightly from 46 percent in fiscal year 2014 to 45 percent in fiscal year 2015. There were 66 (2.49 percent) reports reflecting memory loss within 14 days of ECT. Because memory loss is a known and common side effect, discussion of this risk is required prior to obtaining consent for ECT in Texas.
- There were no cardiac arrests reported within 14 days of ECT.

Part of the DSHS analysis concentrated on patient outcomes. Fifty-eight percent of the reports listed pre-treatment severity of mood disorder symptoms as severe-to-extreme. Reports from two-to-four weeks after treatment showed less than three percent of patients with severe-to-extreme symptoms. There was a slight increase in the rate of adverse events that occurred when compared to the prior year.¹ Less than three percent of patients had reportable events, almost entirely reported as memory loss. Because memory loss is a known and common side effect, discussion of this risk is required prior to obtaining consent for electroconvulsive therapy in Texas. Additionally, one death was reported within the fourteen days following ECT treatment. The cause of death was reported to be a heart attack which occurred three days after the last treatment. An autopsy was not authorized.²

Conclusion

Reports submitted to DSHS by providers of electroconvulsive therapy showed a 7.5 percent increase in the number of treatments in fiscal year 2015 compared to 2014. There was a slight decrease in the number of patients whose source of funding was public. There were slightly more adverse incidents reported in 2015. There was one death reported within 14 days of treatment. Mood disorder symptoms among the most severely ill patients were improved in all but about four percent of patients.

¹ ECT providers are required to report on the following adverse events: apnea, fracture, cardiac arrest, memory loss, and death.

² Section 578.007(b)(8) of the Health and Safety Code requires ECT providers to report autopsy findings if death followed within 14 days of administration of the therapy. However, the Texas Code of Criminal Procedure, Chapter 49, Article 49.05, provides that proper consent be obtained from the legal next of kin before an autopsy can be performed.

Appendix A: List of Facilities with Registered ECT Equipment

Baylor All Saints Medical Center
Ben Taub General Hospital
Central Houston Surgical Center
Cypress Creek Hospital
DePaul Center
Green Oaks Hospital
Houston Behavioral Healthcare Hospital
Houston Methodist
Laurel Ridge Treatment Center
Mayhill Hospital
Methodist Richardson Medical Center
Methodist Specialty & Transplant Hospital
Midland Memorial Hospital
San Jacinto Methodist Hospital
Scott & White Memorial Hospital
Seton Shoal Creek Hospital
Southwest General Hospital
St. Joseph Medical Center
Terrell State Hospital
Texas Health Presbyterian Hospital
Texas West Oaks Hospital
Texoma Medical Center
University Behavioral Health of El Paso
UT Harris County Psychiatric Center
Zale Lipshy University Hospital

**FY15 ECT Summary-All Facilities
for Treatments Given September 1, 2014 to August 31, 2015**

Number of patients, reported quarterly, to have received ECT:		2,649 *				
<u>Race/Ethnicity</u>		Q1	Q2	Q3	Q4	Total
White/Caucasian		565	522	524	522	2,133
Black or African American		41	36	41	36	154
Hispanic or Latino		74	74	85	82	315
Asian		12	7	5	9	33
Other		3	2	5	4	14
Reports reflected						2,649
<u>Gender</u>						
Female		475	417	433	440	1,765
Male		220	224	227	213	884
Reports reflected						2,649
<u>Age</u>						
16-17		0	2	1	1	4
18-24		36	34	51	41	162
25-44		274	237	229	220	960
45-64		272	265	276	284	1,097
65 +		113	103	103	107	426
Reports reflected						2,649
<u>Hospital Admission Status</u>						
Voluntary patient consenting		689	638	658	644	2,629
Involuntary patient consenting		1	0	0	4	5
Guardian consenting for patient		5	3	2	5	15
Reports reflected						2,649
<u>Primary Source of Payment for ECT</u>						
Private 3rd party (insurer, HMO, etc)		347	349	360	356	1,412
Public 3rd party (county, state, Medicaid, etc)		337	281	292	281	1,191
Own/family funds		7	7	1	14	29
Other		4	4	7	2	17
Reports reflected						2,649
<u>Other Reportable Events that Occurred within 14 Days of ECT</u>						
Apnea		0	0	0	0	0
Fracture		0	0	0	0	0
Cardiac arrest		0	0	0	0	0
Reported memory loss		16	15	21	14	66
Death		0	1	0	0	1
Autopsy performed**		0	0	0	0	0
<u>Treatments Administered during this Reporting Period</u>						
Ongoing acute treatments reported		75	89	112	111	387
Concluded acute treatments reported		275	194	203	210	882
Stopped acute treatments reported		100	94	97	84	375
<u>Other reportable psychiatric therapies</u>						
Prolonging Remission in Depressed Elderly (PRIDE)		0	0	0	0	0

*This number may reflect patients who have received ECT in more than one quarter this year.

**Section 578.007(b)(8) of the Health and Safety Code requires ECT providers to report autopsy findings if death followed within 14 days of administration of the therapy. However, the Texas Code of Criminal Procedure, Chapter 49, Article 49.05, provides that proper consent be obtained from the legal next of kin before an autopsy can be performed.

FY15 ECT Summary-All Facilities (Cont')
for Treatments Given September 1, 2014 to August 31, 2015

Number of patients, reported quarterly, to have received ECT:		2649 *				
<u>Total</u>		<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Total</u>
Maintenance Treatments Administered		1,305	1,297	1,203	1,316	5,121
Average Monthly Maintenance Treatments		435.00	432.33	401.00	438.67	426.75
Acute Treatments Planned		4,829	4,016	4,590	4,512	17,947
Acute Treatments Administered		3,249	2,563	2,784	3,098	11,694
Complete Acute Treatments Administered		2,382	1,642	1,757	1,949	7,730
Total Number of ECT Treatments Administered		4,554	3,860	3,987	4,414	16,815
Average Per Patient						
Maintenance Treatments Administered		1.88	2.02	1.82	2.02	1.93
Average Monthly Maintenance Treatments		0.63	0.67	0.61	0.67	0.64
Acute Treatments Planned		6.95	6.27	6.95	6.91	6.78
Acute Treatments Administered		4.67	4.00	4.22	4.74	4.41
Complete Acute Treatments Administered		3.43	2.56	2.66	2.98	2.92
Total Number of ECT Treatments Administered		6.55	6.02	6.04	6.76	6.35
Physicians Assessment						
Level of Memory Impairment Before ECT						
None		346	314	383	353	1,396
Mild		297	252	230	246	1,025
Moderate		36	32	26	31	125
Severe		14	11	14	18	57
Extreme		2	6	5	6	19
Unable to be determine		0	27	0	0	27
Ongoing series		N/A	N/A	N/A	N/A	0
Reports Reflected						2,649
Level of Memory Impairment 2-4 Weeks After ECT						
None		238	182	273	305	998
Mild		376	333	299	273	1,281
Moderate		67	41	44	52	204
Severe		7	2	3	5	17
Extreme		0	0	0	0	0
Unable to be determine		7	83	40	18	148
Ongoing series		0	0	1	0	1
Reports Reflected						2,649
Level of Symptom Severity Before ECT						
None		9	41	1	12	63
Mild		131	112	81	75	399
Moderate		181	197	134	129	641
Severe		297	220	376	376	1,269
Extreme		77	70	67	61	275
Unable to be determine		0	1	1	0	2
Ongoing series		N/A	N/A	N/A	N/A	0
Reports Reflected						2,649
Level of Symptom Severity 2-4 Weeks After ECT						
None		105	142	127	145	519
Mild		461	346	346	329	1,482
Moderate		97	59	129	137	422
Severe		21	6	11	22	60
Extreme		2	0	1	0	3
Unable to be determine		8	88	45	20	161
Ongoing series		1	0	1	0	2
Reports Reflected						2,649

*This number may reflect patients who have received ECT in more than one quarter this year.