Report on Electroconvulsive Therapy For Fiscal Year 2017

As Required by Health and Safety Code Section 578.008(b)

Health and Human Services

April 2018
Table of Contents

Table of Contents ................................................................................... ii

1. Introduction ...................................................................................... 1

2. Demographic and Treatment Data ..................................................... 3

3. Patient Outcomes Data ...................................................................... 6

Appendix A. Facilities with Registered ECT Equipment .................... A-1
1. Introduction

The Report on Electroconvulsive Therapy for Fiscal Year 2017 is required by Health and Safety Code, Section 578.008(b), which states the Health and Human Services Commission (HHSC) must submit a report on electroconvulsive therapy (ECT) annually, by April 1, to the Governor and presiding officer of each house of the Legislature. The report must include a summary, by facility, of data received from ECT treatment providers under Health and Safety Code, Sections 578.006 and 578.007.¹ Other required data include:

- Number of people who received ECT
- Number of people voluntarily receiving mental health services who consented to ECT
- Number of involuntary patients who consented to ECT
- Number of involuntary patients for whom a guardian consented to ECT
- Age, sex, and race of the people who received ECT
- Source of payment for ECT therapy
- Average number of non-ECT treatments
- Average number of ECT treatments administered for each complete series of treatments, but not including maintenance treatments
- Average number of maintenance ECT treatments administered per month
- Number of fractures, reported memory losses, incidents of apnea, and cardiac arrests without death
- Autopsy findings if death followed within 14 days after the date of the administration of ECT

All data are from quarterly reports provided by the 21 facilities with registered ECT equipment which performed ECT treatments in fiscal year 2017. Data are annual aggregate total numbers of patients who received ECT across the four quarters. Because patients may receive treatments in multiple quarters, the annual aggregate totals do not reflect the unique number of patients.

¹ Some of these data are omitted from this report due to the small number of individuals reported on. HHS is required by law to safeguard an individual’s protected health information from disclosure without the consent of the individual. Omitted information may be available upon request for legally authorized purposes to legally authorized persons who sign a confidentiality agreement.
ECT is the medical application of an electrical current to cause a therapeutic seizure and decrease the severity of mood-related mental health symptoms.\(^2\) ECT is a treatment option for some people with severe major depression, bipolar disorder, schizophrenia, catatonia,\(^3\) and other mental health conditions. ECT is typically prescribed only after other treatments have not worked. Acute treatment generally includes an initial series of 6–15 treatments, followed by less frequent maintenance treatments. The most common side effects of ECT are short-term and include headaches, muscle pain, nausea, and confusion or memory loss for a few minutes or hours after treatment. More serious, adverse side effects (e.g., long-term loss of past memories) are less common and may last longer. ECT can only be provided by a physician licensed to practice medicine, cannot be used in children under 16 years old, must only be administered with the proper consent,\(^4\) and must be administered using equipment registered with HHSC.\(^5\) Facilities administering ECT must submit data to HHSC for this report and to assist with audits, analysis, and monitoring.

In fiscal year 2017, 22 facilities registered ECT equipment and were eligible to perform ECT treatments (Appendix A), and 21 facilities performed ECT treatments. Notable findings in fiscal year 2017 include:

- ECT providers submitted 2,773 ECT reports, and over 17,000 treatments were administered to patients across all four quarters of fiscal year 2017. Patients may receive multiple treatments and may receive treatments in more than one quarter.
- There was a 1.04 percent increase in the number of ECT treatments from fiscal year 2016 to fiscal year 2017.
- Overall, patients experienced less severe symptoms after ECT treatments.
- There was a slight decrease in the number of patients using public funds for treatment payment.
- There were 2 deaths reported within 14 days of ECT, with both attributed to causes other than ECT.

\(^2\) In addition to ECT, Section 578.007 discusses other convulsive or coma-producing therapies, such as psychosurgery and pre-frontal sonic sound treatment. Definitions for ECT therapies and reportable therapies can be found in Texas Administrative Code, Section 405.103.

\(^3\) A state of apparent unresponsiveness to external stimuli in a person who is apparently awake.

\(^4\) Treatments can be stopped at any time by the provider or the person who provided consent (patient or legal guardian).

\(^5\) As outlined in Health and Safety Code, Chapter 578 and established in department rule.
2. Demographic and Treatment Data

Figures 1–3 provide patient demographic data on gender, race/ethnicity, and age.

**Figure 1. Gender/Sex of Patients**

![Gender/Sex Chart](chart1.png)

**Figure 2. Race/Ethnicity of Patients**

![Race/Ethnicity Chart](chart2.png)
Table 1 shows the total number and average number of ECT treatments patients received. Where average totals are provided, the average total across all quarters was computed using non-rounded data from the ECT providers.

Table 1. Total Number and Average Number of Treatments

<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Total</th>
<th>Average Per Month&lt;sup&gt;6&lt;/sup&gt;</th>
<th>Average Per Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Treatments Administered</td>
<td>5,809</td>
<td>484.08</td>
<td>2.09</td>
</tr>
<tr>
<td>Acute Treatments Planned</td>
<td>18,391</td>
<td>N/A</td>
<td>6.63</td>
</tr>
<tr>
<td>Acute Treatments Administered</td>
<td>11,822</td>
<td>N/A</td>
<td>4.26</td>
</tr>
<tr>
<td>Complete Acute Treatments Administered (series)</td>
<td>6,256</td>
<td>N/A</td>
<td>2.26</td>
</tr>
</tbody>
</table>

<sup>6</sup> Average monthly treatment data is only required for maintenance treatments.
<table>
<thead>
<tr>
<th>Treatment Type</th>
<th>Total</th>
<th>Average Per Month</th>
<th>Average Per Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-ECT Treatments</td>
<td>0</td>
<td>N/A</td>
<td>0</td>
</tr>
<tr>
<td>Total Number of ECT Treatments Administered</td>
<td>17,631</td>
<td>N/A</td>
<td>6.36</td>
</tr>
</tbody>
</table>

Table 2 shows the number of patients that received ECT based on type of consent and admission.

**Table 2. Number of Patients Based on Consent and Admission Type**

<table>
<thead>
<tr>
<th>Consent and Admission Type</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary patient consenting</td>
<td>2,716</td>
</tr>
<tr>
<td>Involuntary patient consenting</td>
<td>9</td>
</tr>
<tr>
<td>Guardian consenting for patient</td>
<td>48</td>
</tr>
</tbody>
</table>

Table 3 shows the primary source of payment used by patients who received ECT treatment.

**Table 3. Primary Source of Payment**

<table>
<thead>
<tr>
<th>Primary Source of Payment</th>
<th>Number of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private third party</td>
<td>1,587</td>
</tr>
<tr>
<td>Public third party (e.g., state or county resources)</td>
<td>1,119</td>
</tr>
<tr>
<td>Own/family funds</td>
<td>53</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
</tbody>
</table>

7 Any other convulsive or coma-producing therapy used to treat mental health conditions.
Facilities have up to four weeks after the patient’s last treatment to complete a follow-up assessment. Some individuals completed treatment by the end of the quarter, but could not be reached by the facility for a follow-up assessment within the timeframe. These individuals are included in the “Undetermined” category. Some individuals whose treatments continued past the end of the quarter are included in the “Ongoing” category and may be counted in more than one quarter.

Figure 4 shows the physician-assessed severity of symptoms related to the condition being treated before and after ECT treatment. Patients reported experiencing less severe symptoms after ECT treatment.

**Figure 4. Assessed Levels of Symptom Severity Before and After ECT Treatment**
Figure 5 shows the physician-assessed level of memory loss before and after ECT treatment. Memory loss is a known risk and common side effect of ECT and must be discussed before obtaining consent in Texas. Most types of memory loss experienced after ECT are not long-lasting and do not qualify as adverse events. Adverse memory loss effects are reported as very rare.

**Figure 5. Levels of Memory Loss Before and After ECT Treatment**

Table 4 shows the number of reportable adverse events after treatment. Two deaths were reported. The first death occurred 11 days after ECT treatment, an autopsy was performed, and the cause of death was reported as an overdose. The second death occurred three days after ECT treatment. Although consent was not obtained to perform an autopsy, the inquest report does not attribute the death to ECT.

8 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.
### Table 4. Number of Reportable Adverse Events within 14 Days of ECT

<table>
<thead>
<tr>
<th>Adverse Event</th>
<th>Total Number Within 14 Days of Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fractures</td>
<td>0</td>
</tr>
<tr>
<td>Apnea</td>
<td>0</td>
</tr>
<tr>
<td>Cardiac arrests without death</td>
<td>0</td>
</tr>
<tr>
<td>Death</td>
<td>2</td>
</tr>
</tbody>
</table>

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. Facilities with Registered ECT Equipment

- Baylor Scott & White All Saints Medical Center
- Baylor Scott & White Medical Center
- Ben Taub General Hospital
- Cypress Creek Hospital
- DePaul Center
- El Paso Behavioral Health System
- Green Oaks Hospital
- Houston Behavioral Healthcare Hospital
- Houston Methodist Hospital
- Laurel Ridge Treatment Center
- Mayhill Hospital
- Menninger Clinic, The
- Methodist Richardson Medical Center
- Methodist Specialty & Transplant Hospital
- Midland Memorial Hospital
- Seton Shoal Creek Hospital
- St. Joseph Medical Center
- Terrell State Hospital
- Texoma Medical Center
- UT Harris County Psychiatric Center
- West Oaks Hospital
- Zale Lipshy University Hospital