### ANNUAL REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2021-June 30, 2023 (Fiscal Year 2023)

Number and Percentage of Individuals Receiving ECT by Age and Sex

Hospital	Total	0-17	18-21	22-34	35-49	50-64	65+	F	М
University of Vermont Medical Center	88	2	1	13	19	31	22	55	33
Burlington		2.3%	1.1%	14.8%	21.6%	35.2%	25.0%	62.5%	37.5%
Veterans Administration	19	0	0	0	11	6	2	3	16
White River Junction		0.0%	0.0%	0.0%	57.9%	31.6%	10.5%	15.8%	84.2%
Central Vermont Medical Center	5	0	0	0	0	2	3	3	2
Berlin		0.0%	0.0%	0.0%	0.0%	40.0%	60.0%	60.0%	40.0%
All begritale	112	2	1	13	30	39	27	61	51
All hospitals		1.8%	0.9%	11.6%	26.8%	34.8%	24.1%	54.5%	45.5%

Number and Percentage of ECT Treatments, by Location and Type

				0.00			,,							
	Number of	Treatments			Inpat	ient					Outpati	ent		
Hospital	Total	Number of Tx per Person	1	Bitemporal	Bilateral	Bifrontal	LART	Other	Unilateral	Bitemporal	Bilateral	Bifrontal	LART	Other
University of Vermont Medical Center	1,799	20.4	500	26	0	0	0	0	1220	24	3	26	0	0
Burlington			27.8%	1.4%	0.0%	0.0%	0.0%	0.0%	67.8%	1.3%	0.2%	1.4%	0.0%	0.0%
Veterans Administration	134	7.1	61	32	0	0	0	0	12	29	0	0	0	0
White River Junction			45.5%	23.9%	0.0%	0.0%	0.0%	0.0%	9.0%	21.6%	0.0%	0.0%	0.0%	0.0%
Central Vermont Medical Center	134	26.8	0	0	0	0	0	0	134	0	0	0	0	0
Berlin			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
All hospitals	2,067	18.5	561	58	0	0	0	0	1366	53	3	26	0	0
			27.1%	2.8%	0.0%	0.0%	0.0%	0.0%	66.1%	2.6%	0.1%	1.3%	0.0%	0.0%

Number and Percentage of Individuals Receiving Treatments by Location and Type of Treatment

Nullibel allu	reiceilla	ge or mu	iviuuais r	receiving	ceiving freatments by Location and Type of freatment										
Hospital	Total	Inpat. Only	Outpat. Only	Both	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combin- ation				
University of Vermont Medical Center	88	12	38	38	80	0	0	0	0	0	8				
Burlington		13.6%	43.2%	43.2%	90.9%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%				
Veterans Administration	19	14	4	1	10	5	0	0	0	0	4				
White River Junction		73.7%	21.1%	5.3%	52.6%	26.3%	0.0%	0.0%	0.0%	0.0%	21.1%				
Central Vermont Medical Center	5	0	5	0	5	0	0	0	0	0	0				
Berlin		0.0%	100.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
All hospitals	112	26	47	39	95	5	0	0	0	0	12				
		23.2%	42.0%	34.8%	84.8%	4.5%	0.0%	0.0%	0.0%	0.0%	10.7%				

### Individuals with Some Degree of Memory Impairment By Number of Treatments and Treatment Type

Dy Hamilton of Froductions and Froduction Type														
	Memory		Sum o	f Treatments	in Year			Treatm	nent Type Sta	atus				
Hospital	Impairment During FY	Total	1-12	13-29	30+	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combin- ation		
	No	22	16	4	2	16	3	0	0	0	0	3		
All hospitals	Yes Unreported/	62 28	17	31	14	55	0	0	0	0	0	7		
	Missina	28												

Based on reports from hospitals to the Vermont Department of Mental Health. The reports contain monthly individual-level summaries for each patient.

A 'No' means no memory impairment recorded after any episode of treatment no matter how many episodes occurred throughout the year for each individual who received ECT Treatment. 'Yes' means at least one recorded memory impairment no matter how many episodes of treatment might have occurred for each individual receiving treatment. For example, if one individual received 12 treatments and experienced memory impairment after one treatment but not after the other 11 treatments, this individual would still be recorded as having some degree of memory impairment for the year.

#### ANNUAL REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT Number and Percentage of Post-Treatment Episode Global Improvement Scale (GIS) Scores July 1, 2021-June 30, 2023 (Fiscal Year 2023)

						GIS Scores	3			
		Total Episodes Assessed	Very much improved	Much improved	Minimally improved		Minimally worse	Much worse	Very much worse	Not Assessed
			-1-	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -	-7-	- 0 -
	University of Vermont Medical Center	518	321	129	60	8	0	0	0	2
tal			62%	25%	12%	2%	0%	0%	0%	0%
Hospital	Veterans Administration	11	6	5	0	0	0	0	0	26
운			55%	45%	0%	0%	0%	0%	0%	70%
	Central Vermont	134	24	49	37	22	2	0	0	0
	Medical Center	l	18%	37%	28%	16%	1%	0%	0%	0%
ڀ	Male	246	120	69	50	6	1	0	0	16
Gender			49%	28%	20%	2%	0%	0%	0%	6%
3er	Female	410	225	113	47	24	1	0	0	12
Ĭ		1	55%	28%	11%	6%	0%	0%	0%	3%
	0-17	13	9	4	0	0	0	0	0	0
			69%	31%	0%	0%	0%	0%	0%	0%
	18-21	12	1	5	6	0	0	0	0	0
			8%	42%	50%	0%	0%	0%	0%	0%
	22-34	59	33	13	12	1	0	0	0	0
	25.40	1	56%	22%	20%	2%	0%	0%	0%	0%
Age	35-49	170	96 560/	53	19	2	0	0	0	20
`	50-64	262	56% 125	31% 77	11% 34	1% 25	0% 1	0% 0	0% 0	11% 7
	50-04	202	48%	29%	13%	10%	0%	0%	0%	3%
	65+	146	87	30	26	2	1	0	0 70	1
	00.	140	60%	21%	18%	1%	1%	0%	0%	1%
	Unknown	l o	0	0	0	0	0	0	0	0
			NA	NA	NA	NA	NA	NA	NA	NA
	Unilateral Only	636	335	176	93	30	2	0	0	13
			53%	28%	15%	5%	0%	0%	0%	2%
	Bitemporal Only	10	4	5	1	0	0	0	0	12
be			40%	50%	10%	0%	0%	0%	0%	55%
Ę	Bilateral Only	2	1	1	0	0	0	0	0	0
Treatment Type			50%	50%	0%	0%	0%	0%	0%	0%
Ē	Bifrontal Only	6	6	0	0	0	0	0	0	0
rea	LART Only	l ,	100%	0%	0%	0%	0%	0%	0%	0%
-	LART Only	0	0 NA	0 NA	0 NA	0 NA	0 NA	0 NA	0 NA	0
	Other Only	0	0	0	0	0	0	0	0	NA 0
	Outel Offig	"	NA	NA	NA	NA	NA	NA	NA	NA
	Combination	9	5	1	3	0	0	0	0	3
			56%	11%	33%	0%	0%	0%	0%	25%
	Total	663	351	183	97	30	2	0	0	28
		330	53%	28%	15%	5%	0%	0%	0%	4%
				Improved		No Chang	e	Worse		
l				631		30	-	2		
i				95%		5%		0.3%		
l				5576		370		0.070		

## ANNUAL REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2021-June 30, 2023 (Fiscal Year 2023)

Individuals with Some Degree of Memory Impairment
By Number of Treatments and Treatment Type

	Memory		Sum of	treatments	in Year			Trea	atment Type Sta	atus		
Hospital	Impairment During FY	Total	1-12	13-29	30+	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combin- ation
University of Vermont Medical Center	No	13	8	3	2	12	0	0	0	0	0	1
Burlington	Yes	58	15	31	12	52	0	0	0	0	0	6
Veterans Administration	No	9	8	1	0	4	3	0	0	0	0	2
White River Junction	Yes	2	2	0	0	1	0	0	0	0	0	1
Central Vermont Medical Center	No	0	0	0	0	0	0	0	0	0	0	0
Berlin	Yes	2	0	0	2	2	0	0	0	0	0	0
All bognitals	No	22	16	4	2	16	3	0	0	0	0	3
All hospitals	Yes	62	17	31	14	55	0	0	0	0	0	7

Based on reports from hospitals to the Vermont Department of Mental Health. The reports contain monthly individual-level summaries for each patient.

Note: Central Vermont Medical Center provided no data on Memory Impairment during FY21 or FY22.

A 'No' means no memory impairment recorded after any episode of treatment no matter how many episodes occurred throughout the year for each individual who received ECT Treatment. 'Yes' means at least one recorded memory impairment no matter how many episodes of treatment might have occurred for each individual receiving treatment. For example, if one individual received 12 treatments and experienced memory impairment after one treatment but not after the other 11 treatments, this individual would still be recorded as having some degree of memory impairment for the year.

### REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2000-June 30, 2023 (Fiscal Years 2001 - 2023)

Number of Individuals Receiving ECT by Gender

													iscal \				oonac							
Hospital		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
University of	Total	33	43	55	66	79	79	91	87	81	84	92	76	88	98	76	69	59	84	104	90	65	83	88
Vermont Medical Center	Male	11	11	17	20	20	26	33	31	29	23	34	32	33	41	23	27	20	45	47	33	25	37	33
Burlington	Female	22	32	38	46	59	53	58	56	52	61	58	44	55	57	53	42	39	39	57	57	40	46	55
Brattleboro	Total	0	8	13	6	10	25	30	35	42	22	11	-	-	-	-	-	-	-	-	-	-	-	-
Retreat Brattleboro*	Male	0	1	2	1	2	7	6	15	13	12	5	-	-	-	-	-	-	-	-	-	-	-	-
Brattleboro	Female	0	7	11	5	8	18	24	20	29	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Veterans	Total	13	16	16	23	18	11	-	-	-	-	-	-	14	51	45	44	1	49	45	27	36	13	19
White River	Male	12	16	14	21	17	9	-	-	-	-	-	-	12	42	42	41	1	46	37	24	32	9	16
	Female	1	0	2	2	1	2	-	-	-	-	-	-	2	9	3	3	0	3	8	3	4	4	3
Springfield	Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-
Hospital	Male	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Springfield	Female	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
Central Vermont	Total	-	-	-	-	-	-	-	6	20	25	17	17	7	2	3	1	1	1	1	6	9	8	5
Medical Center***	Male	-	-	-	-	-	-	-	2	8	13	6	10	1	0	0	0	0	0	0	2	3	2	2
Berlin	Female	-	-	-	-	-	-	-	4	12	12	11	7	6	2	3	1	1	1	1	4	6	6	3
	Total	46	67	84	95	107	115	121	128	143	131	120	93	109	151	124	114	61	134	153	123	110	104	112
Total	Male	23	28	33	42	39	42	39	48	50	48	45	42	46	83	65	68	21	91	85	59	60	48	51
	Female	23	39	51	53	68	73	82	80	93	83	75	51	63	68	59	46	40	43	68	64	50	56	61

Number of Treatments and Treatments Per Person

												F	iscal \	rear (F	<del>-</del> Y)									
Hospital		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
University of	Treatments	500	607	783	1,164	1,179	1,080	1,238	1,281	1,121	1,118	1,226	1,017	1,184	1,510	924	1,183	920	1,619	1,719	1,354	1,024	949	1,799
Vermont Medical Center Burlington	Treatments / Person	15.2	14.1	14.2	17.6	14.9	13.7	13.6	14.7	13.8	13.3	13.3	13.4	13.5	15.4	12.2	17.1	15.6	19.3	16.5	15.0	15.8	11.4	20.4
Brattleboro	Treatments	244	465	538	419	260	465	350	407	510	209	43	-	-	-	-	-	-	-	-	-	-	-	-
Retreat Brattleboro*	Treatments / Person	-	58.1	41.4	69.8	26.0	18.6	11.7	11.6	12.1	9.5	3.9	-	-	-	-	-	-	-	-	-	-	-	-
Veterans	Treatments	88	148	178	302	155	75	0	0	0	0	0	0	46	555	423	441	4	425	397	249	332	80	134
Administration** White River Junction	Treatments / Person	6.8	9.3	11.1	13.1	8.6	6.8			-	-	-	-	3.3	10.9	9.4	10.0	4.0	8.7	8.8	9.2	9.2	6.2	7.1
Springfield	Treatments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	-
Hospital Springfield	Treatments/ Person	,	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-	-
Central Vermont	Treatments	-	-	-	-	-	-	-	31	214	266	178	124	71	5	18	5	7	7	17	43	111	111	134
Medical Center*** Berlin	Treatments / Person		-	-	-	-	-	-	5.2	10.7	10.6	10.5	7.3	10.1	2.5	6.0	5.0	7.0	7.0	17.0	7.2	12.3	13.9	26.8
	Treatments	832	1,220	1,499	1,885	1,594	1,620	1,588	1,719	1,845	1,593	1,447	1,141	1,301	2,070	1,365	1,629	931	2,051	2,141	1,646	1,467	1,140	2,067
Total	Treatments / Person	18.1	18.2	17.8	19.8	14.9	14.1	13.1	13.4	12.9	12.2	12.1	12.3	11.9	13.7	11.0	14.3	15.3	15.3	14.0	13.4	13.3	11.0	18.5

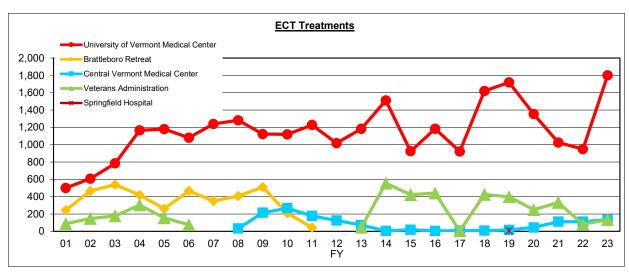
 $<sup>{}^*\!</sup>Brattleboro\,Retreat\,discontinued\,ECT\,January\,2010.\,FY2011\,\,data\,represents\,a\,partial\,year\,of\,information.$ 

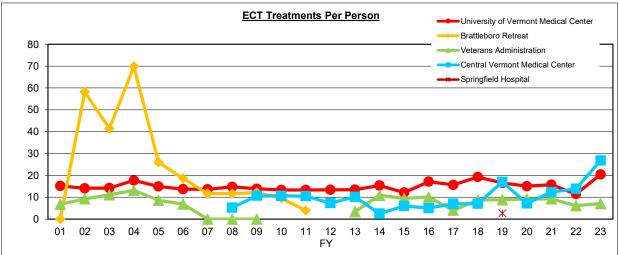
<sup>\*\*</sup>The Veterans Administration stopped providing data after FY2009 and restarted submitting data in June 2013.

<sup>\*\*\*</sup>Central Vermont Medical Center did not start providing ECT until April 2008. FY2008 data represents a partial year of information.

# REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2000-June 30, 2023 (Fiscal Years 2001 - 2023)

#### **Number of Treatments and Treatments per Person**





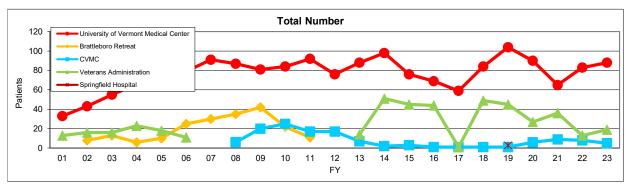
<sup>\*</sup>Brattleboro Retreat discontinued ECT January 2010. FY2011 data represents a partial year of information.

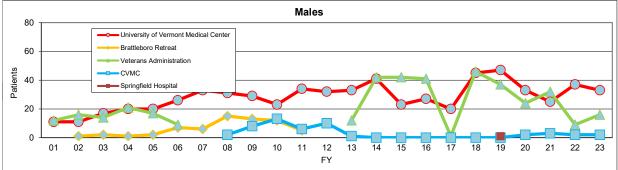
<sup>\*\*</sup>The Veterans Administration stopped providing data after FY2009 and restarted submitting data in June 2013.

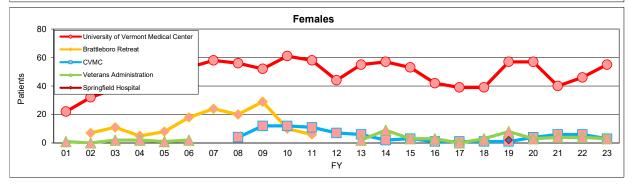
<sup>\*\*\*</sup>Central Vermont Medical Center did not start providing ECT until April 2008. FY2008 data represents a partial year of information.

## REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2000-June 30, 2023 (Fiscal Years 2001 - 2023)

# Number of Individuals Receiving ECT Total and by Gender







<sup>\*</sup>Brattleboro Retreat discontinued ECT January 2010. FY2011 data represents a partial year of information.

<sup>\*\*</sup>The Veterans Administration stopped providing data after FY2009 and restarted submitting data in June 2013.

<sup>\*\*\*</sup>Central Vermont Medical Center did not start providing ECT until April 2008. FY2008 data represents a partial year of information.

Hospital	MMSE Baseline	MMSE Follow- Up			MMSE I	mprovement						
liospitai	Mean	Mean	lmp	oroved	De	clined	No	Change				
	ivicali	ivicali	Number	Percentage	Number	Percentage	Number	Percentage				
CVMC	28.2	30.0	2	40.0%	0	0.0%	3	60.0%				
UVM-MC	23.5	26.5	33	40.7%	17	21.0%	31	38.3%				
VA	23.7	23.0	0 1 100.0% 0 0.0% 0 0.0%									
Total (n= 87)	25.1	26.5	36 41.4% 17 19.5% 34 39.1%									

Note: Baseline values are the first reported value for that patient in the reporting period and the "Follow-Up" value are the last reported value for that patient in the reporting period. An improvement constitutes a positive change in score between baseline and follow-up.

Hospital	MADRS Baseline	MADRS Follow- Up			MADRS	Improvement						
liospitai	Mean	Mean	lmı	proved	De	clined	No	Change				
	iviean	iviean	Number	Percentage	Number	Percentage	Number	Percentage				
CVMC	30.4	21.8	4	80.0%	1	20.0%	0	0.0%				
UVM-MC	36.2	19.6	73	90.1%	5	6.2%	3	3.7%				
VA	38.2	20.9	7	100.0%	0	0.0%	0	0.0%				
Total (n= 93)	34.9	20.7	84 90.3% 6 6.5% 3 3.2%									

Note: Baseline values are the first reported value for that patient in the reporting period and the "Follow-Up" value are the last reported value for that patient in the reporting period. An improvement constitutes a positive change in score between baseline and follow-up.