

**ANNUAL REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT
July 1, 2021-June 30, 2022 (Fiscal Year 2022)**

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	M
University of Vermont Medical Center Burlington	83	0 0.0%	1 1.2%	10 12.0%	25 30.1%	24 28.9%	23 27.7%	46 55.4%	37 44.6%
Veterans Administration White River Junction	13	0 0.0%	0 0.0%	1 7.7%	5 38.5%	4 30.8%	3 23.1%	4 30.8%	9 69.2%
Central Vermont Medical Center Berlin	8	0 0.0%	0 0.0%	0 0.0%	3 37.5%	1 12.5%	4 50.0%	6 75.0%	2 25.0%
All hospitals	104	0 0.0%	1 1.0%	11 10.6%	33 31.7%	29 27.9%	30 28.8%	56 53.8%	48 46.2%

Number and Percentage of ECT Treatments, by Location and Type

Hospital	Number of Treatments		Inpatient						Outpatient					
	Total	Number of Tx per Person	Unilateral	Bitemporal	Bilateral	Bifrontal	LART	Other	Unilateral	Bitemporal	Bilateral	Bifrontal	LART	Other
University of Vermont Medical Center Burlington	949	11.4	204 21.5%	17 1.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	676 71.2%	39 4.1%	0 0.0%	13 1.4%	0 0.0%	0 0.0%
Veterans Administration White River Junction	80	6.2	23 28.8%	27 33.8%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	18 22.5%	12 15.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
Central Vermont Medical Center Berlin	111	13.9	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	111 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
All hospitals	1,140	11.0	227 19.9%	44 3.9%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	805 70.6%	51 4.5%	0 0.0%	13 1.1%	0 0.0%	0 0.0%

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

Hospital	Total	Inpat. Only	Outpat. Only	Both	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combination
University of Vermont Medical Center Burlington	83	12 14.5%	54 65.1%	17 20.5%	72 86.7%	3 3.6%	0 0.0%	1 1.2%	0 0.0%	0 0.0%	7 8.4%
Veterans Administration White River Junction	13	9 69.2%	4 30.8%	0 0.0%	6 46.2%	5 38.5%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 15.4%
Central Vermont Medical Center Berlin	8	0 0.0%	8 100.0%	0 0.0%	8 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%
All hospitals	104	21 20.2%	66 63.5%	17 16.3%	86 82.7%	8 7.7%	0 0.0%	1 1.0%	0 0.0%	0 0.0%	9 8.7%

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

Hospital	Memory Impairment During FY	Total	Sum of Treatments in Year			Treatment Type Status						
			1-12	13-29	30+	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combination
All hospitals	No	22	19	3	0	19	3	0	0	0	0	0
	Yes	64	42	19	3	53	2	0	1	0	0	8
	Unreported/ Missing	18										

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, 2022 (Fiscal Year 2022)

		Total Episodes Assessed	GIS Scores							Not Assessed
			Very much improved	Much improved	Minimally improved	No change	Minimally worse	Much worse	Very much worse	
			- 1 -	- 2 -	- 3 -	- 4 -	- 5 -	- 6 -	- 7 -	
Hospital	University of Vermont Medical Center	275	153	92	23	7	0	0	0	0
			56%	33%	8%	3%	0%	0%	0%	0%
	Veterans Administration	5	3	2	0	0	0	0	0	20
			60%	40%	0%	0%	0%	0%	80%	
	Central Vermont Medical Center	0	0	0	0	0	0	0	0	111
			NA	NA	NA	NA	NA	NA	NA	100%
Gender	Male	105	66	23	10	6	0	0	0	17
			63%	22%	10%	6%	0%	0%	0%	14%
	Female	175	90	71	13	1	0	0	0	114
			51%	41%	7%	1%	0%	0%	0%	39%
Age	0-17	0	0	0	0	0	0	0	0	0
			NA	NA	NA	NA	NA	NA	NA	NA
	18-21	1	1	0	0	0	0	0	0	0
			100%	0%	0%	0%	0%	0%	0%	0%
	22-34	25	10	12	2	1	0	0	0	1
			40%	48%	8%	4%	0%	0%	0%	4%
	35-49	102	46	41	12	3	0	0	0	29
			45%	40%	12%	3%	0%	0%	0%	22%
	50-64	92	57	30	3	2	0	0	0	57
			62%	33%	3%	2%	0%	0%	0%	38%
	65+	60	42	11	6	1	0	0	0	44
			70%	18%	10%	2%	0%	0%	0%	42%
	Unknown	0	0	0	0	0	0	0	0	0
			NA	NA	NA	NA	NA	NA	NA	NA
Treatment Type	Unilateral Only	254	142	85	20	7	0	0	0	125
			56%	33%	8%	3%	0%	0%	0%	33%
	Bitemporal Only	13	5	6	2	0	0	0	0	5
			38%	46%	15%	0%	0%	0%	0%	28%
	Bilateral Only	0	0	0	0	0	0	0	0	0
			NA	NA	NA	NA	NA	NA	NA	NA
	Bifrontal Only	7	5	2	0	0	0	0	0	0
			71%	29%	0%	0%	0%	0%	0%	0%
	LART Only	0	0	0	0	0	0	0	0	0
			NA	NA	NA	NA	NA	NA	NA	NA
Other Only	0	0	0	0	0	0	0	0	0	
		NA	NA	NA	NA	NA	NA	NA	NA	
Combination	6	4	1	1	0	0	0	0	1	
			67%	17%	17%	0%	0%	0%	0%	14%
	Total	280	156	94	23	7	0	0	0	131
			56%	34%	8%	3%	0%	0%	0%	32%
			Improved		No Change		Worse			
			273		7		0			
			98%		3%		0.0%			

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

ANNUAL REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT
July 1, 2021-June 30, 2022 (Fiscal Year 2022)

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

Hospital	Memory Impairment During FY	Total	Sum of treatments in Year			Treatment Type Status						
			1-12	13-29	30+	Unilateral Only	Bitemporal Only	Bilateral Only	Bifrontal Only	LART Only	Other Only	Combination
University of Vermont Medical Center Burlington	No	17	14	3	0	17	0	0	0	0	0	0
	Yes	63	41	19	3	53	2	0	1	0	0	7
Veterans Administration White River Junction	No	5	5	0	0	2	3	0	0	0	0	0
	Yes	1	1	0	0	0	0	0	0	0	0	1
Central Vermont Medical Center Berlin	No	0	0	0	0	0	0	0	0	0	0	0
	Yes	0	0	0	0	0	0	0	0	0	0	0
All hospitals	No	22	19	3	0	19	3	0	0	0	0	0
	Yes	64	42	19	3	53	2	0	1	0	0	8

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, 2022 (Fiscal Years 2001 - 2022)**

Number of Individuals Receiving ECT by Gender

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

Number of Treatments and Treatments Per Person

Hospital		Fiscal Year (FY)																					
		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
University of Vermont Medical Center Burlington	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
	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
Brattleboro Retreat Brattleboro*	Treatments	244	465	538	419	260	465	350	407	510	209	43	-	-	-	-	-	-	-	-	-	-	-
	Treatments / Person	--	58.1	41.4	69.8	26.0	18.6	11.7	11.6	12.1	9.5	3.9	-	-	-	-	-	-	-	-	-	-	-
Veterans Administration** White River Junction	Treatments	88	148	178	302	155	75	0	0	0	0	0	0	46	555	423	441	4	425	397	249	332	80
	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
Springfield Hospital Springfield	Treatments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-
	Treatments / Person	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.7	-	-	-
Central Vermont Medical Center*** Berlin	Treatments	-	-	-	-	-	-	31	214	266	178	124	71	5	18	5	7	7	17	43	111	111	
	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	
Total	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
	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

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

*Brattleboro Retreat discontinued ECT January 2010. FY2011 data represents a partial year of information.

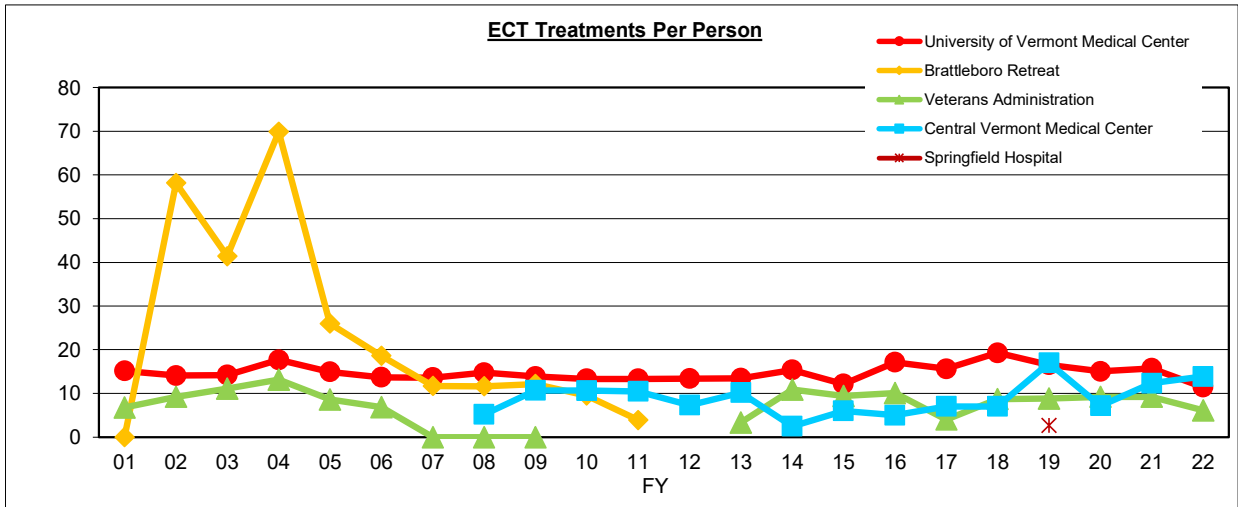
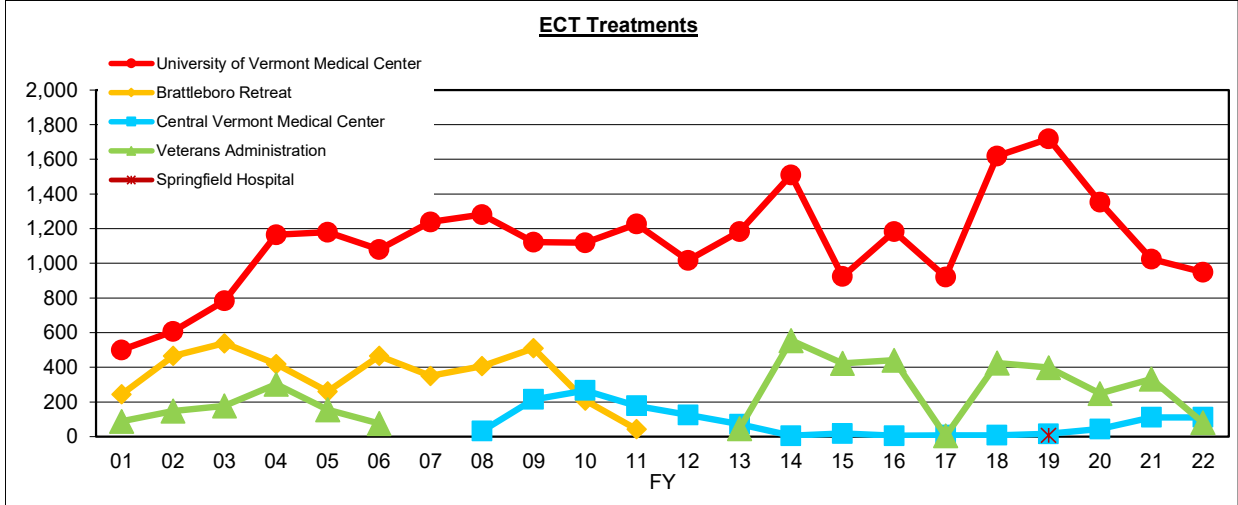
**The Veterans Administration stopped providing data after FY2009 and restarted submitting data in June 2013.

***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, 2022 (Fiscal Years 2001 - 2022)

Number of Treatments and Treatments per Person



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

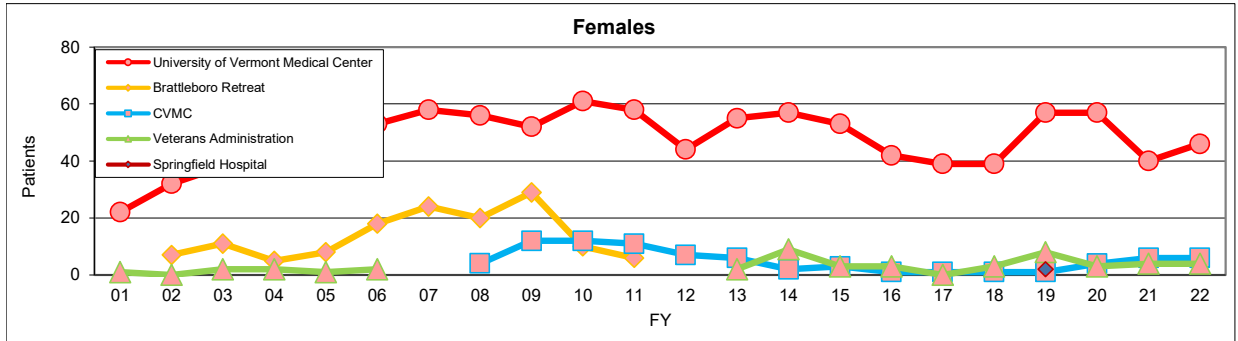
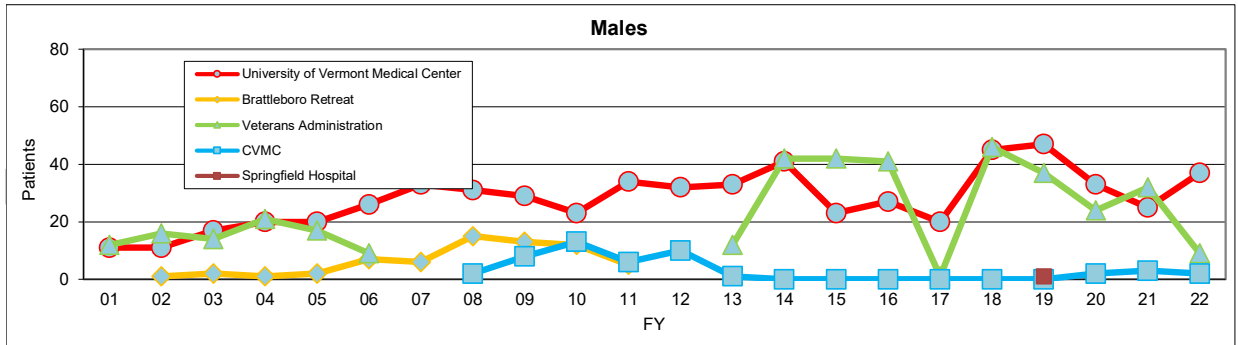
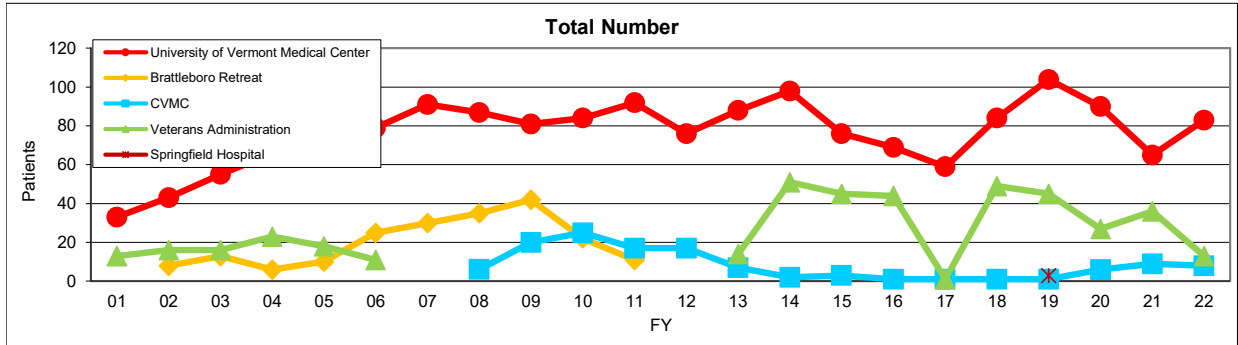
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REPORT ON ELECTROCONVULSIVE THERAPY (ECT) IN VERMONT July 1, 2000-June 30, 2022 (Fiscal Years 2001 - 2022)

Number of Individuals Receiving ECT Total and by Gender



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

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Hospital	MMSE Baseline Mean	MMSE Follow- Up Mean	MMSE Improvement					
			Improved		Declined		No Change	
			Number	Percentage	Number	Percentage	Number	Percentage
CVMC	28.3	29.5	3	37.5%	1	12.5%	4	50.0%
UVM-MC	22.7	26.0	38	48.7%	23	29.5%	17	21.8%
VA	25.2	27.0	0	0.0%	1	100.0%	0	0.0%
Total (n= 87)	25.4	27.5	41	47.1%	25	28.7%	21	24.1%

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 Mean	MADRS Follow- Up Mean	MADRS Improvement					
			Improved		Declined		No Change	
			Number	Percentage	Number	Percentage	Number	Percentage
CVMC	31.3	8.0	8	100.0%	0	0.0%	0	0.0%
UVM-MC	36.7	21.0	72	94.7%	4	5.3%	0	0.0%
VA	38.5	14.7	6	100.0%	0	0.0%	0	0.0%
Total (n= 90)	35.5	14.6	86	95.6%	4	4.4%	0	0.0%

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.