The Clinical TMS Society conducted a survey on typical clinical TMS practices at its Annual Meeting in Toronto Canada on May 28th 2015. The Clinical Standards and Insurance committees created the survey with contributions from Drs Tarique Perera, Max Okasha, Michelle Cochran, and Kevin Kinback. A total of 68 members representing over 75 TMS practices participated in the survey using PollEverywhere software. Only full members who were practicing clinicians owning and operating out patient clinical were eligible to vote. The results were tabulated by the society administrators and presented in the following table.

	Clinical TMS Society Survey		
Questions	Answers	Number	Percent
1. How long have you been doing TMS?	Less than one year	10	14.71
	1-2 years	10	14.71
	2-3 years	11	16.18
	3-4 years	17	25
	More than 4 years	20	29.41
	Total Responses	68	
	Unique Participants	68	
2. Which devices do you use? (check all that apply)	NeuroStar	62	65.96
	Brainsway	11	11.7
	Magventure	5	5.32
	MagPro	7	7.45
	Magstim	7	7.45
	Other	2	2.13
	Total Responses	94	
	Unique Participants	70	
3. In your opinion, what should be the required training for the prescribing physician?	Manufacturer training	17	26.15
	Product training plus CME course	48	73.85
	Total Responses	67	
	Unique Participants	67	
4. What should be the required training for TMS Operators? (Check all that apply	Manufacturer training	17	10.83
	Manufacturer training plus 1-5 observed treatments	30	19.11
	Manufacturer training plus 5+ observed treatments	25	15.92
	Current CPR or BLS	30	19.11
	HIPPA Training	37	23.57
	University or Industry sponsored course	18	11.46
	Total Responses	157	
	Unique Participants	67	
5. What are the degrees that your TMS	No college degree	14	9.79
	Bachelors	43	30.07
	Masters	23	16.08
	Medical Technician/LVN	20	13.99
	RN	24	16.78
	PhD	7	4.9

operator(s) have? (Check all that apply)	MD	12	8.39
	Total Responses	147	
	Unique Participants	70	
6. Autonomy of the TMS operator:	Operator treats only when TMS Provider is in the building	6	8.96
	Operator can treat when Provider is absent but other MD is in the building	9	13.43
	Operator can treat alone, but with immediate access to prescriber	42	62.69
	Operator can treat without immediate access to prescriber	10	14.93
	Total Responses	66	
	Unique Participants	66	
7. Who can perform the initial Motor Threshold determination and TMS coil placement?	Physician only	53	80.3
	Physician or Technician	13	19.7
	Total Responses	67	
	Unique Participants	67	
8. What is your level of physician oversight?	Operator provides updates or progress notes every day	37	27.82
	Operator provides updates or progress notes every week	14	10.53
	Physician checks in with patient every day, or 2-3 times/week	25	18.8
	Physician checks in with patient once every 1-2 weeks	32	24.06
	Clinical meetings with treatment team are held on regular basis	25	18.8
	Total Responses	133	
	Unique Participants	69	
9. Do you have written	Yes	42	62.69
	No	25	37.31
	Total Responses	67	

Standard Operating Procedures for your TMS practice?	Unique Participants	67	
10. What additional equipment do you have in the TMS room? (Check all that apply)	None	8	5.41
	Crash cart	5	3.38
	Defibrillator	8	5.41
	Medications to treat seizure, etc	10	6.76
	Oxygen	14	9.46
	Suction	9	6.08
	Full crash cart with intubation equipment	2	1.35
	EMG	9	6.08
	EEG	4	2.7
	Music Player (MP3 or otherwise)	37	25
	Television or other video	42	28.38
	Total Responses	143	
	Unique Participants	68	
11. A sufficient trial means:	Adequate dose and duration of at least 4 weeks	18	27.27
	Adequate dose and duration of at least 6-8 weeks	31	46.97
	Medication intolerance even if inadequate dose/duration	17	25.76
	Total Responses	68	
	Unique Participants	68	
12. Antidepressant failure means:	Lack of RESPONSE after 6-8 weeks of medications at adequate dose	34	50.75
	Lack of REMISSION after 6-8 weeks of medications at adequate dose	16	23.88
	Medication intolerance or side effects even if inadequate dose/duration	17	25.37
	Total Responses	67	
	Unique Participants	67	
13. What is the minimum number of treatment	No minimum, TMS is first line	5	7.46
	1 antidepressant, TMS is second line	16	23.88
	2-3 antidepressants	31	46.27
	4 or more antidepressants	8	11.94
	4 or more antidepressants plus augmentation agents	7	10.45

failures (adequate trials) before you recommend TMS?	Must fail MAO or ECT	0	0
	Total Responses	67	
	Unique Participants	67	
14. How do you locate the DLPFC?	5.5cm anterior to motor cortex on MT determination	39	58.21
	6cm or more anterior to motor cortex on MT determination	13	19.4
	Use 10-20 EEG guided methods (Beam method)	13	19.4
	Use stereotactic coil navigation systems	2	2.99
	Total Responses	62	
	Unique Participants	62	
15. If there is a bilateral treatment, do you check MT separately on each side?	Yes	28	45.16
	No	34	54.84
	Total Responses	104	
	Unique Participants	67	
16. When do you recheck an MT?	Never rechecked during treatment	5	4.81
	Routinely rechecked midway through acute course	26	25
	Rechecked if there is lack of response	38	36.54
	Rechecked if medications are changed	35	33.65
	Total Responses	127	
	Unique Participants	69	
17. What is your typical treatment parameter?	Neuronetics standard: Left DLPFC at 10Hz, 120% of MT, 3000 pulses	45	35.43
	Higher frequency on left (>10Hz)	9	7.09
	Standard 10Hz but >3000 pulses	18	14.17
	Right DLPFC 1Hz 110% of MT	12	9.45
	Bilateral Standard Left and Right	15	11.81
	Alternating Left or Right based on prominent anxiety or other reason	11	8.66
	Brainsway standard: Left DLPFC at 18Hz	8	6.3
	Other	9	7.09

	Total Responses	62	
	Unique Participants	62	
18. Decreasing inter-train interval:	Never shorten the interval	28	45.16
	20-25 sec (Neuronetics)	11	17.74
	15-19 sec (Neuronetics or Brainsway)	12	19.35
	10-14 sec (Neuronetics or Brainsway)	9	14.52
	Less than 10 sec (Neuronetics or Brainsway)	2	3.23
	Total Responses	127	
	Unique Participants	67	
19. What is your target length of TMS course?	4 weeks, since Randomized Control Trials (RCTs) show plateau of benefits after 4 weeks	5	7.58
	6 weeks, since RCTs show additional benefit up to 6 weeks	28	42.42
	7-8 weeks since Observational Studies and cross over data show benefit beyond 6 weeks	5	7.58
	With measurement-based care, the treatment duration is keyed to symptomatic remission	28	42.42
	Total Responses	68	
	Unique Participants	68	
20. Antidepressant medication management during acute TMS course	Usually wash out antidepressant medications prior to TMS	2	2.94
	Taper medications during the course of TMS	9	13.24
	Increase medications during TMS course	2	2.94
	Medications unchanged during the course of TMS	55	80.88
	Total Responses	174	
	Unique Participants	78	
21. What rating scales do you typically use for depression? (Check all that apply.)	None	2	1.15
	Beck Depression Inventory	39	22.41
	Hamilton Depression Rating Scale	24	13.79
	MADRS	11	6.32
	PHQ-9	52	29.89
	Sheehan	6	3.45
	Zung	11	6.32
	CGIS	7	4.02
	Other	22	12.64
	Total Responses	174	
	Unique Participants	68	

22. When do you make treatment changes in non-responders?	2 weeks or less	15	21.13
	3 weeks	30	42.25
	4 weeks	22	30.99
	5-6 weeks	0	0
	more than 6 weeks	1	1.41
	Protocol is never altered for non-response	3	4.23
	Total Responses	71	
	Unique Participants	71	
23. Typical changes in TMS non-responders: (Check all that apply)	Stop TMS	3	1.2
	Recheck MT level	46	18.4
	Adjust coil location - anterior, lateral, or both	23	9.2
	Increase pulses to >3000	44	17.6
	Increase dose to >120% MT	11	4.4
	Increase to >5 sessions per week	5	2
	Switch to right sided, low frequency (1 Hz)	13	5.2
	Switch to bilateral: left high-frequency and right low-frequency	36	14.4
	Switch to alternating sessions of left high-frequency and right high- frequency	5	2
	Add or increase medications	36	14.4
	Add adjunctive therapy: phototherapy, CBT, biofeedback, exercise, nutritional supplements, etc.	28	11.2
	Total Responses	274	
	Unique Participants	65	
24. In your experience, what is the typical length of treatment before response is first seen?	2 weeks or less	21	30.88
	3 weeks	30	44.12
	4 weeks	15	22.06
	5 weeks	1	1.47
	6 weeks or more	1	1.47
	Total Responses	66	
	Unique Participants	66	
25. In your experience, what is the typical	3 weeks or less	6	9.09
	4-5 weeks	36	54.55
	6 weeks	23	34.85
	more than 6 weeks	1	1.52
	Total Responses	69	

length of TMS treatment before remission is first seen?	Unique Participants	69	
26. Termination of TMS in responders or remitters:	Abrupt	7	10.14
	Taper over 2-3 weeks	53	76.81
	Taper over 4+ weeks	9	13.04
	Total Responses	63	
	Unique Participants	63	
27. In TMS non-responders, who have completed 6 weeks of treatment, TMS is terminated?	Immediately	21	33.33
	After extending treatment 1-2 weeks	33	52.38
	After extending treatment more than 2 weeks	9	14.29
	Total Responses	63	
	Unique Participants	63	
28. In partial responders who have completed the acute phase of 6 weeks, do you:	Stop TMS	4	6.35
	Extend course but maintain same protocol	27	42.86
	Extend course after altering protocol (i.e. changing dose and/or location)	22	34.92
	Stop acute course and start maintenance TMS	10	15.87
	Total Responses	68	
	Unique Participants	68	
29. Reasons for extending the acute	Never: the acute course length is fixed	4	3.39
	Non-response	39	33.05
	Responders who have not remitted	50	42.37
	In order to taper off medications	15	12.71
	Other	10	8.47

course of TMS beyond 6 weeks (check all that apply)	Total Responses	118	
	Unique Participants	68	
30. What is your primary strategy to avoid relapse?	Maintenance TMS	25	37.88
	Maintenance medications	40	60.61
	No TMS treatments, medications tapered	1	1.52
	Total Responses	66	
	Unique Participants	66	
31. TMS is reintroduced in:	Early relapse (i.e. mild symptoms deterioration)	60	90.91
	Full relapse (i.e. criteria for major depression are met)	6	9.09
	Total Responses	69	
	Unique Participants	69	
32. Do you redo the MT for a booster session?	Return to the original settings	27	39.13
	Redo the motor location and MT	42	60.87
	Total Responses	66	
	Unique Participants	66	
33. Number of boosters given:	1-2 treatments	4	6.06
	3-5 treatments	22	33.33
	Weekly treatments until response	5	7.58
	Clusters of treatments until response	19	28.79
	Weekly treatments until remission	2	3.03
	Clusters of treatments until remission	14	21.21
	Total Responses	64	
	Unique Participants	64	
34. When do you consider maintenance TMS (in the absence of	Never	6	9.38
	All remitters	16	25
	Responders that do not remit	2	3.13
	Patients with a history of frequent relapse (4 or more in one year)	35	54.69
	Patients who are not on maintenance medications	5	7.81

relapsing symptoms)?	Total Responses	68	
	Unique Participants	68	
35. Typical frequency of maintenance sessions:	Weekly	12	17.65
	Every 2-3 weeks	9	13.24
	Monthly	18	26.47
	Bimonthly	2	2.94
	Tapers over several months from weekly to monthly	4	5.88
	Titrated to patient's response	23	33.82
	Total Responses	63	
	Unique Participants	63	
36. Number of sessions at each maintenance interval:	One session at a time	42	66.67
	Cluster of 2 sessions	12	19.05
	Cluster of 3 or more sessions	9	14.29
	Total Responses	68	
	Unique Participants	68	