Question 41: Rate your Knowledge

Overall Survey Means and Ranges by Questions

Questions	Pre (n=45)	Range	Post (n=24)	Range
Development Screening Assessment	3.38	1-5	3.54	2-5
ASD Screening Tools	3.49	1-5	3.67	2-5
Mental Health Assessment – ASD	2.98	1-5	3.25	1-5
Med Prescription for Behaviors - ASD	2.09	1-5	2.04	1-5
Evidence-based Intervention - ASD	3.8	1-5	3.8	2-5
Medical Comorbidity Identification – ASD	2.62	1-5	2.83	1-5
Community Resources Access – ASD	3.16	1-5	3.38	2-5
Support Families & Caregivers	3.6	1-5	3.8	3-5
Overall Mean	3.18		3.32	

Presurvey Means and SD's by Types

Type	Mental Health (n=25)	Advanced Topics (n=3)	Primary Care (n=17)
Development Screening Assessment	3.36 (.95)	4.33 (.58)	3.24 (.83)
ASD Screening Tools	3.36 (.99)	4.33 (.58)	3.53 (.94)
Mental Health Assessment – ASD	3.04 (1.31)	4 (0)	2.71 (1.16)
Med Prescription for Behaviors - ASD	1.88 (1.17)	3 (1.73)	2.24 (1.56)
Evidence-based Intervention - ASD	3.84 (.94)	3.67 (.58)	3.76 (.97)
Medical Comorbidity Identification – ASD	2.52 (1.12)	3.33 (1.15)	2.65 (1.17)
Community Resources Access – ASD	3.16 (.8)	3.33 (1.15)	3.12 (1.05)
Support Families & Caregivers	3.6 (.96)	4 (1)	3.53 (1.12)
Overall Mean	3.14 (.62)	3.72 (.7)	3.14 (.6)

Postsurvey Means and SD's by Types

Type	Mental Health (n=6)	Advanced Topic (n=11)	Primary Care (n=7)
Development Screening Assessment	4 (.89)	3.55 (.69)	3.14 (.9)
ASD Screening Tools	4 (.63)	3.72 (.65)	3.29 (1.11)
Mental Health Assessment – ASD	4 (.63)	3 (1.1)	3 (1.41)
Med Prescription for Behaviors - ASD	2.17 (.98)	2.1 (1.22)	1.86 (1.57)
Evidence-based Intervention - ASD	4.17 (.41)	3.64 (.81)	3.71 (.95)
Medical Comorbidity Identification – ASD	3 (.89)	3.19 (1.17)	2.14 (1.57)
Community Resources Access – ASD	3.33 (.82)	3.36 (.67)	3.43 (.98)
Support Families & Caregivers	3.83 (.41)	3.82 (.6)	3.71 (.76)
Overall Mean	3.57	3.33 (.54)	3.1 (.61)

Correlations between Items for Presurvey

	1	2	3	4	5	6	7	8
1	1	0.71	0.61	0.1	0.28	0.32	0.29	0.34
2	0.71	1	0.58	0.21	0.39	0.42	0.33	0.46
3	0.61	0.58	1	0.23	0.2	0.64	0.25	0.34
4	0.1	0.21	0.23	1	-0.02	0.49	0.1	0.16
5	0.28	0.39	0.2	-0.02	1	0.14	0.59	0.7
6	0.32	0.42	0.64	0.49	0.14	1	0.3	0.38
7	0.29	0.33	0.25	0.1	0.59	0.3	1	0.84
8	0.34	0.46	0.34	0.16	0.7	0.38	0.84	1

Correlations between Items for Postsurvey

	1	2	3	4	5	6	7	8
1	1	0.85	0.49	-0.02	0.45	0.38	0.28	0.42
2	0.85	1	0.37	0.19	0.43	0.65	0.55	0.66
3	0.49	0.37	1	0.18	0.06	0.27	-0.01	0.08
4	-0.02	0.19	0.18	1	-0.26	0.28	0.3	0.07
5	0.45	0.43	0.06	-0.26	1	0.31	0.21	0.47
6	0.38	0.65	0.27	0.28	0.31	1	0.51	0.59
7	0.28	0.55	-0.01	0.3	0.21	0.51	1	0.66
8	0.42	0.66	0.08	0.07	0.47	0.59	0.66	1

Paired t-test between Pre-survey and Post-survey (for MH and PC)

data: mh_paired_t$pre_Q41_avg and mh_paired_t$post_Q41_avg
t = 0.047519, df = 5, p-value = 0.9639
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.2654817 0.2754817
sample estimates:
mean of the differences
                 0.005

data: pc_paired_t$pre_Q41_avg and pc_paired_t$post_Q41_avg
t = 0.35631, df = 5, p-value = 0.7361
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.6214441 0.8214441
sample estimates:
mean of the differences
                   0.1

Question 38: Rate your Confidence

Overall Presurvey Means and Ranges by Questions

Questions	Pre (n=45)	Range	Post (n=24)	Range
ASD Screening	4.57	2-5	4.67	3-5
Mental Health Assessment – ASD	3.51	1-5	3.67	1-5
Med Prescription for Behaviors - ASD	2.75	1-5	2.71	1-5
Educating ASD to Family & Caregivers	4.29	2-5	4.42	3-5
Medical Comorbidity Identification – ASD	3.03	1-5	3.37	1-5
Community Resources Identification– ASD	3.33	1-5	3.78	3-5
Pediatric Mental Health Recognition	3.48	1-5	3.73	1-5
Mental Health Discussion with ASD Patients & Family	3.55	1-5	3.83	1-5
Mental Health Treatment Modalities Recommendation	3.5	1-5	3.57	1-5
Overall Mean	3.62		3.87	

Presurvey Means and SD's by Types

Questions	Mental Health (n=25)	Advanced Topics (n=3)	Primary Care (n=17)
ASD Screening	4.42 (.97)	5 (0)	4.71 (.59)
Mental Health Assessment – ASD	3.57 (1.21)	4 (0)	3.33 (1.23)
Med Prescription for Behaviors - ASD	2.25 (1.89)	4.5 (.71)	2.5 (1.38)
Educating ASD to Family & Caregivers	4.36 (.95)	4.33 (.58)	4.18 (1.07)
Medical Comorbidity Identification – ASD	3.11 (1.23)	4 (0)	2.81 (1.17)
Community Resources Identification– ASD	3.32 (.85)	3.67 (.58)	3.3 (1.1)
Pediatric Mental Health Recognition	3.62 (.97)	4.33 (.58)	3.13 (1.15)
Mental Health Discussion with ASD Patients & Family	3.41 (1.18)	4.33 (.58)	3.59 (1.18)
Mental Health Treatment Modalities Recommendation	3.58 (1.12)	4 (0)	3.31 (1.01)
Overall Mean	3.64 (.8)	4.22 (.22)	3.49 (.79)

Postsurvey Means and SD's by Types

Questions	Mental Health (n=6)	Advanced Topic (n =11)	Primary Care (n=7)
ASD Screening	4.83 (.41)	4.55 (.69)	4.71 (.49)
Mental Health Assessment – ASD	4.5 (.55)	3.55 (1.13)	3.14 (1.46)
Med Prescription for Behaviors - ASD	NA	2.25 (.96)	3.33 (2.08)
Educating ASD to Family & Caregivers	4.67 (.52)	4.19 (.75)	4.57 (.53)
Medical Comorbidity Identification – ASD	3.5 (1.29)	3.3 (.95)	3.4 (1.52)
Community Resources Identification– ASD	3.8 (.84)	3.55 (.52)	4.14 (1.07)
Pediatric Mental Health Recognition	4.17 (.98)	3.4 (1.35)	3.83 (.98)
Mental Health Discussion with ASD Patients & Family	4.5 (.55)	3.18 (1.08)	4.33 (.52)
Mental Health Treatment Modalities Recommendation	4.17 (.98)	3.09 (1.04)	3.8 (1.47)
Overall Mean	4.3 (.48)	3.57 (.66)	3.96 (.53)

Correlations between Items for Presurvey

	1	2	3	4	5	6	7	8	9
1	1	0.73	0.51	0.75	0.55	0.46	0.59	0.36	0.57
2	0.73	1	0.74	0.52	0.69	0.45	0.81	0.74	0.72
3	0.51	0.74	1	0.54	0.84	0.78	0.5	0.53	0.56
4	0.75	0.52	0.54	1	0.5	0.58	0.33	0.48	0.58
5	0.55	0.69	0.84	0.5	1	0.56	0.4	0.46	0.41
6	0.46	0.45	0.78	0.58	0.56	1	0.24	0.1	0.48
7	0.59	0.81	0.5	0.33	0.4	0.24	1	0.73	0.87
8	0.36	0.74	0.53	0.48	0.46	0.1	0.73	1	0.75
9	0.57	0.72	0.56	0.58	0.41	0.48	0.87	0.75	1

Correlations between Items for Postsurvey

	1	2	3	4	5	6	7	8	9
1	1	0.29	0.51	0.56	0.73	0	0.7	0.73	0.51
2	0.29	1	0.29	-0.24	-0.24	-0.53	0.61	0.55	0.8
3	0.51	0.29	1	0.28	0.29	-0.27	0.56	0.61	0.26
4	0.56	-0.24	0.28	1	0.5	0.68	-0.07	0.36	0.04
5	0.73	-0.24	0.29	0.5	1	0.3	0.44	0.3	-0.2
6	0	-0.53	-0.27	0.68	0.3	1	-0.38	0	-0.41
7	0.7	0.61	0.56	-0.07	0.44	-0.38	1	0.81	0.56
8	0.73	0.55	0.61	0.36	0.3	0	0.81	1	0.69
9	0.51	0.8	0.26	0.04	-0.2	-0.41	0.56	0.69	1

Paired t-test between Pre-survey and Post-survey (for MH and PC)

data: mh_paired_t$pre_Q38_avg and mh_paired_t$post_Q38_avg
t = -1.1976, df = 5, p-value = 0.2847
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.7708814 0.2808814
sample estimates:
mean of the differences
-0.245

data: pc_paired_t$pre_Q38_avg and pc_paired_t$post_Q38_avg
t = -0.93553, df = 5, p-value = 0.3925
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -1.2055237 0.5621904
sample estimates:
mean of the differences
-0.3216667

Question 25: Barriers Treating People w/ Autism

Overall Responses from 37 People for Pre-survey

Lack of…	# (%)
Time	21 (56.8%)
Support from Admin	15 (40.5%)
Adequate Reimbursement	19 (51.4%)
Autism Symptoms Knowledge	5 (13.5%)
Confidence in Ability to Manage Behavior Issues for Autistic Children	8 (21.6%)
Confidence in Ability to Manage Medical Issues for Autistic Children	7 (18.9%)
Prior Autism Training	6 (16.2%)
Access to Autism Specialists	14 (37.8%)
Knowledge on Autism Resources	11 (29.7%)
Local Resources and Expertise	24 (64.9%)
No Barriers/NA	1 (2.7%)

Overall Responses from 18 People for Post-survey

Lack of…	# (%)
Time	11 (61.1%)
Support from Admin	3 (16.7%)
Adequate Reimbursement	11 (61.1%)
Autism Symptoms Knowledge	1 (5.6%)
Confidence in Ability to Manage Behavior Issues for Autistic Children	4 (22.2%)
Confidence in Ability to Manage Medical Issues for Autistic Children	4 (22.2%)
Prior Autism Training	1 (5.6%)
Access to Autism Specialists	5 (27.8%)
Knowledge on Autism Resources	0 (0%)
Local Resources and Expertise	12 (66.6%)
No Barriers/NA	1 (5.6%)

***We excluded No Barriers/NA responses from people who had at least one other response**

Question 34: Barriers Treating Mental Health Disorders w/ ASD

Overall Responses from 36 People for Pre-survey

Lack of…	# (%)
Knowledge | Confidence in Treating Dual Diagnoses	14 (38.9%)
Local Specialists	29 (80.6%)
Adequate Reimbursement	16 (44.4%)
Access to Resources	23 (63.9%)
Knowledge – Available Treatment Modalities	16 (44.4%)
Knowledge – The Role of Different Disciplines and Professionals	15 (41.7%)
Speedy Consultation Process	14 (38.9%)
Network of Care	29 (80.6%)
Comfort Discussing Mental Health Conditions	4 (11.1%)
Other	2 (5.6%)
No Barriers/NA	3 (8.3%)

Overall Responses from 21 People for Post-survey

Lack of…	# (%)
Knowledge | Confidence in Treating Dual Diagnoses	8 (38.1%)
Local Specialists	16 (76.2%)
Adequate Reimbursement	8 (38.1%)
Access to Resources	12 (57.1%)
Knowledge – Available Treatment Modalities	11 (52.4%)
Knowledge – The Role of Different Disciplines and Professionals	7 (33.3%)
Speedy Consultation Process	8 (38.1%)
Network of Care	15 (71.4%)
Comfort Discussing Mental Health Conditions	2 (9.5%)
Other	0 (0%)
No Barriers/NA	2 (9.5%)

***We excluded No Barriers/NA responses from people who had at least one other response**

Question 48: Barriers Treating Medical Conditions w/ ASD

Overall Responses from 31 People for Pre-survey

Lack of…	# (%)
Knowledge | Confidence in Treating Dual Diagnoses	20 (64.5%)
Local Specialists	23 (74.2%)
Adequate Reimbursement	19 (61.2%)
Access to Resources	23 (74.2%)
Knowledge – Available Treatment Modalities	16 (51.6%)
Knowledge – The Role of Different Disciplines and Professionals	12 (38.7%)
Speedy Consultation Process	13 (41.9%)
Network of Care	21 (67.7%)
Comfort Discussing Mental Health Conditions	3 (9.7%)
Other	2 (6.5%)
No Barriers/NA	6 (19.4%)

Overall Responses from 16 People for Pre-survey

Lack of…	# (%)
Knowledge | Confidence in Treating Dual Diagnoses	8 (50%)
Local Specialists	15 (93.7%)
Adequate Reimbursement	9 (56.3%)
Access to Resources	12 (75%)
Knowledge – Available Treatment Modalities	9 (56.3%)
Knowledge – The Role of Different Disciplines and Professionals	5 (31.3%)
Speedy Consultation Process	5 (31.3%)
Network of Care	9 (56.3%)
Comfort Discussing Mental Health Conditions	2 (12.5%)
Other	1 (6.3%)
No Barriers/NA	5 (31.3%)

***We excluded No Barriers/NA responses from people who had at least one other response**

We wanted to categorize the barrier responses in Q25, 34, 38 into two types: internal barriers, where the sources of the barriers are from individual capacity, and external barriers, where the sources of the barriers are outside of individual capacity.

Internal factors for Question 25 included responses related to lack of time, knowledge, and confidence; otherwise, the responses were categorized as external factors. Based on this standard, there are 5 internal responses and 5 external responses. Internal for Questions 34 and 48 included responses related to lack of knowledge, confidence, and comfort (for discussing w families); otherwise, the responses were categorized as external factors. Based on this standard, there are 4 internal response and 6 external responses.

Below are the results for internal/external responses count by pre and post surveys, as well as correlations of numbers of internal responses endorsed throughout different questions (Q25, 34, 48), as well as those of external responses.

Overall Number of Internal/External Responses

	Pre-survey (%)		Post-survey (%)	
	Internal	**External**	**Internal**	**External**
Q25	52 (40%)	78 (60%)	20 (38.5%)	32 (61.5%)
Q34	49 (30.2%)	113 (69.8%)	28 (32.2%)	59 (67.8%)
Q48	51 (33.6%)	101 (66.4%)	24 (32%)	51 (68%)

Correlations of Number of Internal Responses Endorsed across Questions

Presurvey	Q25	Q34	Q48
Q25	1	.24	.2
Q34	.24	1	.74
Q48	.2	.74	1

Postsurvey	Q25	Q34	Q48
Q25	1	-.15	-.23
Q34	-.15	1	.58
Q48	-.23	.58	1

Correlations of Number of External Responses Endorsed across Questions

Presurvey	Q25	Q34	Q48
Q25	1	.24	.2
Q34	.48	1	.74
Q48	.28	.81	1

Postsurvey	Q25	Q34	Q48
Q25	1	.46	.25
Q34	.46	1	.64
Q48	.25	.64	1

Q1: Age Range

Age for Survey Participants

Age Range	Presurvey	Postsurvey
<21	0	0
21-30	6	4
31-40	23	13
41-50	17	4
51-60	5	3
61-70	1	4
>70	1	0
NA	4	0

Q8: Primary Discipline

Primary Discipline (Profession) for Survey Participants

Profession	Presurvey	Postsurvey
Physician	10	5
Psychologist	12	14
Physician Assistant	0	0
Behavior Specialist	0	1
Nurse Practitioner	2	1
Education	15	4
Other	22	10

Q40/41: Location of Practice

Country	Presurvey	Postsurvey
US	38	17
Other	15	11
NA	4	0