

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Serious Mental Illness (SMI) Diagnostic Codes		
	ICD-9 codes	ICD-10 codes
Bipolar disorder	296.00-296.89, 301.11	F30.1-F31.9
Schizophrenia	295.0-295.6, 295.8-295.9, 297.1, 297.3, 298.8, 298.9, 301.22	F20.0-F24, F28-F29
Schizoaffective disorder	295.6	F25.0-F25.9

eTable 2. Potentially Obesogenic Medications for Serious Mental Illness (SMI)				
Amitriptyline	Clozapine	Mirtazapine	Phenelzine	Thioridazine
Asenapine	Desipramine	Nortriptyline	Quetiapine	Tranlycypromine
Chlorpromazine	Doxepin	Olanzapine	Risperidone	
Clomipramine	Imipramine	Paroxetine	Selegiline	

Identified in consultation with clinic leadership and informed by a literature search. Mood-stabilizing medications were not included, as study team members and clinic leaders were unable to identify suitable non-obesogenic alternatives.

eTable 3. Intervention Dose, ie, the Number and Percent of Visits (Index and Post-Index) at Which the CDS Was Printed by System and Treatment Group								
	All		Site A		Site B		Site C	
	Control	CDS	Control	CDS	Control	CDS	Control	CDS
n	4387	4550	2120	1807	1486	1818	781	925
visits, n								
M	6.8	6.8	7.4	7.2	6.7	7.2	5.0	5.2
SD	5.5	5.6	6.1	6.2	5.1	5.7	3.4	3.7
25th percentile	3	3	3	3	3	3	3	3
Median	5	5	6	5	5	6	4	4
75th percentile	9	9	9	9	8	9	6	6
Visits for which CDS printed, n								
M	0.5	4.0	0.8	4.3	0.2	4.1	0.1	3.1
SD	1.5	3.3	2.0	3.7	0.9	3.3	0.5	2.3
25th percentile	0	2	0	2	0	2	0	2
Median	0	3	0	3	0	3	0	3
75th percentile	0	5	1	6	0	6	0	4
CDS printed, % of visits								
M	5.7	61.1	9.3	62.1	2.5	59.5	2.0	62.2
SD	15.3	27.8	19.0	28.7	9.5	26.4	9.6	28.3
25th percentile	0	45.5	0	45.5	0	44.4	0	50.0
Median	0	63.6	0	66.7	0	61.1	0	66.7
75th percentile	0	80.0	9.1	83.3	0	76.9	0	80.0
CDS printed, % of visits								
0%	82.6	5.9	71.9	6.5	91.5	5.3	94.6	5.9
>0 - <50%	12.6	20.5	20.0	19.9	7.1	22.2	3.1	18.3
50%- <100%	4.6	56.0	7.7	54.1	1.3	58.7	2.3	54.3
100%	0.2	17.6	0.4	19.4	0	13.8	0	21.5

eTable 4. Rate Ratios Estimating Rates of Change in Total Modifiable CV Risk From Index to 12 Months Post-Index Among Patients in Intervention Clinics by Print Rate Subgroups

	ALL	Site A	Site B	Site C
	RR (95% CI)	RR (95% CI)	RR (95% CI)	RR (95% CI)
Print rate				
0%	0.99 (0.91-1.07)	0.93 (0.83-1.03)	1.24 (1.06-1.45)	0.83 (0.61-1.11)
>0 - <50%	0.99 (0.96-1.02)	1.00 (0.96-1.04)	0.98 (0.94-1.02)	1.00 (0.91-1.09)
50%- <100%	0.99 (0.98-1.01)	0.99 (0.96-1.01)	1.01 (0.98-1.04)	0.97 (0.92-1.04)
100%	1.01 (0.96-1.06)	1.01 (0.95-1.08)	0.99 (0.91-1.08)	1.03 (0.90-1.19)

eTable 5. Emergency Department Visit Rates by Health System and Treatment Group in the Year Prior to the First Visit (Pre) and Time Between First Visit and 9/19/2018 (Post)

		Site A			Site B			Site C		
		Control	CDS	All	Control	CDS	All	Control	CDS	All
n patients		2120	1807	3927	1486	1818	3304	781	925	1706
pt years	M	2.07	2.07	2.07	1.42	1.42	1.42	1.31	1.32	1.32
follow-up	Mdn	2.21	2.21	2.21	1.48	1.48	1.48	1.35	1.36	1.36
n ED visits	pre	2053	1037	3090	1933	1776	3709	248	464	712
	post	3873	2218	6091	2601	2316	4917	389	839	1228
n per patient	pre	0.97	0.57	0.79	1.30	0.98	1.12	0.32	0.50	0.42
	post	1.83	1.23	1.55	1.75	1.27	1.49	0.50	0.91	0.72
n patients with 1+	pre	762	395	1157	626	621	1247	125	212	337
	post	1008	576	1584	713	708	1421	161	309	470
% of patients with 1+	pre	35.9	21.9	29.5	42.1	34.2	37.7	16.0	22.9	19.8
	post	47.5	31.9	40.3	48.0	38.9	43.0	20.6	33.4	27.5
		tx, p=		0.02	tx, p=		0.42	tx, p=		0.12
		time, p=		0.02	time, p=		0.20	time, p=		0.07
		tx*time, p=		0.40	tx*time, p=		0.80	tx*time, p=		0.20
n per patient-year	pre	0.97	0.57	0.79	1.30	0.98	1.12	0.32	0.50	0.42
	post	0.88	0.59	0.75	1.23	0.90	1.05	0.38	0.69	0.55
		tx, p=		0.14	tx, p=		0.24	tx, p=		0.17
		time, p=		0.61	time, p=		0.16	time, p=		0.04
		tx*time, p=		0.17	tx*time, p=		0.73	tx*time, p=		0.42

eTable 6. Inpatient Stay Rates by Health System and Treatment Group in the Year Prior to the First Visit (Pre) and Time Between First Visit and 9/19/2018 (Post)

		Site A			Site B			Site C		
		Control	CDS	All	Control	CDS	All	Control	CDS	All
n patients		2120	1807	3927	1486	1818	3304	781	925	1706
pt years	M	2.07	2.07	2.07	1.42	1.42	1.42	1.31	1.32	1.32
follow-up	Mdn	2.21	2.21	2.21	1.48	1.48	1.48	1.35	1.36	1.36
n IP stays	pre	420	247	667	357	408	765	84	153	237
	post	729	509	1238	593	600	1193	93	222	315
n per patient	pre	0.20	0.14	0.17	0.24	0.22	0.23	0.11	0.17	0.14
	post	0.34	0.28	0.32	0.40	0.33	0.36	0.12	0.24	0.19
n patients with 1+	pre	279	167	446	221	235	456	53	100	153
	post	383	259	642	287	313	600	64	130	194
% of patients with 1+	pre	13.2	9.2	11.4	14.9	12.9	13.8	6.8	10.8	9.0
	post	18.1	14.3	16.3	19.3	17.2	18.2	8.2	14.1	11.4
		tx, p=		0.09	tx, p=		0.40	tx, p=		0.11
		time, p=		0.0002	time, p=		0.84	time, p=		0.88
		tx*time, p=		0.31	tx*time, p=		0.85	tx*time, p=		0.69
n per patient-year	pre	0.20	0.14	0.17	0.24	0.22	0.23	0.11	0.17	0.14
	post	0.17	0.14	0.15	0.28	0.23	0.25	0.09	0.18	0.14
		tx, p=		0.31	tx, p=		0.59	tx, p=		0.09
		time, p=		0.28	time, p=		0.06	time, p=		0.71
		tx*time, p=		0.16	tx*time, p=		0.16	tx*time, p=		0.25

eTable 7. Suicide Attempt Rates by Health System and Treatment Group in the Year Prior to the First Visit (Pre) and Time Between First Visit and 9/19/2018 (Post)

		Site A			Site B			Site C		
		Control	CDS	All	Control	CDS	All	Control	CDS	All
n patients		2120	1807	3927	1486	1818	3304	781	925	1706
pt years	M	2.07	2.07	2.07	1.42	1.42	1.42	1.31	1.32	1.32
follow-up	Mdn	2.21	2.21	2.21	1.48	1.48	1.48	1.35	1.36	1.36
n suicide attempts	pre	57	42	99	64	66	130	3	5	8
	post	93	60	153	67	48	115	10	18	28
n per patient	pre	0.027	0.023	0.025	0.043	0.036	0.039	0.004	0.005	0.004
	post	0.044	0.033	0.039	0.045	0.026	0.035	0.013	0.019	0.016
n patients with 1+	pre	49	33	82	33	30	63	3	5	8
suicide attempt	post	69	48	117	41	27	68	8	5	13
% of patients with 1+	pre	2.3	1.8	2.1	2.2	1.7	1.9	0.4	0.5	0.5
suicide attempts	post	3.3	2.7	3.0	2.8	1.5	2.1	1.0	0.5	0.8
		tx, p= 0.21			tx, p= 0.009					
		time, p= 0.02			time, p= 0.10					
		tx*time, p= 0.94			tx*time, p= 0.36					
n per patient-year	pre	0.027	0.023	0.025	0.043	0.036	0.039	.004	.005	.005
	post	0.021	0.016	0.019	0.032	0.019	0.025	.010	.015	.012
		tx, p= 0.44			tx, p= 0.22					
		time, p= 0.05			time, p= 0.09					
		tx*time, p= 0.61			tx*time, p= 0.41					