

Supplementary Material

Article Title: Understanding the Relationship Between Depression Symptom Severity and Health Care Costs for Patients With Treatment-Resistant Depression

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DOI Number: <https://doi.org/10.4088/JCP.21m13976>

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THE JOURNAL OF CLINICAL PSYCHIATRY

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of cost for one year following index date

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Disclaimer

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Supplementary Table 1. Excluded Mental Health conditions

Diagnosis Class	ICD9_CD ¹	ICD10_CD ²
Bipolar Spectrum Disorder	296.7X	F31.70
Dementia	290.0	F03.90
Dementia	780.93	R41.X
Schizophrenia Spectrum Disorder	295.XX	F20.XX
Schizophrenia Spectrum Disorder	295.70	F25.X
Mood disorder due to known physiological condition	293.X	F06.3X
Cyclothymic disorder	301.13	F34.0

1. International Classification of Diseases, Ninth Revision (ICD-9)
2. International Classification of Diseases, Tenth Revision (ICD-10)

Supplementary Table 2. Comparison of Analysis Sample with Those Excluded because too few PHQ-9s.¹

	Analysis Sample (N=42,162)		Excluded b/c ≤ 1 PHQ (N=18,340)		<i>p</i> -value
	Mean or %	SD	Mean or %	SD	
Age	50.9	16.9	49.3	17.2	<.001
Male	29.7%		33.8%		<.001
Race/ethnicity					<.001
Hispanic	5.5%		5.1%		.034
White/Caucasian	93.3%		92.6%		.002
Black/African American	2.9%		2.7%		.372
Asian	2.1%		2.9%		<.001
American Indian/Alaska Native	1.4%		1.1%		.007
Hawaiian/Pacific Islander	0.6%		0.6%		.636
Other	0.5%		0.6%		.035
Insurance Type					<.001
Commercial	62.9%		72.3%		<.001
Medicare	30.3%		21.9%		<.001
Medicaid	6.8%		5.8%		<.001
Household Income: <\$50,000	39.2	17.1	37.8	16.8	<.001
Household Income: \$50,000-99,999	33.3	10.1	33.0	10.1	.020

Household Income: \$100,000 or more	27.6	16.1	29.2	16.5	<.001
High School or less	32.6	14.6	30.4	14.7	<.001
Some College/ Undergraduate degree	55.8	9.7	56.5	9.4	<.001
Graduate/Post-graduate/Professional degree	11.6	9.3	13.0	10.0	<.001
Anxiety Disorder	64.0%		43.9%		<.001
Attention Deficit Disorder	10.3%		6.1%		<.001
Autism Spectrum Disorder	0.5%		0.3%		.001
Conduct/Disruptive behavior/Opp. Defiant	0.5%		0.5%		.832
Eating Disorder	3.8%		2.1%		<.001
Other Psychosis	3.2%		2.2%		<.001
Overweight/Obese	45.9%		33.3%		<.001
Substance Abuse Disorder	27.5%		19.9%		<.001
Possibly Self-Inflicted Injury	0.6%		0.2%		<.001
Self-Inflicted Injury	1.4%		0.7%		<.001
Myocardial infarction	8.2%		6.2%		<.001
Congestive heart failure	6.8%		5.5%		<.001
Peripheral vascular disease	18.5%		12.0%		<.001
Cerebrovascular disease	13.7%		11.7%		<.001
Chronic Pulmonary Disease	37.6%		27.5%		<.001
Connective tissue/rheumatic disease	3.9%		2.4%		<.001
Peptic ulcer disease	7.9%		5.2%		<.001
Mild liver disease	11.9%		7.7%		<.001
Diabetes without chronic complications/mild to moderate	21.6%		13.8%		<.001
Moderate or severe liver disease	0.7%		0.5%		.005

1. Patient Health Questionnaire 9

Supplementary Table 3.a. Adjusted ¹ comparison of health care use by group and type of service for one year ² following index date								
	TRD ³		Non-TRD MDD ⁴		TRD compared to MDD			
	Mean or %	SD	Mean or %	SD	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value
All Services								
Any Inpatient Stay: Total (%)	11.1%		9.1%		1.09	1.02	1.17	.014
Number of Inpatient Stays: Total (mean)	0.16	0.58	0.13	0.52	1.08	1.00	1.16	.036
Number of Inpatient Days: Total (mean)	0.80	4.08	0.61	3.34	1.08	0.97	1.20	.151
Any ED Visit: Total (%)	28.3%		26.4%		1.09	1.03	1.14	.001
Number of ED Visits: Total (Mean)	0.58	1.56	0.60	1.85	1.03	0.99	1.08	.161
Any Outpatient Visit: Total (%)	99.1%		98.4%		1.42	1.15	1.74	.001
Number of Outpatient Visits: Total (Mean)	22.53	22.51	17.99	20.78	1.11	1.09	1.13	<.001
Any Other (Telephone, Email) Visit: Total (%)	98.6%		97.1%		1.64	1.41	1.91	<.001
Number of Other Visits: Total (Mean)	20.20	22.59	15.87	20.57	1.15	1.13	1.17	<.001
Any MH Medication	96.0%		72.7%		8.97	8.33	9.67	<.001
With a mental health diagnosis								
Any Inpatient Stay: (%)	10.2%		7.9%		1.14	1.06	1.23	<.001
Number of Inpatient Stays: (mean)	0.15	0.55	0.11	0.47	1.14	1.06	1.23	.001
Number of Inpatient Days: (mean)	0.73	3.79	0.52	3.07	1.16	1.04	1.30	.009
Any ED Visit: (%)	14.7%		13.8%		1.10	1.04	1.18	.002
Number of ED Visits: (Mean)	0.26	0.97	0.28	1.20	1.06	1.00	1.13	.067
Any Outpatient Visit: (%)	89.1%		82.7%		1.57	1.48	1.67	<.001
Number of Outpatient Visits: (Mean)	5.58	11.16	4.72	12.49	1.10	1.07	1.13	<.001
Any Other (Telephone, Email) Visit: (%)	46.4%		35.1%		1.51	1.44	1.58	<.001
Number of Other Visits: (Mean)	1.05	1.80	0.71	1.48	1.37	1.33	1.42	<.001
With a mental health specialty provider								
Any Inpatient Stay: (%)	10.2%		7.9%		1.14	1.06	1.23	.001
Number of Inpatient Stays: (mean)	0.15	0.55	0.11	0.47	1.14	1.05	1.22	.001
Number of Inpatient Days: (mean)	0.73	3.79	0.52	3.07	1.16	1.04	1.29	.010
Any Outpatient Visit: (%)	89.5%		83.4%		1.56	1.47	1.66	<.001
Number of Outpatient Visits: (Mean)	6.02	11.95	5.13	13.06	1.09	1.07	1.12	<.001
Any Other (Telephone, Email) Visit: (%)	60.3%		50.7%		1.37	1.31	1.43	<.001
Number of Other Visits: (Mean)	3.11	6.47	2.26	6.12	1.25	1.21	1.29	<.001
With a depression diagnosis								
Any Inpatient Stay: (%)	8.3%		5.9%		1.25	1.15	1.36	<.001

Number of Inpatient Stays: (mean)	0.11	0.46	0.08	0.37	1.26	1.15	1.37	<.001
Number of Inpatient Days: (mean)	0.56	3.38	0.36	2.35	1.29	1.14	1.46	<.001
Any ED Visit: (%)	8.0%		7.2%		1.12	1.03	1.22	.007
Number of ED Visits: (Mean)	0.12	0.53	0.11	0.60	1.11	1.02	1.21	.018
Any Outpatient Visit: (%)	78.7%		71.8%		1.39	1.33	1.46	<.001
Number of Outpatient Visits: (Mean)	3.58	6.12	2.74	5.07	1.15	1.12	1.18	<.001
Any Other (Telephone, Email) Visit: (%)	32.2%		24.0%		1.43	1.37	1.50	<.001
Number of Other Visits: (Mean)	0.59	1.21	0.39	0.92	1.43	1.37	1.49	<.001
With a depression diagnosis and a mental health provider								
Any Inpatient Stay: (%)	0.1%		0.1%		na	na	na	.356
Number of Inpatient Stays: (mean)	0.00	0.03	0.00	0.04	na	na	na	.409
Number of Inpatient Days: (mean)	0.01	0.31	0.01	0.44	na	na	na	.998
Any ED Visit: (%)	0.0%		0.1%		na	na	na	.392
Number of ED Visits: (Mean)	0.00	0.02	0.00	0.03	na	na	na	.587
Any Outpatient Visit: (%)	32.9%		27.5%		1.06	1.02	1.12	.009
Number of Outpatient Visits: (Mean)	2.05	5.71	1.58	4.78	1.13	1.07	1.19	<.001
Any Other (Telephone, Email) Visit: (%)	13.3%		7.8%		1.45	1.35	1.56	<.001
Number of Other Visits: (Mean)	0.25	0.88	0.13	0.62	1.56	1.45	1.69	<.001
With any mental health diagnosis any setting								
Any Psychotherapy Visit: (%)	25.8%		26.1%		0.78	0.75	0.82	<.001
Number of Psychotherapy Visits: (Mean)	2.06	6.38	1.81	5.44	0.97	0.91	1.04	.407
With any mental health diagnosis specialty setting								
Any Psychotherapy Visit: (%)	26.7%		27.0%		0.79	0.75	0.83	<.001
Number of Psychotherapy Visits: (Mean)	2.16	6.58	1.91	5.61	0.97	0.91	1.03	.384
With a depression diagnosis any setting								
Any Psychotherapy Visit: (%)	20.6%		21.2%		0.78	0.74	0.83	.000
Number of Psychotherapy Visits: (Mean)	1.38	4.60	1.23	4.04	0.99	0.92	1.06	.762
With a depression diagnosis specialty setting								
Any Psychotherapy Visit: (%)	20.6%		21.2%		0.78	0.74	0.82	<.001
Number of Psychotherapy Visits: (Mean)	1.36	4.56	1.22	4.03	0.98	0.92	1.06	.647
1. Regression models include the following covariates: demographics (gender, age, race/ethnicity, poverty status), type of insurance (private, Medicaid/Medicare), comorbid physical health disorders (e.g., diabetes) and behavioral health conditions (e.g., substance use disorder). 2. Participants observed for a minimum of 1 year.								

Supplementary Table 3.b. Adjusted ¹ comparison of health care costs by group and type of cost for one year ² following index date								
	TRD		Non-TRD MDD		TRD compared to MDD			
	Mean	SD	Mean	SD	<i>B</i>	Lower 95% CI	Upper 95% CI	<i>p</i> -value
All Costs								
Total Cost	12,562	24,934	9071	22089	1.23	1.21	1.26	<.001
Inpatient Costs: Total	3,402	15,688	2394	12750	1.15	1.08	1.22	<.001
ED Costs: Total	671	2,488	594	2,364	1.13	1.07	1.18	<.001
Outpatient Costs: Total	3,891	4,422	3,070	3,931	1.14	1.11	1.16	<.001
Other Costs (telephone, email): Total	308	363	252	343	1.10	1.08	1.12	<.001
Total RX Cost	3,433	11,063	2,098	11,835	1.58	1.53	1.62	<.001
Total MH RX Cost	688	1,666	278	1,153	2.58	2.49	2.66	<.001
Costs with mental health diagnosis								
Total Cost: With MH DX	5,013	16,355	3,632	13,871	1.19	1.15	1.24	<.001
Inpatient Costs: With MH DX	3,095	14,495	2,050	11,647	1.22	1.15	1.30	<.001
ED Costs: With MH DX	267	1,447	245	1,453	1.20	1.14	1.26	<.001
Outpatient Costs: With MH DX	1,196	2,083	969	2,063	1.13	1.10	1.17	<.001
Other Costs (telephone, email): With MH DX	18	33	13	28	1.30	1.26	1.34	<.001
Costs with mental health diagnosis and specialty setting								
Total Cost: With MH Provider & DX	5,835	16,583	4,008	14,100	1.31	1.27	1.35	<.001
Inpatient Costs: With MH Provider & DX	3,095	14,495	2,051	11,647	1.22	1.15	1.30	<.001
ED Costs: With MH Provider & DX	271	1,466	252	1,474	1.19	1.13	1.25	<.001
Outpatient Costs: With MH Provider & DX	1,231	2,120	1,004	2,112	1.13	1.10	1.16	<.001
Other Costs (telephone, email): With MH Provider & DX	50	105	39	102	1.18	1.14	1.22	<.001
Costs with depression diagnosis								
Total Cost: With Depression DX	3,568	13,732	2,347	10,823	1.26	1.21	1.31	<.001
Inpatient Costs: With Depression DX	2,397	12,795	1,455	9,480	1.32	1.24	1.40	<.001
ED Costs: With Depression DX	86	615	72	540	1.26	1.20	1.32	<.001
Outpatient Costs: With Depression DX	805	1,589	603	1,265	1.18	1.14	1.22	<.001
Other Costs (telephone, email): With Depression DX	10	22	7	17	1.32	1.28	1.36	<.001
1. Regression models include the following covariates: demographics (gender, age, race/ethnicity, poverty status), type of insurance (private, Medicaid/Medicare), comorbid physical health disorders (e.g., diabetes) and behavioral health conditions (e.g., substance use disorder). 2. Participants observed for a minimum of 1 year.								

Supplementary Table 4.1.a. Unadjusted description of healthcare resource use by group, depression symptom level and type of service for 1-year ¹ post index date												
Description	TRD						Non-TRD MDD					
	Non-Minimal (N=3,245)		Mild-Moderate (N=17,009)		Moderately Severe to Severe (N=4,308)		Non-Minimal (N=3,147)		Mild-Moderate (N=11,583)		Moderately Severe to Severe (N=2,924)	
	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD
Any Service												
Any Inpatient Stay: Total (%)	11.3%		11.1%		11.2%		9.2%		8.9%		9.5%	
Number of Inpatient Stays: Total (mean)	0.16	0.54	0.16	0.58	0.17	0.63	0.12	0.42	0.13	0.51	0.14	0.64
Number of Inpatient Days: Total (mean)	0.79	6.13	0.80	3.72	0.81	3.44	0.57	2.82	0.59	3.09	0.73	4.56
Any ED Visit: Total (%)	23.9%		28.0%		33.1%		20.0%		25.8%		35.3%	
Number of ED Visits: Total (Mean)	0.47	1.68	0.56	1.47	0.75	1.77	0.41	1.51	0.57	1.78	0.88	2.37
Any Outpatient Visit: Total (%)	99.4%		99.1%		99.0%		98.6%		98.3%		98.3%	
Number of Outpatient Visits: Total (Mean)	21.01	20.92	22.40	22.42	24.22	23.87	16.82	18.73	17.87	19.53	19.74	26.74
Any Other (Telephone, Email) Visit: Total (%)	98.6%		98.5%		98.7%		96.6%		97.0%		98.1%	
Number of Other Visits: Total (Mean)	17.79	19.79	20.00	22.52	22.78	24.52	13.90	17.44	15.72	20.53	18.57	23.41
With a mental health diagnosis												
Any Inpatient Stay: (%)	10.4%		10.2%		10.2%		7.9%		7.7%		8.6%	
Number of Inpatient Stays: (mean)	0.14	0.49	0.15	0.55	0.16	0.60	0.10	0.36	0.11	0.46	0.13	0.62
Number of Inpatient Days: (mean)	0.71	5.32	0.72	3.54	0.75	3.31	0.48	2.48	0.50	2.76	0.67	4.48
Any ED Visit: (%)	10.8%		14.1%		20.0%		9.0%		13.0%		22.3%	
Number of ED Visits: (Mean)	0.18	0.99	0.24	0.88	0.39	1.24	0.15	0.85	0.26	1.14	0.49	1.66
Any Outpatient Visit: (%)	86.7%		89.0%		91.2%		76.5%		82.9%		88.6%	
Number of Outpatient Visits: (Mean)	3.67	8.57	5.39	11.03	7.76	12.90	3.07	9.33	4.55	10.10	7.13	20.87
Any Other (Telephone, Email) Visit: (%)	36.9%		46.1%		54.7%		22.9%		35.6%		46.3%	
Number of Other Visits: (Mean)	0.69	1.27	1.02	1.74	1.47	2.27	0.41	1.05	0.69	1.42	1.11	1.96
With a mental health diagnosis and specialty care												
Any Inpatient Stay: (%)	10.4%		10.2%		10.2%		7.9%		7.7%		8.6%	
Number of Inpatient Stays: (mean)	0.14	0.49	0.15	0.55	0.16	0.60	0.10	0.36	0.11	0.46	0.13	0.62
Number of Inpatient Days: (mean)	0.71	5.32	0.72	3.54	0.75	3.31	0.48	2.48	0.50	2.76	0.67	4.48
Any Outpatient Visit: (%)	87.4%		89.4%		91.5%		77.3%		83.5%		89.2%	
Number of Outpatient Visits: (Mean)	3.97	9.05	5.80	11.79	8.44	13.97	3.30	9.74	4.97	10.80	7.73	21.33
Any Other (Telephone, Email) Visit: (%)	48.5%		60.0%		70.6%		33.8%		51.5%		65.4%	
Number of Other Visits: (Mean)	1.69	3.54	2.87	6.03	5.09	8.95	1.14	3.24	2.15	5.98	3.90	8.32
With a depression diagnosis												
Any Inpatient Stay: (%)	8.6%		8.2%		8.1%		6.2%		5.6%		6.8%	
Number of Inpatient Stays: (mean)	0.11	0.43	0.11	0.46	0.12	0.50	0.07	0.30	0.07	0.35	0.10	0.48
Number of Inpatient Days: (mean)	0.58	5.16	0.55	3.09	0.56	2.73	0.33	1.72	0.33	2.14	0.48	3.49
Any ED Visit: (%)	5.8%		7.5%		11.5%		4.6%		6.6%		12.5%	
Number of ED Visits: (Mean)	0.08	0.63	0.10	0.46	0.19	0.70	0.06	0.32	0.10	0.59	0.21	0.80
Any Outpatient Visit: (%)	75.0%		78.7%		81.5%		65.6%		71.8%		78.7%	
Number of Outpatient Visits: (Mean)	2.23	3.54	3.47	5.81	5.03	8.20	1.79	3.32	2.75	4.95	3.75	6.65
Any Other (Telephone, Email) Visit: (%)	24.0%		32.2%		38.8%		14.5%		24.4%		32.7%	

Number of Other Visits: (Mean)	0.35	0.77	0.57	1.18	0.82	1.51	0.21	0.59	0.38	0.89	0.61	1.26
With a depression diagnosis and specialty care												
Any Inpatient Stay: (%)	0.0%		0.1%		0.2%		0.0%		0.1%		0.3%	
Number of Inpatient Stays: (mean)	0.00	0.02	0.00	0.03	0.00	0.05	0.00	0.02	0.00	0.03	0.00	0.07
Number of Inpatient Days: (mean)	0.00	0.14	0.01	0.21	0.03	0.62	0.00	0.05	0.01	0.30	0.04	0.90
Any ED Visit: (%)	0.0%		0.0%		0.0%		0.0%		0.0%		0.1%	
Number of ED Visits: (Mean)	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.02	0.00	0.03	0.00	0.04
Any Outpatient Visit: (%)	21.7%		32.3%		43.8%		16.4%		28.0%		37.3%	
Number of Outpatient Visits: (Mean)	0.92	3.19	1.95	5.44	3.27	7.68	0.80	3.02	1.60	4.68	2.32	6.33
Any Other (Telephone, Email) Visit: (%)	8.2%		12.8%		19.5%		4.1%		7.3%		13.8%	
Number of Other Visits: (Mean)	0.13	0.51	0.23	0.85	0.41	1.15	0.06	0.36	0.12	0.56	0.27	0.94
With a mental health diagnosis												
Any Psychotherapy Visit: (%)	14.0%		25.6%		35.4%		15.8%		26.8%		34.1%	
Number of Psychotherapy Visits: (Mean)	1.03	4.51	1.98	6.10	3.12	8.25	1.06	4.27	1.88	5.42	2.37	6.44
Any Psychotherapy Visit: (%)	15.2%		26.5%		36.3%		16.4%		27.8%		35.1%	
Number of Psychotherapy Visits: (Mean)	1.11	4.67	2.08	6.33	3.24	8.39	1.13	4.48	1.97	5.59	2.51	6.63
With a depression diagnosis												
Any Psychotherapy Visit: (%)	9.6%		20.5%		29.4%		12.0%		22.0%		28.1%	
Number of Psychotherapy Visits: (Mean)	0.55	2.56	1.34	4.42	2.16	6.11	0.67	2.87	1.27	4.00	1.65	5.10
Any Psychotherapy Visit: (%)	9.6%		20.5%		29.3%		12.0%		22.0%		28.0%	
Number of Psychotherapy Visits: (Mean)	0.54	2.53	1.32	4.38	2.14	6.05	0.66	2.86	1.26	3.98	1.64	5.10
1. Participants observed for a minimum of 1 year. 2. TRD is treatment resistant depression 3. non-TRD MDD is major depressive disorder, but not TRD												

Supplementary Table 4.1.b. Adjusted ¹ comparison of health care use by group, depression symptom level, and type of service for one year ² following index date																								
Description	TRD ³												Non-TRD MDD ⁴											
	Severe compared to Moderate				Severe compared to Mild				Moderate compared to Mild				Severe compared to Moderate				Severe compared to Mild				Moderate compared to Mild			
	OR ⁵ / IRR ⁶	Lower 95% CI ⁷	Upper 95% CI	<i>p</i> -value	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value	OR / IRR	Lower 95% CI	Upper 95% CI	<i>p</i> -value
Any Service																								
Any Inpatient Stay: Total (%)	1.13	1.01	1.26	0.02	1.18	1.01	1.37	0.02	1.04	0.92	1.18	0.40	1.05	0.91	1.22	0.54	1.04	0.87	1.26	0.54	0.99	0.86	1.15	0.62
Number of Inpatient Stays: Total (mean)	1.19	1.07	1.33	0.00	1.25	1.08	1.45	0.00	1.05	0.93	1.19	0.45	1.12	0.97	1.29	0.13	1.22	1.01	1.48	0.03	1.10	0.95	1.27	0.22
Number of Inpatient Days: Total (mean)	1.20	1.02	1.42	0.03	1.19	0.95	1.49	0.13	0.99	0.82	1.19	0.91	1.24	0.99	1.55	0.06	1.28	0.97	1.69	0.08	1.04	0.83	1.28	0.75
Any ED Visit: Total (%)	1.26	1.17	1.36	0.00	1.53	1.38	1.71	0.00	1.22	1.11	1.33	0.57	1.39	1.27	1.53	0.00	1.86	1.64	2.10	0.00	1.33	1.20	1.48	0.56
Number of ED Visits: Total (Mean)	1.30	1.21	1.39	0.00	1.48	1.34	1.64	0.00	1.14	1.05	1.24	0.00	1.32	1.21	1.44	0.00	1.69	1.51	1.90	0.00	1.28	1.16	1.41	0.00
Any Outpatient Visit: Total (%)	0.94	0.66	1.36	0.73	0.92	0.53	1.62	0.73	0.98	0.60	1.60	0.91	1.09	0.78	1.53	0.49	1.18	0.75	1.83	0.49	1.08	0.76	1.53	0.97
Number of Outpatient Visits: Total (Mean)	1.13	1.10	1.16	0.00	1.23	1.18	1.28	0.00	1.08	1.05	1.12	0.00	1.11	1.07	1.15	0.00	1.23	1.18	1.29	0.00	1.11	1.07	1.15	0.00
Any Other (Telephone, Email) Visit: Total (%)	1.27	0.93	1.73	0.06	1.48	0.98	2.23	0.06	1.16	0.84	1.61	0.73	1.72	1.27	2.33	0.00	2.37	1.67	3.36	0.00	1.37	1.09	1.73	0.28
Number of Other Visits: Total (Mean)	1.17	1.14	1.21	0.00	1.30	1.25	1.36	0.00	1.11	1.08	1.15	0.00	1.18	1.13	1.22	0.00	1.37	1.31	1.44	0.00	1.17	1.12	1.21	0.00
With a mental health diagnosis																								
Any Inpatient Stay: (%)	1.11	0.99	1.25	0.05	1.15	0.98	1.35	0.05	1.04	0.91	1.18	0.46	1.10	0.94	1.28	0.24	1.10	0.91	1.34	0.24	1.01	0.86	1.17	0.46
Number of Inpatient Stays: (mean)	1.19	1.06	1.33	0.00	1.25	1.07	1.46	0.01	1.05	0.92	1.19	0.48	1.19	1.02	1.38	0.03	1.31	1.07	1.60	0.01	1.10	0.94	1.29	0.23
Number of Inpatient Days: (mean)	1.21	1.02	1.44	0.03	1.19	0.94	1.51	0.15	0.98	0.81	1.19	0.84	1.34	1.06	1.71	0.01	1.36	1.01	1.83	0.04	1.01	0.80	1.28	0.91
Any ED Visit: (%)	1.40	1.28	1.54	0.00	1.76	1.53	2.03	0.00	1.26	1.11	1.42	0.00	1.58	1.42	1.77	0.00	2.06	1.76	2.42	0.00	1.30	1.13	1.50	0.00
Number of ED Visits: (Mean)	1.46	1.33	1.60	0.00	1.74	1.51	2.00	0.00	1.19	1.06	1.35	0.00	1.58	1.41	1.77	0.00	2.17	1.84	2.56	0.00	1.38	1.20	1.58	0.00
Any Outpatient Visit: (%)	1.29	1.14	1.45	0.00	1.65	1.42	1.92	0.00	1.28	1.14	1.44	0.00	1.51	1.33	1.71	0.00	2.20	1.90	2.55	0.00	1.46	1.33	1.61	0.00
Number of Outpatient Visits: (Mean)	1.33	1.29	1.38	0.00	1.85	1.76	1.95	0.00	1.39	1.33	1.45	0.00	1.36	1.29	1.43	0.00	1.94	1.82	2.07	0.00	1.43	1.36	1.50	0.00
Any Other (Telephone, Email) Visit: (%)	1.26	1.18	1.35	0.00	1.66	1.51	1.83	0.00	1.32	1.22	1.42	0.49	1.42	1.31	1.55	0.00	2.40	2.14	2.69	0.00	1.69	1.54	1.85	0.01
Number of Other Visits: (Mean)	1.32	1.25	1.38	0.00	1.75	1.63	1.89	0.00	1.33	1.25	1.42	0.00	1.43	1.33	1.53	0.00	2.18	1.98	2.40	0.00	1.52	1.41	1.65	0.00
With a mental health diagnosis and setting																								
Any Inpatient Stay: (%)	1.11	0.99	1.25	0.05	1.15	0.98	1.35	0.05	1.04	0.91	1.18	0.46	1.10	0.94	1.28	0.24	1.10	0.91	1.34	0.24	1.01	0.86	1.17	0.46
Number of Inpatient Stays: (mean)	1.19	1.06	1.33	0.00	1.25	1.07	1.46	0.01	1.05	0.92	1.19	0.48	1.19	1.02	1.38	0.03	1.31	1.07	1.60	0.01	1.10	0.94	1.29	0.23
Number of Inpatient Days: (mean)	1.21	1.02	1.44	0.03	1.19	0.94	1.51	0.15	0.98	0.81	1.19	0.84	1.34	1.06	1.71	0.01	1.36	1.01	1.83	0.04	1.01	0.80	1.28	0.91
Any Outpatient Visit: (%)	1.40	1.28	1.54	0.00	1.76	1.53	2.03	0.00	1.26	1.11	1.42	0.18	1.58	1.42	1.77	0.00	2.06	1.76	2.42	0.00	1.30	1.13	1.50	0.05
Number of Outpatient Visits: (Mean)	1.46	1.33	1.60	0.00	1.74	1.51	2.00	0.00	1.19	1.06	1.35	0.00	1.58	1.41	1.77	0.00	2.17	1.84	2.56	0.00	1.38	1.20	1.58	0.00

Any Other (Telephone, Email) Visit: (%)	1.29	1.14	1.45	0.00	1.65	1.42	1.92	0.00	1.28	1.14	1.44	0.97	1.51	1.33	1.71	0.00	2.20	1.90	2.55	0.00	1.46	1.33	1.61	0.73
Number of Other Visits: (Mean)	1.33	1.29	1.38	0.00	1.85	1.76	1.95	0.00	1.39	1.33	1.45	0.00	1.36	1.29	1.43	0.00	1.94	1.82	2.07	0.00	1.43	1.36	1.50	0.00
With a depression diagnosis																								
Any Inpatient Stay: (%)	1.08	0.95	1.23	0.19	1.11	0.93	1.32	0.19	1.02	0.89	1.18	0.58	1.21	1.02	1.43	0.09	1.13	0.91	1.40	0.09	0.93	0.79	1.11	0.06
Number of Inpatient Stays: (mean)	1.16	1.02	1.31	0.02	1.19	1.00	1.42	0.05	1.03	0.89	1.18	0.71	1.29	1.08	1.53	0.00	1.31	1.05	1.64	0.02	1.02	0.85	1.22	0.84
Number of Inpatient Days: (mean)	1.14	0.94	1.38	0.17	1.06	0.81	1.38	0.68	0.93	0.75	1.15	0.48	1.45	1.10	1.91	0.01	1.51	1.07	2.13	0.02	1.04	0.80	1.36	0.75
Any ED Visit: (%)	1.51	1.35	1.69	0.00	1.87	1.56	2.24	0.00	1.24	1.06	1.46	0.08	1.71	1.49	1.96	0.00	2.18	1.77	2.69	0.00	1.28	1.06	1.54	0.02
Number of ED Visits: (Mean)	1.58	1.40	1.78	0.00	1.82	1.51	2.19	0.00	1.15	0.98	1.35	0.09	1.67	1.43	1.94	0.00	2.35	1.88	2.94	0.00	1.41	1.16	1.71	0.00
Any Outpatient Visit: (%)	1.27	1.16	1.38	0.00	1.68	1.50	1.89	0.00	1.33	1.21	1.45	0.51	1.47	1.33	1.62	0.00	2.04	1.81	2.30	0.00	1.39	1.28	1.52	0.46
Number of Outpatient Visits: (Mean)	1.39	1.34	1.45	0.00	2.10	1.98	2.22	0.00	1.51	1.43	1.58	0.00	1.34	1.27	1.41	0.00	1.97	1.84	2.11	0.00	1.47	1.40	1.56	0.00
Any Other (Telephone, Email) Visit: (%)	1.27	1.19	1.36	0.00	1.81	1.63	2.01	0.00	1.42	1.30	1.55	0.07	1.45	1.32	1.58	0.00	2.60	2.28	2.96	0.00	1.80	1.61	2.01	0.01
Number of Other Visits: (Mean)	1.36	1.28	1.45	0.00	2.08	1.90	2.29	0.00	1.53	1.41	1.66	0.00	1.54	1.42	1.68	0.00	2.63	2.33	2.96	0.00	1.70	1.54	1.88	0.00
With a depression diagnosis and specialty setting																								
Any Inpatient Stay: (%)	2.24	0.99	5.06	0.04	5.56	0.70	44.37	0.04	2.48	0.32	18.89	0.93	3.24	1.32	7.93	0.01	7.35	0.91	59.52	0.01	2.27	0.28	18.10	0.77
Number of Inpatient Stays: (mean)	2.12	0.91	4.94	0.08	6.06	0.73	50.49	0.10	2.86	0.36	22.49	0.32	3.39	1.42	8.12	0.01	7.69	0.96	61.34	0.05	2.27	0.29	17.98	0.44
Number of Inpatient Days: (mean)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Any ED Visit: (%)	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Number of ED Visits: (Mean)	1.50	1.39	1.61	0.00	2.34	2.10	2.60	0.00	1.56	1.43	1.71	0.50	1.57	1.43	1.72	0.00	2.80	2.46	3.19	0.00	1.79	1.60	1.99	0.09
Any Outpatient Visit: (%)	1.49	1.37	1.62	0.00	2.96	2.62	3.35	0.00	1.99	1.80	2.20	0.00	1.47	1.31	1.65	0.00	2.85	2.46	3.30	0.00	1.94	1.73	2.17	0.00
Number of Outpatient Visits: (Mean)	1.53	1.40	1.67	0.00	2.28	1.96	2.65	0.00	1.49	1.30	1.71	0.80	2.02	1.77	2.31	0.00	3.37	2.72	4.17	0.00	1.67	1.37	2.02	0.13
Any Other (Telephone, Email) Visit: (%)	1.65	1.49	1.82	0.00	2.77	2.36	3.25	0.00	1.68	1.46	1.93	0.00	2.23	1.91	2.60	0.00	3.66	2.93	4.57	0.00	1.64	1.35	1.99	0.00
Number of Other Visits: (Mean)	2.24	0.99	5.06	0.04	5.56	0.70	44.37	0.04	2.48	0.32	18.89	0.93	3.24	1.32	7.93	0.01	7.35	0.91	59.52	0.01	2.27	0.28	18.10	0.77
All psychotherapy																								
Any Psychotherapy Visit: (%)	1.37	1.27	1.48	0.00	2.40	2.13	2.70	0.00	1.75	1.58	1.94	0.00	1.38	1.26	1.52	0.00	2.39	2.09	2.73	0.00	1.73	1.55	1.93	0.01
Number of Psychotherapy Visits: (Mean)	1.36	1.20	1.54	0.00	2.71	2.29	3.22	0.00	1.99	1.73	2.29	0.00	1.14	0.99	1.32	0.07	2.10	1.75	2.52	0.00	1.84	1.60	2.11	0.00
Any mental health diagnosis																								
Any Psychotherapy Visit: (%)	1.38	1.28	1.49	0.00	2.52	2.23	2.85	0.00	1.83	1.64	2.04	0.00	1.38	1.26	1.52	0.00	2.38	2.08	2.72	0.00	1.72	1.54	1.92	0.01
Number of Psychotherapy Visits: (Mean)	1.35	1.22	1.50	0.00	2.52	2.18	2.92	0.00	1.86	1.65	2.10	0.00	1.14	1.01	1.29	0.03	1.99	1.70	2.32	0.00	1.74	1.55	1.97	0.00
Any mental health diagnosis and specialty setting																								
Any Psychotherapy Visit: (%)	1.37	1.27	1.48	0.00	2.40	2.13	2.70	0.00	1.75	1.58	1.94	0.00	1.38	1.26	1.52	0.00	2.39	2.09	2.73	0.00	1.73	1.55	1.93	0.01
Number of Psychotherapy Visits: (Mean)	1.35	1.22	1.49	0.00	2.42	2.10	2.80	0.00	1.80	1.60	2.02	0.00	1.13	1.01	1.27	0.04	1.94	1.67	2.26	0.00	1.72	1.53	1.94	0.00
Any depression diagnosis																								
Any Psychotherapy Visit: (%)	1.44	1.34	1.56	0.00	3.11	2.71	3.56	0.00	2.15	1.90	2.44	0.00	1.41	1.28	1.56	0.00	2.62	2.27	3.03	0.00	1.86	1.65	2.09	0.00
Number of Psychotherapy Visits: (Mean)	1.39	1.24	1.56	0.00	3.09	2.62	3.65	0.00	2.23	1.94	2.55	0.00	1.23	1.08	1.41	0.00	2.38	2.00	2.82	0.00	1.93	1.69	2.20	0.00
Mental Health Medication																								

Any MH Medication	1.02	0.86	1.21	0.51	0.86	0.67	1.11	0.51	0.85	0.68	1.05	0.21	1.28	1.15	1.41	0.00	1.44	1.27	1.62	0.00	1.13	1.03	1.23	0.09
1. Regression models include the following covariates: demographics (gender, age, race/ethnicity, poverty status), type of insurance (private, Medicaid/Medicare), comorbid physical health disorders (e.g., diabetes) and behavioral health conditions (e.g., substance use disorder). 2. Participants observed for a minimum of 1 year. 3. TRD is treatment resistant depression 4. non-TRD MDD is major depressive disorder, but not TRD 5. OR is odds ratio 6. IRR is incident rate ratio 7. CI is confidence interval																								

Supplementary Table 4.2.a. Unadjusted description of healthcare costs by group, depression symptom level, and type of cost for 1-year ¹ post index date												
Descriptions	TRD ²						Non-TRD MDD ³					
	Non-Minimal (N=3,245)		Mild-Moderate (N=17,009)		Moderately Severe to Severe (N=4,308)		Non-Minimal (N=3,147)		Mild-Moderate (N=11,583)		Moderately Severe to Severe (N=2,924)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
All Costs												
Total Cost	12,220	31,864	12,429	23,900	13,344	22,895	8,752	25,800	8,899	20,755	10,098	22,853
Inpatient Costs	3,548	21,942	3,434	15,006	3,169	12,307	2,301	10,837	2,352	12,343	2,659	15,860
ED Costs	572	2,822	659	2,428	792	2,446	483	2,812	573	2,161	798	2,583
Outpatient Costs	3,621	4,316	3,852	4,306	4,246	4,906	2,791	3,878	3,066	3,845	3,388	4,290
Costs with mental health diagnosis												
Total Cost	4,547	19,407	4,986	16,245	5,473	14,113	3,033	10,944	3,529	13,677	4,686	17,039
Inpatient Costs	3,205	18,637	3,132	14,235	2,865	11,672	1,957	9,819	1,990	11,176	2,387	14,847
ED Costs	198	1,525	255	1,423	369	1,476	158	1,606	223	1,253	427	1,923
Outpatient Costs	888	1,613	1,169	2,024	1,539	2,532	690	1,560	946	1,905	1,360	2,908
Medication costs												
Total RX Cost	3,500	15,271	3,339	9,736	3,754	12,160	2,402	20,479	1,993	8,998	2,186	8,575
Total MH RX Cost	606	1,700	652	1,551	893	2,024	195	695	259	1,050	446	1,763
1. Participants observed for a minimum of 1 year. 2. TRD is treatment resistant depression 3. non-TRD MDD is major depressive disorder, but not TRD												

Supplementary Table 4.2.b. Adjusted ¹ comparison of health care costs by group, depression symptom level, and type of cost for one year ² following index date																								
Description	TRD ³												Non-TRD MDD ⁴											
	Severe compared to Moderate				Severe compared to Mild				Moderate compared to Mild				Severe compared to Moderate				Severe compared to Mild				Moderate compared to Mild			
	OR ⁵ / IRR ⁶	Lower 95% CI ⁷	Upper 95% CI	p-value	OR / IRR	Lower 95% CI	Upper 95% CI	p-value	OR / IRR	Lower 95% CI	Upper 95% CI	p-value	OR / IRR	Lower 95% CI	Upper 95% CI	p-value	OR / IRR	Lower 95% CI	Upper 95% CI	p-value	OR / IRR	Lower 95% CI	Upper 95% CI	p-value
All Costs																								
Total Cost	1.16	1.12	1.21	0.00	1.21	1.15	1.28	0.00	1.05	1.01	1.09	0.02	1.23	1.17	1.28	0.00	1.25	1.18	1.33	0.00	1.05	1.00	1.09	0.05
Inpatient Costs	1.11	1.01	1.23	0.04	1.07	0.93	1.23	0.35	0.99	0.88	1.10	0.79	1.35	1.19	1.52	0.00	1.22	1.04	1.44	0.01	1.06	0.94	1.19	0.34
ED Costs	1.26	1.16	1.36	0.00	1.44	1.28	1.62	0.00	1.18	1.07	1.29	0.00	1.23	1.12	1.36	0.00	1.64	1.44	1.88	0.00	1.30	1.18	1.44	0.00
Outpatient Costs	1.15	1.11	1.18	0.00	1.24	1.19	1.30	0.00	1.07	1.03	1.11	0.00	1.12	1.07	1.17	0.00	1.25	1.18	1.33	0.00	1.13	1.08	1.17	0.00
Other Costs (telephone, email)	1.22	1.18	1.26	0.00	1.40	1.34	1.47	0.00	1.15	1.11	1.19	0.00	1.22	1.17	1.27	0.00	1.44	1.36	1.52	0.00	1.19	1.14	1.23	0.00
Total RX Cost	1.17	1.12	1.22	0.00	1.17	1.10	1.24	0.00	1.00	0.95	1.05	0.98	1.21	1.14	1.29	0.00	1.03	0.94	1.12	0.52	0.77	0.72	0.82	0.00
With any mental health diagnosis																								
Total Cost	1.23	1.16	1.30	0.00	1.32	1.21	1.43	0.00	1.11	1.04	1.18	0.00	1.42	1.32	1.52	0.00	1.64	1.48	1.81	0.00	1.21	1.13	1.30	0.00
Inpatient Costs	1.12	1.01	1.24	0.03	1.04	0.90	1.21	0.56	0.97	0.87	1.08	0.60	1.41	1.24	1.59	0.00	1.27	1.08	1.50	0.00	1.02	0.91	1.14	0.77
ED Costs	1.38	1.27	1.50	0.00	1.63	1.45	1.84	0.00	1.24	1.14	1.36	0.00	1.62	1.47	1.79	0.00	2.72	2.39	3.10	0.00	1.45	1.32	1.60	0.00
Outpatient Costs	1.26	1.20	1.32	0.00	1.61	1.50	1.72	0.00	1.25	1.18	1.31	0.00	1.32	1.24	1.41	0.00	1.81	1.66	1.98	0.00	1.33	1.25	1.42	0.00
Other Costs (telephone, email)	1.35	1.29	1.42	0.00	1.86	1.73	1.99	0.00	1.36	1.29	1.43	0.00	1.43	1.35	1.52	0.00	2.10	1.94	2.28	0.00	1.47	1.39	1.56	0.00
Mental health diagnosis and specialty setting																								
Total Cost	1.24	1.18	1.30	0.00	1.32	1.23	1.41	0.00	1.09	1.03	1.15	0.00	1.42	1.33	1.51	0.00	1.67	1.53	1.82	0.00	1.22	1.15	1.30	0.00
Inpatient Costs	1.12	1.01	1.23	0.03	1.04	0.90	1.21	0.56	0.97	0.87	1.09	0.61	1.40	1.24	1.58	0.00	1.27	1.08	1.50	0.00	1.02	0.91	1.15	0.74
ED Costs	1.36	1.25	1.48	0.00	1.57	1.39	1.77	0.00	1.19	1.08	1.30	0.00	1.62	1.46	1.78	0.00	2.76	2.43	3.15	0.00	1.48	1.34	1.63	0.00
Outpatient Costs	1.27	1.21	1.33	0.00	1.62	1.51	1.73	0.00	1.24	1.18	1.31	0.00	1.33	1.25	1.41	0.00	1.82	1.67	1.98	0.00	1.34	1.26	1.42	0.00
Other Costs (telephone, email)	1.62	1.54	1.70	0.00	2.51	2.33	2.70	0.00	1.53	1.45	1.62	0.00	1.64	1.54	1.75	0.00	2.81	2.58	3.06	0.00	1.68	1.58	1.79	0.00
With a depression Diagnosis																								
Total Cost	1.21	1.14	1.29	0.00	1.30	1.18	1.42	0.00	1.10	1.02	1.18	0.01	1.44	1.33	1.56	0.00	1.65	1.48	1.85	0.00	1.23	1.14	1.33	0.00
Inpatient Costs	1.03	0.93	1.14	0.56	0.94	0.81	1.08	0.37	0.94	0.84	1.05	0.27	1.49	1.32	1.68	0.00	1.32	1.12	1.56	0.00	1.04	0.92	1.16	0.54
ED Costs	1.61	1.49	1.74	0.00	1.91	1.70	2.16	0.00	1.22	1.12	1.33	0.00	1.53	1.40	1.68	0.00	2.27	1.97	2.62	0.00	1.29	1.18	1.41	0.00
Outpatient Costs	1.30	1.23	1.37	0.00	1.75	1.62	1.90	0.00	1.32	1.25	1.41	0.00	1.30	1.21	1.39	0.00	1.82	1.65	2.00	0.00	1.34	1.25	1.44	0.00
Other Costs (telephone, email)	1.38	1.31	1.44	0.00	2.10	1.96	2.25	0.00	1.51	1.43	1.60	0.00	1.53	1.44	1.62	0.00	2.45	2.27	2.65	0.00	1.54	1.45	1.63	0.00
Medication Cost																								
Total MH RX Cost	1.31	1.25	1.37	0.00	1.40	1.31	1.50	0.00	1.04	0.99	1.09	0.16	1.42	1.32	1.53	0.00	1.73	1.57	1.91	0.00	1.22	1.14	1.31	0.00
1. Regression models include the following covariates: demographics (gender, age, race/ethnicity, poverty status), type of insurance (private, Medicaid/Medicare), comorbid physical health disorders (e.g., diabetes) and behavioral health conditions (e.g., substance use disorder). 2. Participants observed for a minimum of 1 year. 3. TRD is treatment resistant depression 4. non-TRD MDD is major depressive disorder, but not TRD 5. OR is odds ratio 6. IRR is incident rate ratio 7. CI is confidence interval																								

Supplementary Table 5. Regression Output from Total All-Cause Cost Model.

Criteria For Assessing Goodness Of Fit			
Criterion	DF	Value	Value/DF ¹
Deviance	42E3	57903.9334	1.3743
Scaled Deviance	42E3	49593.3845	1.1771
Pearson Chi-Square	42E3	161194.3624	3.8259
Scaled Pearson X2	42E3	138059.2566	3.2768
Log Likelihood		-426804.5559	
Full Log Likelihood		-426804.5559	
AIC (smaller is better)		853651.1117	
AICC (smaller is better)		853651.1337	
BIC (smaller is better)		853832.7415	

Algorithm converged.

Analysis Of Maximum Likelihood Parameter Estimates							
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	95% Confidence Limits	Pr > ChiSq	
Intercept	1	8.3383	0.0377	8.2644	8.4121	48973.2	<.0001
PHQ ² -Level 1	1	-0.0479	0.0152	-0.0776	-0.0182	10.00	0.0016
PHQ-Level 3	1	0.1671	0.0144	0.1388	0.1954	134.06	<.0001
PHQ-Level 2	0	0.0000	0.0000	0.0000	0.0000	.	.

Analysis Of Maximum Likelihood Parameter Estimates								
Parameter	DF	Estimate	Standard Error	Wald	95% Confidence Limits	Wald Chi-Square	Pr > ChiSq	
TRD	1	1	0.2088	0.0113	0.1866	0.2310	339.40	<.0001
TRD	0	0	0.0000	0.0000	0.0000	0.0000	.	.
Age		1	0.0049	0.0004	0.0040	0.0058	120.55	<.0001
Male		1	0.0037	0.0117	-0.0192	0.0266	0.10	0.7523
Race ³	AS	1	-0.1421	0.0380	-0.2166	-0.0677	14.00	0.0002
Race	BA	1	0.1002	0.0328	0.0358	0.1646	9.31	0.0023
Race	HP	1	-0.1437	0.0725	-0.2858	-0.0016	3.93	0.0475
Race	IN	1	0.0895	0.0471	-0.0028	0.1818	3.61	0.0574
Race	OT	1	-0.0228	0.0838	-0.1871	0.1414	0.07	0.7854
Race	UN	1	-0.1640	0.0327	-0.2281	-0.0999	25.13	<.0001
Race	WH	0	0.0000	0.0000	0.0000	0.0000	.	.
Ethnicity	N	1	0.0688	0.0323	0.0055	0.1321	4.54	0.0332
Ethnicity	UN	1	-0.0475	0.0314	-0.1090	0.0140	2.29	0.1298
Ethnicity	H	0	0.0000	0.0000	0.0000	0.0000	.	.
Charlson		1	0.2725	0.0046	0.2635	0.2814	3566.63	<.0001
Anxiety		1	0.2379	0.0125	0.2134	0.2624	360.84	<.0001
Substance ⁴		1	0.6410	0.0262	0.5896	0.6924	597.55	<.0001
Enrollment		1	-0.0000	0.0000	-0.0001	0.0001	0.18	0.6737
Medicaid		1	0.4184	0.0221	0.3750	0.4618	357.15	<.0001

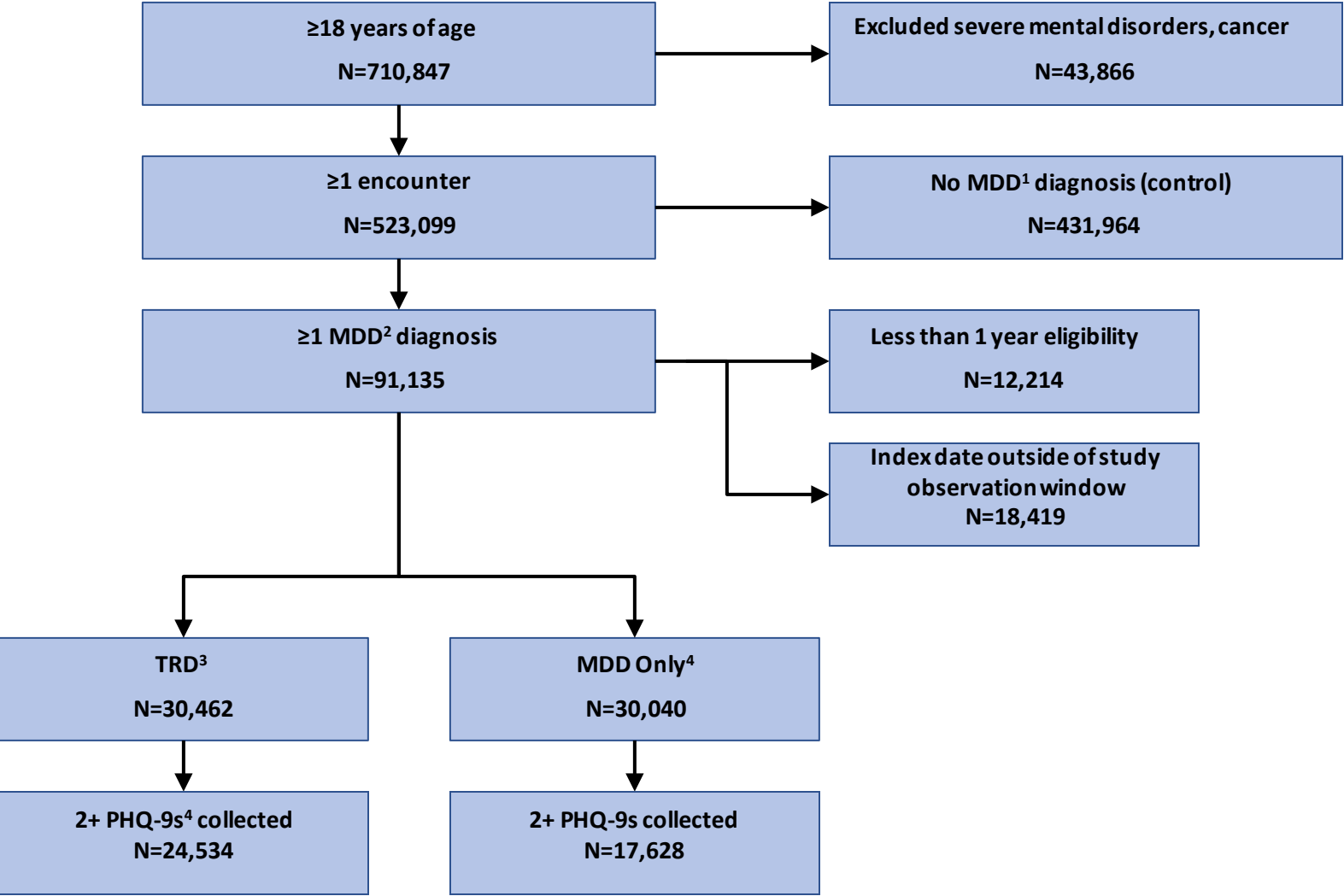
Analysis Of Maximum Likelihood Parameter Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	95% Confidence Limits	Pr > ChiSq
Medicare	1	0.3483	0.0152	527.24	0.3186 0.3780	<.0001
Scale	1	0.8565	0.0051	0.8465	0.8666	

Note: The scale parameter was estimated by maximum likelihood.

1. DF is degrees of freedom; 2. Patient Health Questionnaire 9
3. Race categories are abbreviated as AS, Asian; BA, Black; HP, Hawaiian/Pacific Islander; IN, American Indian/Alaska Native; OT, Other; UN, Unknown; WH, White; N, Non-Hispanic; 4. Substance is substance use disorder.

Supplementary Figure 1. Patient Flow Diagram



1. No MDD is no diagnosis of major depressive disorder in the study period.
2. MDD diagnosis is one or more major depressive diagnosis during the study period. 3. TRD is treatment resistant depression.
4. MDD Only is major depressive disorder, but no TRD.

Supplementary Figure 2. Distribution of Depression Symptom Severity by Diagnostic Group

