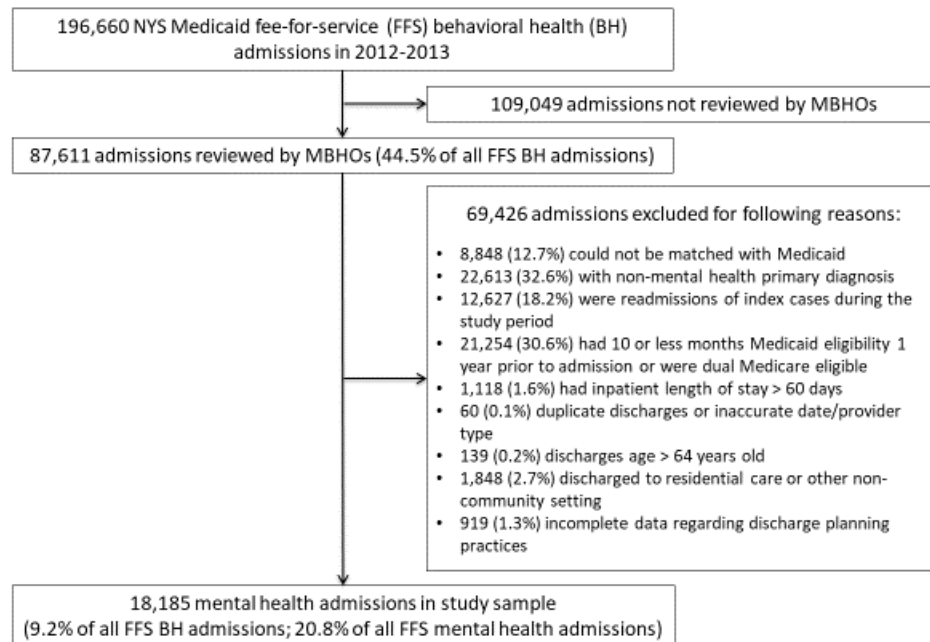**Supplemental data**

Consort diagram depicting creation of study sample.

Inpatient staff scheduled outpatient appointments for 79.8% of discharges (14,503 out of 18,185 cases with complete information), forwarded a discharge summary to an outpatient provider within 1 day of discharge for 72.8% (13,735 out of 18,867 cases), and communicated with outpatient clinicians for 64.9% (12,099 out of 18,653 cases). All three discharge planning practices were completed for 46.3% (8,185 out of 17,668 cases). The findings reveal significant gaps in psychiatric inpatient discharge planning. Approximately 20% to 35% of discharged patients did not receive at least one of these recommended practices and over 50% failed to receive all 3 practices.

The models reported below identify patients at risk of not receiving all three discharge planning practices.

Suplemental Table 1 shows percentages of patients not receiving complete discharge planning stratified by patient characteristics. In the adjusted logistic regression model, patient characteristics associated with not receiving complete discharge planning included having short (≤4 days) or long (31-60 days) inpatient lengths of stay, with a similar tendency for intermediate length of stay (15-30 days, p=.04). Patients with a primary diagnosis of bipolar disorder were less likely to receive complete discharge planning with a similar tendency for patients with depressive disorders (p=.02). Other significant variables included homelessness, co-occurring substance use, high medical co-morbidity (Elixhauser score 4 or greater), and lack of participation in outpatient care in the 12 months prior to admission.

Suplemental Table 2 reports associations between not receiving complete discharge planning and hospital and service system characteristics. In the adjusted logistic regression model, patients treated in medium or large hospitals were more likely to not receive complete discharge planning. Other hospital and service system variables that tended to associate with not receiving complete discharge planning included being treated in hospitals with a higher percentages of psychiatric discharges having Medicaid (p=.03), hospitals

that did not provide outpatient psychiatric services (p=.02), or teaching hospitals (p=.04). Patients reviewed by the MBHOs in New York City area also tended to be more likely to not receive complete discharge planning (Hudson River, p=.03; New York City, p=.04; Long Island, p=.04).

Supplemental Table 1. Patient characteristics and likelihood of not receiving complete discharge planning (all 3 discharge planning practices).

Variable	Total sample (N=17668) N	Did not receive (N=9483) N	%	Unadjusted odds of no appointment scheduled Odds Ratio	99% Confidence Interval	Adjusted odds of no appointment scheduled (N=17328) Odds Ratio	99% Confidence Interval	p-value
Age								
4-12	1,777	871	49.0	ref		ref		
13-17	2,466	1,338	54.3	1.23	(.93 - 1.64)	1.13	(.88 - 1.46)	.20
18-35	5,323	2,827	53.1	1.18	(.79 - 1.76)	1.18	(.8 - 1.75)	.28
36-64	8,102	4,447	54.9	1.27	(.84 - 1.9)	1.24	(.82 - 1.87)	.18
Gender								
Female	8,196	4,311	52.6	ref		ref		
Male	9,472	5,172	54.6	1.08	(.99 - 1.19)	1.03	(.92 - 1.15)	.51
Race/ethnicity								
Non-Hispanic White	7225	3680	50.9	ref		ref		
Non-Hispanic Black	5883	3304	56.1	1.23	(1.01 - 1.51)	0.99	(0.89 - 1.11)	0.848
Puerto Rican - Hispanic	1930	1047	54.2	1.14	(0.92 - 1.42)	0.98	(0.84 - 1.14)	0.679
Other	1375	791	57.5	1.3	(1.03 - 1.66)	1.02	(0.87 - 1.21)	0.738
Unknown	1255	661	52.6	1.07	(0.87 - 1.32)	1	(0.84 - 1.18)	0.961
Length of stay								
5-14 days	9,007	4,676	51.9	ref		ref		
0-4 days	2,608	1,467	56.3	1.19	(.96 - 1.47)	1.35	(1.14 - 1.59)	<.001
15-30 days	4,633	2,550	55.0	1.13	(.94 - 1.37)	1.13	(.97 - 1.31)	.04
31-60 days	1,420	790	55.6	1.16	(.91 - 1.48)	1.24	(1.02 - 1.51)	.004
Homeless at admission								
No	15,674	8,109	51.7	ref		ref		
Yes	1,248	800	64.1	1.67	(1.26 - 2.2)	1.37	(1.1 - 1.71)	.002
Primary diagnosis at discharge								
Schizophrenia disorders	4,897	2,545	51.9	ref		ref		
Schizoaffective disorders	1,763	878	49.8	.92	(0.76 - 1.11)	.92	(.78 - 1.09)	.22
Bipolar disorders	5,778	3,309	57.3	1.24	(1.04 - 1.47)	1.26	(1.08 - 1.47)	.001
Depressive disorders	3,321	1,807	54.4	1.1	(.89 - 1.36)	1.17	(.99 - 1.38)	.02
Other MH disorders	1,909	944	49.5	0.9	(.68 - 1.21)	1.07	(.88 - 1.32)	.37
Co-occurring substance use diagnosis at discharge								
No	11151	5597	50.2	ref		ref		
Yes	6517	3886	59.6	1.47	(1.23 - 1.75)	1.40	(1.25 - 1.56)	<.001
Medical comorbidity in								

previous 12 months (non-behavioral health)								
0	5809	3040	52.3	ref		ref		
1-3	8408	4498	53.5	1.05	(.91 - 1.2)	1.06	(.96 - 1.17)	.10
4 or higher	3274	1837	56.1	1.16	(.96 - 1.42)	1.15	(1 - 1.31)	.009
Prior engagement in psychiatric outpatient services								
Active (past month)	8,855	4,143	46.8	ref		ref		
Recent (past 12 months, but not past month)	3,727	1,957	52.5	1.26	(1.00 - 1.58)	1.19	(.94 - 1.49)	.06
None (none in past 12 months)	5,086	3,383	66.5	2.26	(1.87 - 2.73)	2.26	(1.91 - 2.68)	<.001

Supplemental Table 2. Hospital and System characteristics and likelihood of not receiving complete discharge planning (all 3 discharge planning practices).[1]

Variable (Hospital)	Total sample (N=17668)	Did not receive (N=9483)		Unadjusted odds of no appointment scheduled		Adjusted odds of no appointment scheduled (N=17328)		
	N	N	%	Odds Ratio	99% Confidence Interval	Odds Ratio	99% Confidence Interval	p-value
Number of hospital beds								
Small: less than 100	735	362	49.3	ref		ref		
Medium: 100-499	9,438	4,870	51.6	1.10	(.73 - 1.66)	1.67	(1.13 - 2.48)	.008
Large: 500 or more	7,495	4,251	56.7	1.35	(.82 - 2.22)	2.15	(1.15 - 4.01)	.002
Hospital ownership								
Public	4996	2680	53.64	ref		ref		
Private not-for-profit	10875	5801	53.34	0.99	(0.65 - 1.51)	1.2	(0.73 - 1.97)	0.3556
Private for-profit	1797	1002	55.76	1.09	(0.72 - 1.66)	1.62	(0.82 - 3.19)	0.0675
Psychiatric discharges that were Medicaid, %								
Low: less than 49% (Q1)	3,372	1,893	56.1	ref		ref		
Medium: 49-71%	8,903	4,203	47.2	.70	(.51 - 0.96)	.81	(.62 - 1.06)	.05
High: over 71% (Q3)	5,393	3,387	62.8	1.32	(.87 - 2.01)	1.77	(.91 - 3.43)	.03
Hospital provides outpatient psychiatric services								
No	2,405	1,284	53.4	ref		ref		
Yes	15,263	8,199	53.7	1.01	(.60 - 1.71)	.67	(.43 - 1.05)	.02
Teaching hospital								
No	3,329	1,605	48.2	ref		ref		
Yes	14,339	7,878	54.9	1.31	(.75 - 2.3)	1.46	(.91 - 2.33)	.04
Psychiatric discharges with substance use disorder diagnosis								
Low: less than 34% (Q1)	4035	2193	54.35	ref		ref		
Medium: 34-60%	9948	5488	55.17	1.03	(0.68 - 1.58)	0.85	(0.52 - 1.39)	0.3995
High: over 60% (Q3)	3685	1802	48.90	0.8	(0.51 - 1.28)	0.9	(0.49 - 1.67)	0.6630
Psychiatric population with 2 or more psychiatric discharges								
Low: less than 24.5% (Q1)	3936	1970	50.05	ref		ref		
Medium: 24.5-35%	8503	4612	54.24	1.18	(0.7 - 2)	0.74	(0.37 - 1.48)	0.2591
High: over 35% (Q3)	5229	2901	55.48	1.24	(0.77 - 2.01)	0.6	(0.25 - 1.45)	0.1341
Variable (Hospital)								
Behavioral Health Organization								

Western	2,545	1,051	41.3	ref		ref		
Central	2,534	1,076	42.5	1.05	(.46 - 2.39)	.84	(.36 - 1.97)	.60
Hudson River	4,594	2,703	58.8	2.03	(1.16 - 3.56)	2.13	(.88 - 5.15)	.03
NYC	6,736	3,980	59.1	2.05	(1.12 - 3.77)	1.94	(.86 - 4.38)	.04
Long Island	1,259	673	53.5	1.63	(.92 - 2.88)	1.91	(.87 - 4.22)	.04
County population in poverty								
Low: less than 15%	5549	2975	53.61	ref		ref		
Medium: 15-19%	6715	3532	52.60	0.96	(0.69 - 1.33)	1.22	(0.9 - 1.66)	0.0923
High: 20% or higher	5241	2871	54.78	1.05	(0.75 - 1.47)	0.87	(0.58 - 1.31)	0.3805
Mental health workers per 100k residents								
Low: less than 67 (Q1)	1385	650	46.93	ref		ref		
Medium: 67 to 166	10045	5347	53.23	1.29	(0.86 - 1.92)	0.95	(0.6 - 1.52)	0.7955
High: 167 or more (Q3)	6075	3381	55.65	1.42	(0.95 - 2.13)	0.76	(0.47 - 1.22)	0.1306
Urban/rural classification								
Medium metro	2,128	1,111	52.2	ref		ref		
Large central metro	9,622	5,308	55.2	1.13	(.68 - 1.85)	.61	(.32 - 1.17)	.05
Large fringe metro	2,862	1,615	56.4	1.19	(.73 - 1.92)	.89	(.54 - 1.48)	.55
Small metro	1,051	556	52.9	1.03	(.53 - 2.01)	.94	(.57 - 1.54)	.74
Micropolitan	1,432	592	41.34	.65	(.34 - 1.22)	.85	(.51 - 1.44)	.43
Noncore	410	196	47.8	.84	(.46 - 1.54)	.78	(.42 - 1.43)	.29