

EMPIRICAL DOCUMENTATION TO ACCOMPANY “WHAT DOES WILLINGNESS-TO-PAY REVEAL ABOUT HOSPITAL MARKET POWER IN MERGER CASES?”

In this document, we describe in detail how samples were constructed from the patient discharge data for each of three samples. While the discharge databases contain complete records of all patient discharges from acute care hospitals, sampling is necessary to implement the empirical choice model to satisfy computational constraints. Further, we investigate how the results change when we increase sample size, i.e. include many more patients and hospitals in the model. We find that the model obtains similar results under alternative sampling frames, although the error rates are somewhat higher (up to 9% error rates) as the sample is expanded. Finally, the construction of the sample for the Long Island merger analysis is discussed.

1.1. Sample Construction for the Palm Beach, Florida analysis. Table 1 reports the coverage rates, i.e. the percent of the hospital’s total discharges included in the final sample for 1994, for patients from the 33 zip codes. As an example, there are in total 3493 patients from zip code 33401 receiving service from 55 hospitals. After excluding hospitals with less than 50 patients for 1994, there are 3258 patients remaining, comprising about 93% of all the patients from zip code 33401. In the total sample, we account for 90113 patients, over 92% of total patients. We will call this sample the “n-4 sample” for purposes of comparison below, because it contains essentially the complete patient population in the areas where the four focal hospitals compete, shown in table 2 in boldface red for those with the colorized copy of this document, whereas the coverage rates for the other 16 peripheral hospitals are relatively low. Similar patient choice sets are constructed for the 1997 post-merger data.

We construct choice sets by assuming that all patients in a given zip code face a fixed set of alternative hospitals and we infer that set from the consumption patterns observed in the discharge data. For example, from zip code 33401, about 95% of the patients went to 6 of the 20 hospitals, each of which accepted more than 50 patients. In this manner, we determined that patients from zip code 33401, for example, have 6 alternatives in their choice set. Each patient’s choice set from the 33 zip codes can be defined similarly. Every patient has at least one and at most 4 of the merged hospitals in their choice set. Even with only one, a patient could be affected by the merger since MCO contracts with the merged hospitals are likely to be aggregated over all members and

TABLE 1. Total Number of Patients and Percentage Coverage, by Zip Code, in the n-4 Sample

Zip Code	Total Patients	Patients After Exclusions	Percent Coverage
33401	3493	3258	0.933
33403	1388	1285	0.926
33404	4592	4338	0.945
33405	2380	2206	0.927
33406	2410	2278	0.945
33407	4513	4132	0.916
33408	2072	1920	0.927
33409	2289	2075	0.907
33410	2995	2775	0.927
33411	3837	3570	0.930
33413	597	447	0.749
33414	2495	2289	0.917
33415	4697	4475	0.953
33417	4377	4184	0.956
33418	1902	1726	0.907
33426	1523	1268	0.833
33430	3928	3692	0.940
33435	4695	4383	0.934
33436	3096	2791	0.901
33437	2931	2566	0.875
33440	2397	2074	0.865
33445	3867	3491	0.903
33458	2507	2361	0.942
33460	4051	3828	0.945
33461	4030	3790	0.940
33462	3905	3526	0.903
33463	3697	3493	0.945
33467	3243	2891	0.891
33470	1087	885	0.814
33476	1778	1626	0.915
33480	1642	1427	0.869
33484	4875	4544	0.932
33493	617	519	0.841
Total	97906	90113	0.920

TABLE 2. Total Number of Patients and Percentage Coverage, by hospital, in n-4 Sample for 1994

ID	Hospital Name	City	County	Total N	N in Sample	percent
100002	BETHESDA MEMORIAL	Boynton Beach	Palm Beach	14086	9936	70.54
100010	SAINT MARY'S HOSPITAL	West Palm Beach	Palm Beach	21659	19308	89.15
100012	LEE MEMORIAL HOSPITAL	Fort Myers	Lee	24709	211	0.85
100080	JFK MEDICAL CENTER	Atlantis	Palm Beach	12168	10805	88.80
100098	HENDRY REGIONAL	Clewiston	Hendry	1144	795	69.49
100130	GLADES GENERAL HOSPITAL	Belle Glade	Palm Beach	3186	2954	92.72
100144	EVERGLADES REGIONAL	Pahokee	Palm Beach	2898	2471	85.27
100168	BOCA RATON COMMUNITY	Boca Raton	Palm Beach	15342	1772	11.55
100176	PALM BEACH GARDENS	Palm Beach Gardens	Palm Beach	8589	6067	70.64
100199	POMPANO BEACH MEDICAL	Pompano Beach	Broward	5858	157	2.68
100207	PALM BEACH REGIONAL	Lake Worth	Palm Beach	5132	4738	92.32
100220	SOUTHWEST FLORIDA	Fort Myers	Lee	11510	100	0.87
100234	COLUMBIA HOSPITAL	West Palm Beach	Palm Beach	5131	4382	85.40
100237	NORTH RIDGE MEDICAL	Ft. Lauderdale	Broward	7219	225	3.12
100253	JUPITER MEDICAL CENTER	Jupiter	Palm Beach	5602	2050	36.59
100258	DELRAY MEDICAL CENTER	Delray Beach	Palm Beach	10359	6070	58.60
110006	PALMS WEST HOSPITAL	Loxahatchee	Palm Beach	4945	4302	87.00
110008	WEST BOCA MEDICAL	Boca Raton	Palm Beach	9440	627	6.64
110010	WELLINGTON REGIONAL	Wellington	Palm Beach	3000	2232	74.40
110403	GOOD SAMARITAN HOSPITAL	West Palm Beach	Palm Beach	12445	10852	87.20

networks do not vary access to hospitals by zip code. The number of hospitals in the resulting choice sets range from 3 to 10.

Among the 20 acute care hospitals, 15 are in Palm Beach County, 2 in the adjacent Broward, 2 in Lee County, 1 in the adjacent Henry County.

The 15 included hospitals in Palm Beach County constitute all acute-care hospitals in the county. Of the 90113 total patients, over 98% of them (88566) went to one of the 16 hospitals in Palm Beach County. Hospital ownership and service provision are listed in table 3.

TABLE 3. Hospital Control Type and Services Offered in the Florida Sample

Hospital Name	Control	mri	cardio	nerv	resp	labor	psych	transplant
BETHESDA MEMORIAL HOSPITAL	NFP	1	1	1	1	1	1	0
SAINT MARY'S HOSPITAL	NFP	1	1	1	1	1	1	0
LEE MEMORIAL HOSPITAL	NFP	1	1	1	1	1	0	0
JFK MEDICAL CENTER	NFP	0	1	1	1	0	1	0
HENDRY REGIONAL MEDICAL CENTER	Gov	0	0	0	1	0	0	0
GLADES GENERAL HOSPITAL	Gov	0	0	0	1	1	0	0
EVERGLADES REGIONAL MEDICAL CENTER	NFP	0	1	0	1	1	0	0
BOCA RATON COMMUNITY HOSPITAL	NFP	0	1	0	1	1	0	0
PALM BEACH GARDENS MEDICAL CENTER	FP	1	1	1	1	1	0	0
POMPANO BEACH MEDICAL CENTER	FP	0	1	1	1	0	0	0
PALM BEACH REGIONAL HOSPITAL	FP	1	1	1	1	1	0	0
SOUTHWEST FLORIDA REGIONAL	FP	1	1	1	1	0	0	1
COLUMBIA HOSPITAL	FP	0	0	1	1	0	1	0
NORTH RIDGE MEDICAL CENTER	FP	1	1	1	1	0	0	0
JUPITER MEDICAL CENTER	NFP	1	0	0	1	0	0	0
DELRAY MEDICAL CENTER	FP	0	1	1	1	0	0	0
PALMS WEST HOSPITAL	FP	0	0	1	1	1	0	0
WEST BOCA MEDICAL CENTER	FP	0	0	0	1	1	0	0
WELLINGTON REGIONAL MEDICAL CENTER	FP	1	0	1	1	1	0	0
GOOD SAMARITAN HOSPITAL	NFP	1	1	1	1	1	0	0

Note: Control indicates Not-for-Profit (NFP), Government (Gov) or for-profit (FP) ownership. The columns indicate whether the hospital offers services or specializes in magnetic resonance imaging (mri), cardiac care (cardio), diseases of nervous system (nerv), respiratory (resp) , labor and delivery (labor), psychiatric care (psych) and organ transplant services (transplant).

1.2. **The Expanded sample to test for robustness.** A question to be addressed here is the sensitivity of the model’s predictions to changes in the sampling design. We explore this issue with an expanded sample, the “n-20 Sample”. This sample enlarges the coverage of patient discharges (see table 4) to give a comprehensive set of discharges for the merged hospitals as well as the 16 other hospitals who are competing with them.

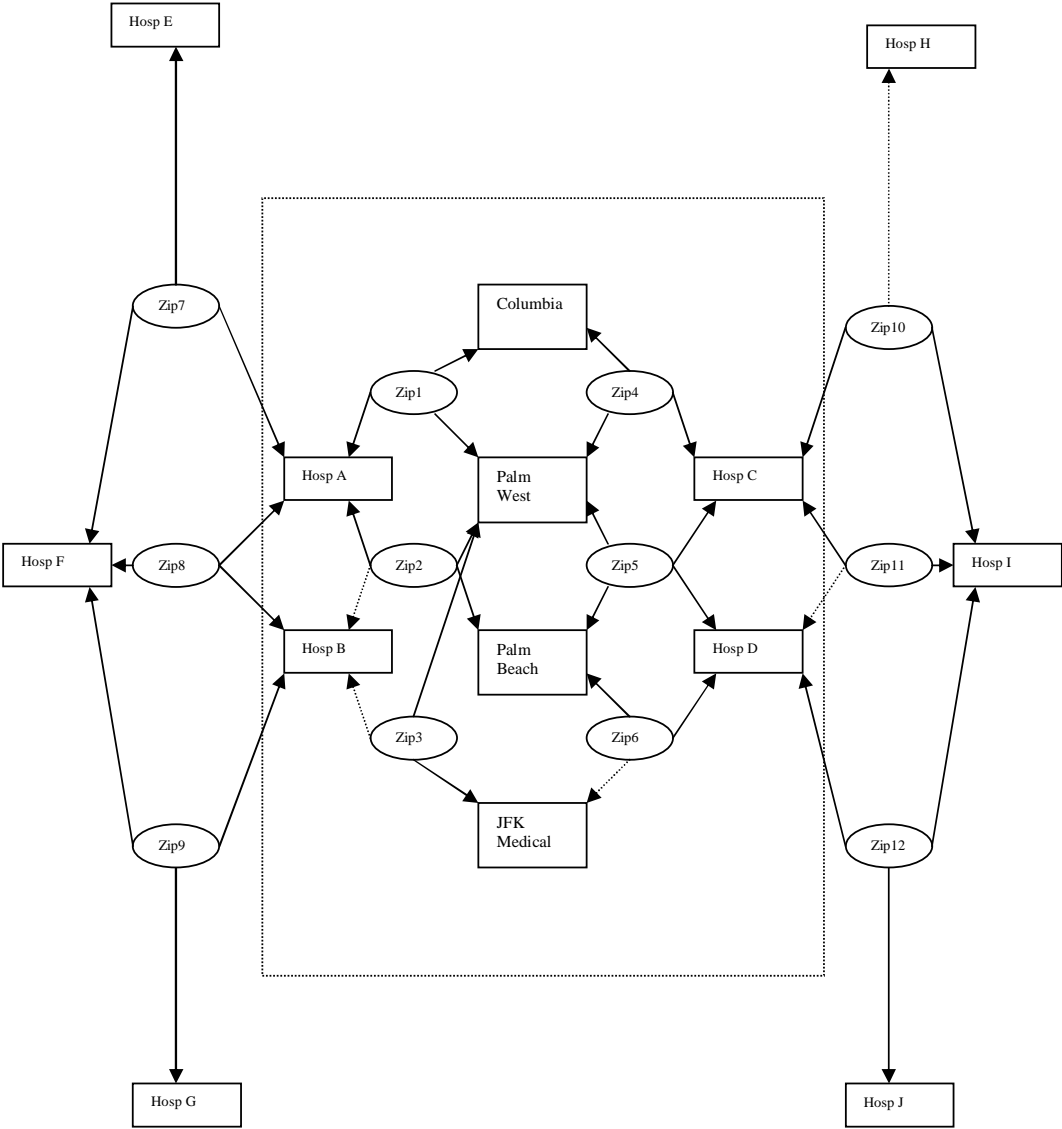


FIGURE 1. hospital market area for the n-20 sample

The expanded sample, illustrated in figure 1.2, contains within it the “n-4” sample (shown in the box) but also includes a broader choice set that captures essentially all the patients and zip codes that are relevant to the 16 peripheral hospitals. In this “n-20 Sample”, there are 81 additional hospitals that have to be included to construct complete choice sets for the additional zip codes.

Note, finally that for 1997 there are only 3 merged hospitals remaining (one having been closed) and 15 peripheral hospitals.

TABLE 4. Percentage Coverage in n-20 Sample in Florida for 1994

Hosp ID	Hospital Name	Total Number of Patients	Number of Patients in Sample	Coverage Rate(%)
100002	BETHESDA MEMORIAL	14086	13165	93.46
100010	SAINT MARY'S HOSPITAL	21659	20244	93.47
100012	LEE MEMORIAL HOSPITAL	24709	22493	91.03
100080	JFK MEDICAL CENTER	12168	10805	88.80
100098	HENDRY REGIONAL	1144	1001	87.50
100130	GLADES GENERAL HOSPITAL	3186	3040	95.42
100144	EVERGLADES REGIONAL	2898	2719	93.82
100168	BOCA RATON COMMUNITY	15342	13379	87.21
100176	PALM BEACH GARDENS	8589	7517	87.52
100199	POMPANO BEACH MEDICAL	5858	5256	89.72
100207	PALM BEACH REGIONAL	5132	4738	92.32
100220	SOUTHWEST FLORIDA	11510	10231	88.89
100234	COLUMBIA HOSPITAL	5131	4382	85.40
100237	NORTH RIDGE MEDICAL	7219	6147	85.15
100253	JUPITER MEDICAL CENTER	5602	4590	81.94
100258	DELRAY MEDICAL CENTER	10359	9521	91.91
110006	PALMS WEST HOSPITAL	4945	4302	87.00
110008	WEST BOCA MEDICAL	9440	8463	89.65
110010	WELLINGTON REGIONAL	3000	2232	74.40
110403	GOOD SAMARITAN HOSPITAL	12445	11131	89.44

Note that the patient choice sets in the earlier “n-4” sample (those patients and hospitals in the box) remain identical in the “n-20” sample because that is determined uniquely for each zip code, and the zip codes relevant to the 4 merging hospitals has the same set of hospitals in both samples.

1.3. Bootstrap Predictions Based on the “n-20 Sample”. In the paper, we presented bootstrap results for predictions of the model based on the “n-4” sample. To examine the robustness of these results, a further set of predictions from a new set of conditional logit models was estimated on 100 pseudo-samples based upon the “n-20” sample.

Recall that the analysis of the “n-4 sample” focused on four hospitals that were subject to merger. As shown in table 2, the sample covers over 85% of discharges from the four hospitals. But for the other 16 hospital the coverage rate is relatively low. In the “n-20” sample we are able to assess the aggregate WTP for all of the 20 hospitals, instead of only the limited ones who were merging because the “n-20” sample covers a large percent of patients for all 20 hospitals (see table 4).

Table 6 compares the estimation results of the logit model using n-4 and n-20 sample. The results from the expanded sample in table 5 yield somewhat less precise forecasts than the 3.9% average error rate obtained from the predictions using the “n-4” sample. Looking at the

pre-merger prediction of the WTP relative to the actual post-merger WTP from 1997, the mean error of the model based on the 1994 data is 4.79%. In general, the larger “n-20” sample provides some additional statistical efficiency in the coefficient estimates of the model, but would produce more volatile estimates of the effects if the hospital service profiles are quite different and patient preferences over hospital attributes varies as the breadth of the market grows. For example, with the “n-20” sample there are 81 hospitals instead of only 20 in the “n-4” sample. Thus, if the marginal value of hospital service is lower in the expanded sample, that would affect the conditional logit estimates and may result in a higher prediction error.

TABLE 5. Effects on WTP of the Florida Merger Case in “n-20” Sample

	Premerger			Postmerger		
	WTP merged 1994 data	WTP separate 1994 data	predicted change, %	WTP merged 1997 data	97-94 chg, %	prediction error, %
1	28435.45	23479.04	21.11	27348.49	16.48	3.82
2	28867.88	23782.73	21.38	27207.71	14.40	5.75
3	28661.27	23658.04	21.15	27385.88	15.76	4.45
4	28776.14	23710.39	21.37	27351.76	15.36	4.95
5	28763.86	23689.19	21.42	27193.94	14.79	5.46
6	28666.50	23628.82	21.32	27282.49	15.46	4.83
7	28869.29	23827.92	21.16	27396.10	14.97	5.10
8	28562.88	23536.49	21.36	27714.79	17.75	2.97
9	28887.95	23770.25	21.53	27508.51	15.73	4.78
10	28893.63	23792.02	21.44	27122.01	14.00	6.13
-	-	-	-	-	-	-
100	28921.92	23817.20	21.43	27511.65	15.51	4.88
Mean, all 100	28714.37	23671.30	21.30	27336.97	15.49	4.79
St. Dev	230.24	166.23	0.16	179.69	1.09	0.97

1.4. **Sample Construction for the Long Island case.** We proceed with the analysis of the Long Island case, using a sampling method similar to the one employed for the Florida case described in section 1.1. Starting with the two hospitals under study: Long Island and North Shore, we find all the zip codes where these hospitals’ patients reside. We then include all the other hospitals used by patients from these zip codes.

In selecting patient zip codes from the two merged hospitals, we still require the presence of at least 50 patients for a zip code to be included. Due to higher patient volume in New York than in the Florida case¹, we have 151 zip codes for New York pre-merger compared to only 33 zip codes in Florida. To identify the set of other hospitals that are relevant to patients from these 151 zip codes, we included all hospitals that serve at least 2% of patients from the 151 zip codes. The final data have 59 general short-term acute care hospitals, with 471,980 admissions. Patients in the sample have a maximum of 15 hospitals in their choice sets. Each zip code has on average 80% coverage

¹In 1996, the two merged hospitals had 77,835 admissions compared to the total 27,376 admissions of the four merged hospitals in Florida in 1994.

TABLE 6. Estimation Results from “n-4” Sample and “n-20” Sample.

Variable	n-4 Sample:		n-20 Sample:		Variable	n-4 Sample:		n-20 Sample:	
	Coeff.	Std. Err.	Coeff.	Std. Err.		Coeff.	Std. Err.	Coeff.	Std. Err.
fp	-1.094 ^{††}	0.058	-0.415 ^{††}	0.029	h_labor	-0.304 ^{††}	0.017	-0.082 ^{††}	0.006
fpmale	0.173 ^{††}	0.018	0.079 ^{††}	0.010	h_lablabor	6.608 ^{††}	0.379	5.753 ^{††}	0.126
fpwhite	0.225 ^{††}	0.032	0.028	0.017	h_mri	-0.306 ^{††}	0.019	-0.024 ^{††}	0.007
fpelderly	0.315 ^{††}	0.045	0.238 ^{††}	0.023	h_mrriimage	0.466 ^{††}	0.065	-0.134 ^{††}	0.034
fpchild	-0.061	0.053	0.215 ^{††}	0.028	h_psych	0.335 ^{††}	0.018	-0.199 ^{††}	0.007
fpage	0.016 ^{††}	0.001	0.013 ^{††}	0.001	h_psypsych	3.402 ^{††}	0.105	3.242 ^{††}	0.054
fpincome1994	0.004 ^{††}	0.001	-0.018 ^{††}	0.001	time	-0.068 ^{††}	0.005	-0.034 ^{††}	0.003
fpstay	0.000	0.002	0.010 ^{††}	0.001	tfp	-0.003 [‡]	0.001	0.008 ^{††}	0.001
fpndx	-0.083 ^{††}	0.004	-0.151 ^{††}	0.002	tnurse_int93	0.906 ^{††}	0.037	0.88 ^{††}	0.018
fpnp	0.013 [‡]	0.007	0.018 ^{††}	0.004	tcap_int93	0.044 ^{††}	0.002	0.034 ^{††}	0.001
fpchrlson	-0.070 ^{††}	0.006	-0.013 ^{††}	0.003	tmale	0.000	0.001	0.005 ^{††}	0.001
nurse_int93	-15.829 ^{††}	1.764	-21.543 ^{††}	1.190	twhite	-0.007 ^{††}	0.002	0.007 ^{††}	0.001
nursemale	-1.288 [‡]	0.593	-0.161	0.426	telderly	-0.013 ^{††}	0.003	0.01 ^{††}	0.001
nursewhite	3.062 ^{††}	0.982	-1.623 [‡]	0.672	tchild	-0.028 ^{††}	0.003	-0.040 ^{††}	0.002
nurseelderly	-3.155 [‡]	1.416	1.467	1.010	tage	-0.002 ^{††}	0.000	-0.002 ^{††}	0.000
nursechild	-3.385 [‡]	1.530	-9.428 ^{††}	1.126	tincome1994	-0.001 ^{††}	0.000	-0.003 ^{††}	0.000
nurseage	-0.300 ^{††}	0.034	-0.299 ^{††}	0.025	tlstay	0.000 [‡]	0.000	0.000 ^{††}	0.000
nursein 1994	0.382 ^{††}	0.049	0.479 ^{††}	0.029	tndx	0.000	0.000	-0.003 ^{††}	0.000
nurselstay	-0.494 ^{††}	0.065	-0.938 ^{††}	0.045	tnpx	0.007 ^{††}	0.000	0.012 ^{††}	0.000
nursendx	2.783 ^{††}	0.131	1.096 ^{††}	0.096	txchrlson	0.005 ^{††}	0.000	0.003 ^{††}	0.000
nursenpx	-0.311	0.214	0.920 ^{††}	0.161	tcario	-0.017 ^{††}	0.003	-0.009 ^{††}	0.002
nursexchrl n	0.353 [†]	0.193	0.320 [‡]	0.142	tlabor	-0.016 ^{††}	0.003	-0.026 ^{††}	0.002
cap_int93	-0.633 ^{††}	0.114	-0.965 ^{††}	0.061	tresp	-0.02 ^{††}	0.003	-0.033 ^{††}	0.002
capmale	0.007	0.039	-0.122 ^{††}	0.021	tdigest	-0.019 ^{††}	0.003	-0.036 ^{††}	0.002
capwhite	-0.481 ^{††}	0.060	-0.002	0.035	tmuscl	0.005	0.003	-0.003 [†]	0.002
capelderly	-0.302 ^{††}	0.089	-0.292 ^{††}	0.049	tnerv	-0.019 ^{††}	0.004	-0.028 ^{††}	0.002
capchild	-0.028	0.098	-0.010	0.056	turinary	-0.006	0.004	-0.023 ^{††}	0.002
capage	0.017 ^{††}	0.002	0.004 ^{††}	0.001	tgenital	0.012 ^{††}	0.004	-0.010 ^{††}	0.002
capinco 1994	0.001	0.003	0.005 ^{††}	0.002	tpsych	0.021 ^{††}	0.006	-0.007 [‡]	0.003
caplstay	-0.013 ^{††}	0.004	-0.005 [‡]	0.002	tliver	-0.022 ^{††}	0.004	-0.035 ^{††}	0.002
capndx	-0.003	0.009	-0.028 ^{††}	0.005	tendor	-0.013 ^{††}	0.004	-0.021 ^{††}	0.002
capnp	-0.287 ^{††}	0.015	-0.193 ^{††}	0.008	tinfection	-0.01 [‡]	0.004	-0.027 ^{††}	0.003
capxchrlson	0.090 ^{††}	0.013	0.066 ^{††}	0.007	tinteg	-0.009 [†]	0.005	-0.022 ^{††}	0.003
h_transplant	2.163 ^{††}	0.121	0.232 ^{††}	0.015	tmyelop	0.017 ^{††}	0.005	0.009 ^{††}	0.003
h_nerv	-0.525 ^{††}	0.026	-0.263 ^{††}	0.009	tinjury	-0.008	0.005	-0.036 ^{††}	0.004
h_nervnerv	0.081	0.063	0.134 ^{††}	0.027	tent	-0.002	0.005	-0.022 ^{††}	0.003
h_cardio	0.508 ^{††}	0.028	0.317 ^{††}	0.009	timage	0.004	0.003	-0.009 ^{††}	0.002
h_carcario	0.337 ^{††}	0.030	0.291 ^{††}	0.016					

Number of obs	473466	1846668
LR chi2(75)	60454.42	222586.4
Prob > chi2	0.000	0
Pseudo R2	0.240	0.2426
Log likelihood	-95648.548	-347428.7

^{††} p-value .01 or less; [‡] p-value .05 or less and [†] p-value .1 or less

rate. The data include 91% and 92% of discharges from Long Island and North Shore hospitals respectively. The sample descriptive statistics for the sample are reported in table 7. Finally, each hospital’s ownership and range of services they provide are listed in table 8.

TABLE 7. Patient Sample Statistics in the New York Merger Case in 1996 and 1999

Variable	Premerger 1996				Postmerger 1999			
	Mean	Std. Dev.	Min	Max	Mean	Std. Dev.	Min	Max
nfp	0.818	0.386	0	1	0.872	0.334	0	1
fp	0.115	0.319	0	1	0.059	0.236	0	1
teaching	0.453	0.498	0	1	0.480	0.500	0	1
nurse_int	0.004	0.001	0.002	0.006	0.004	0.001	0.001	0.008
cap_int	627.655	347.059	142.042	1992.460	826.796	439.287	175.734	2591.921
h_transplant	0.261	0.439	0	1	0.174	0.379	0	1
h_resp	0.988	0.107	0	1	0.970	0.170	0	1
h_cardio	0.614	0.487	0	1	0.627	0.484	0	1
h_labor	0.899	0.301	0	1	0.911	0.284	0	1
h_mri	0.876	0.330	0	1	0.908	0.289	0	1
h_psych	0.787	0.409	0	1	0.805	0.396	0	1
admission	1.842	1.076	1	4	1.780	1.070	1	4
male	0.406	0.491	0	1	0.408	0.491	0	1
white	0.711	0.453	0	1	0.693	0.461	0	1
age	52.461	28.170	0	114	53.103	28.541	0	109
elderly	0.505	0.500	0	1	0.511	0.500	0	1
child	0.147	0.354	0	1	0.150	0.357	0	1
income	25.989	10.503	0	102.562	26.029	10.447	0	102.562
lstay	7.098	11.240	0	835	6.396	9.443	0	354
ndx	3.465	3.044	0	16	3.568	3.113	0	16
npx	1.151	1.926	0	14	1.097	1.862	0	14
xchrlson	2.471	2.349	0	15	2.491	2.312	0	15
cardio	0.197	0.398	0	1	0.204	0.403	0	1
labor	0.211	0.408	0	1	0.207	0.405	0	1
resp	0.100	0.300	0	1	0.106	0.307	0	1
digest	0.090	0.286	0	1	0.091	0.288	0	1
muscl	0.056	0.231	0	1	0.053	0.225	0	1
nerv	0.061	0.239	0	1	0.061	0.240	0	1
urinary	0.039	0.195	0	1	0.039	0.194	0	1
genital	0.035	0.184	0	1	0.033	0.178	0	1
psych	0.026	0.159	0	1	0.026	0.158	0	1
liver	0.031	0.174	0	1	0.028	0.165	0	1
endor	0.030	0.171	0	1	0.035	0.184	0	1
infection	0.021	0.143	0	1	0.023	0.150	0	1
integ	0.025	0.156	0	1	0.024	0.153	0	1
myelop	0.020	0.141	0	1	0.013	0.113	0	1
injury	0.009	0.096	0	1	0.009	0.096	0	1
ent	0.012	0.108	0	1	0.012	0.110	0	1
image	0.021	0.142	0	1	0.030	0.171	0	1
other	0.004	0.062	0	1	0.003	0.052	0	1
time	12.809	8.476	0	48	13.137	8.844	0	54
distance	6.243	5.408	0	39.170	6.477	5.674	0	40.180
medicare	0.434	0.496	0	1	0.403	0.491	0	1
medcarhm	0.024	0.152	0	1	0.046	0.209	0	1
commins	0.168	0.374	0	1	0.139	0.346	0	1
commhmo	0.241	0.428	0	1	0.233	0.423	0	1
commppo	0.133	0.340	0	1	0.178	0.383	0	1
N. of Obs.	297566				321227			

Note: variables are defined in table 1 of the main paper.

TABLE 8. Hospital Characteristics in the New York Case

Hospital Name	Control	mri	cardio	nerv	resp	labor	psych	transplant
Brunswick General Hospital	FP	1	0	0	1	0	0	0
Southside Hospital	NFP	1	1	1	1	1	1	0
Mid-Island Hospital	FP	0	0	0	1	1	0	0
Brookdale Hospital	NFP	1	1	1	1	1	1	0
Brooklyn Hospital Center	NFP	1	1	1	1	1	0	1
New York Methodist Hospital	NFP	1	1	1	1	1	1	0
Coney Island Hospital	Gov	1	1	1	1	1	1	0
Catholic Medical Center	NFP	1	0	1	1	1	1	0
Interfaith Medical Center	NFP	1	1	1	1	1	1	0
Kingsbrook Jewish Medical Center	NFP	1	0	0	1	0	1	0
Kings County Hospital Center	Gov	1	0	1	1	1	1	0
Kings Highway Hospital Center	FP	1	0	0	1	0	0	0
Long Island College Hospital	NFP	1	1	1	1	1	1	0
New York Comm Hospital	NFP	0	0	0	0	0	0	0
Maimonides Medical Center	NFP	1	1	1	1	1	1	0
University Hospital of Brooklyn-SUNY	Gov	1	1	1	1	1	1	1
Victory Memorial Hospital	NFP	0	0	1	1	1	0	0
Woodhull Medical & Mental Center	Gov	0	0	1	1	1	1	0
Wyckoff Heights Medical Center	NFP	1	0	1	1	1	0	0
St John's Episcopal Hospital	NFP	1	0	1	1	1	1	0
New York Hospital Medical Center	NFP	1	1	1	1	1	1	0
Flushing Hospital Medical Center	NFP	1	0	1	1	1	0	0
North Shore University Flushing	NFP	1	0	1	1	1	0	0
Parkway Hospital	FP	1	0	0	1	0	0	0
North Shore University Glen Cove	NFP	1	0	1	1	1	1	0
Long Island Jewish Medical Center	NFP	1	1	1	1	1	1	1
Hempstead Gen Hospital	FP	0	0	0	0	0	1	0
Nassau County Medical Center	Gov	1	1	1	1	1	1	0
Huntington Hospital	NFP	1	0	1	1	1	1	0
Jamaica Hospital Center	NFP	1	1	1	1	1	1	0
Queens Hospital Center	Gov	1	0	1	1	1	1	0
Long Beach Medical Center	NFP	1	0	0	1	0	1	0
Western Queens Comm Hospital	FP	0	0	1	1	0	0	0
North Shore University Hospital Manhasset	NFP	1	1	1	1	1	1	1
Winthrop-University Hospital	NFP	1	1	1	1	1	1	0
Bellevue Hospital Center	Gov	1	1	1	1	1	1	0
Beth Israel Medical Center	NFP	1	1	1	1	1	1	0
Cabrini Medical Center	NFP	1	0	1	1	0	1	0
New York University Medical Center	NFP	1	1	1	1	1	1	1
Lenox Hill Hospital	NFP	1	1	1	1	1	1	0
Metropolitan Hospital Center	Gov	1	0	1	1	1	1	0
Mount Sinai Medical Center	NFP	1	1	1	1	1	1	1
Elmhurst Hospital Center	Gov	1	1	1	1	1	1	0
Presby Hospital	NFP	1	1	1	1	1	1	1
Saint Vincent's Hospital	NFP	1	1	1	1	1	1	1
Society of the New York Hospital	NFP	1	1	1	1	1	1	1
South Nassau Comms Hospital	NFP	1	1	1	1	1	1	0
Brookhaven Mem Hospital Medical Center	NFP	0	0	1	1	1	1	0
North Shore University Plainview	FP	0	0	1	1	1	1	0
John T Mather Mem Hospital	NFP	1	0	1	1	0	1	0
St Charles Hospital & Rehab Center	NFP	0	0	1	0	1	0	0
Peninsula Hospital Center	NFP	1	0	0	1	0	0	0
Mercy Medical Center	NFP	1	0	1	1	1	1	0
Massapequa General Hospital	FP	0	0	0	1	0	0	0
St John's Episcopal Hospital	NFP	0	1	1	1	1	1	0
University Hospital	Gov	1	1	1	1	1	1	1
North Shore University Syosset	NFP	1	0	0	1	1	1	0
Franklin Hospital Medical Center	NFP	0	0	1	1	1	1	0
Good Samaritan Hospital Medical Center	NFP	1	1	1	1	1	0	0

Note: Control indicates Not-for-Profit (NFP), Government (Gov) or for-profit (FP) ownership. The columns indicate whether the hospital offers services or specializes in magnetic resonance imaging (mri), cardiac care (cardio), diseases of nervous system (nerv), respiratory (resp), labor and delivery (labor), psychiatric care (psych) and organ transplant services (transplant).