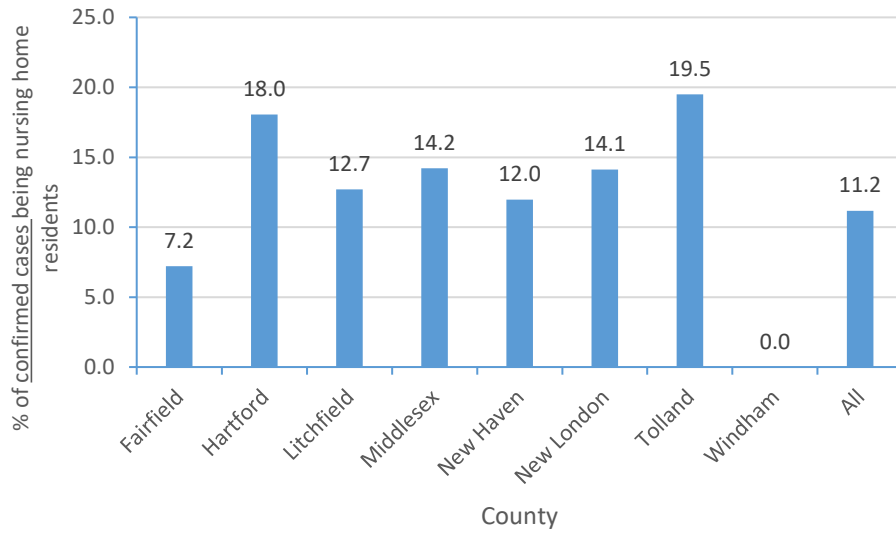
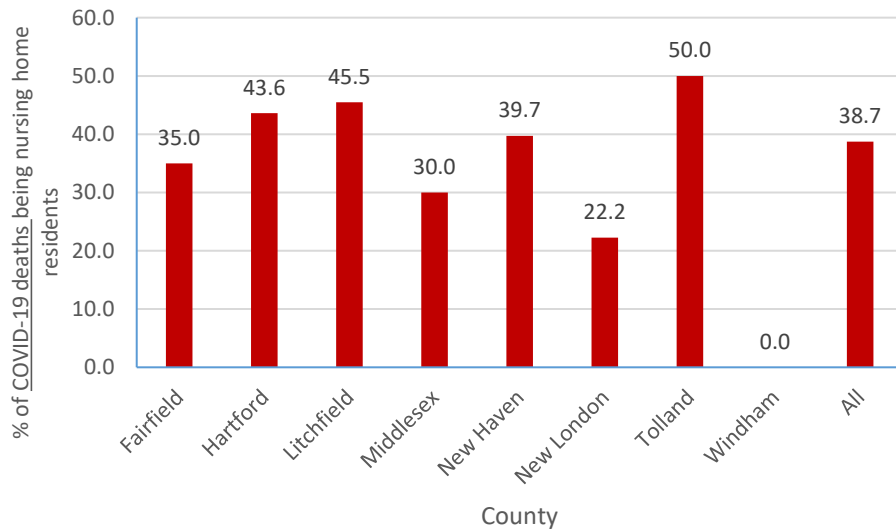


Supplements

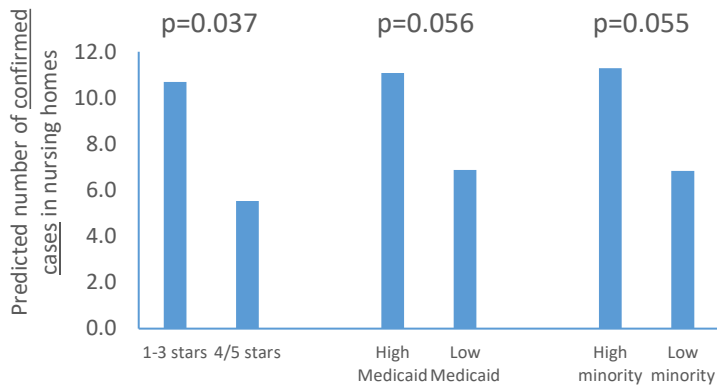


(A)

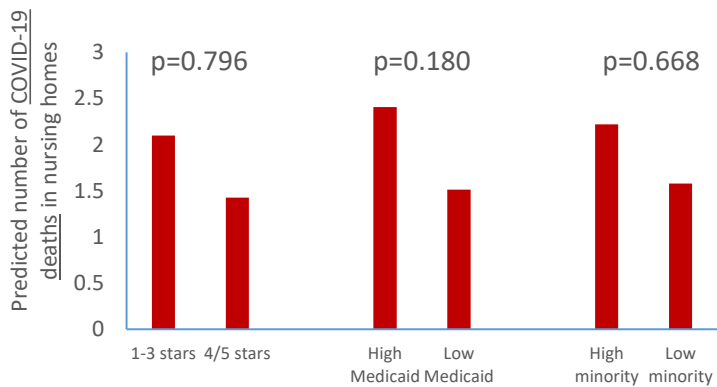


(B)

Supplementary Figure S1. Proportions of COVID-19 confirmed cases (A) and deaths (B) who were nursing home residents by county of Connecticut, as of April 16, 2020.



(A)



(B)

Supplementary Figure S2. Predicted numbers of COVID-19 confirmed cases (A) and deaths (B) among Connecticut nursing home residents (as of April 16, 2020) versus nursing home 5-star ratings, high vs. low concentration of Medicaid residents, and high vs. low racial and ethnic minority residents in the nursing home (p-values are for the independent associations of nursing home categories with predicted counts that were derived from the joint tests of the two-part regression models).

Full model results

Variable labels:

reported_rn_staffing_hours_per_r:	RN staffing hrs/resident day
rating4plus:	star ratings 4 or 5 (1/0)
nh_mcaid_top_quartile:	%Medicaid residents, top quartile group (1/0)
nh_minority_top_quartile:	%minority residents, top quartile group (1/0)
number_of_certified_beds:	# certified beds
average_number_of_residents_per:	average daily resident census
nfp_gov:	non-profit or government-owned (vs for-profit)
chain:	chain affiliation (1/0)
avg_casemix:	case mix index
pctmcare_10:	percentage of Medicare residents x 10
reported_total_nurse_staffing_ho:	total nurse staffing hrs/resident day
comm_cases_total_10:	county COVID-19 cases not in nursing homes x 10
comm_deaths_total_10:	county COVID-19 deaths not in nursing homes x 10
pop_est_100k:	county pop size x 100k

nh_covid_cases	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
logit						
reported_rn_staffing_hours_per_r	-.6433052	1.050644	-0.61	0.540	-2.70253	1.41592
rating4plus	-.293662	.3613267	-0.81	0.416	-1.001849	.4145254
nh_mcaid_top_quartile	.4055116	.4660623	0.87	0.384	-.5079537	1.318977
nh_minority_top_quartile	-.0311767	.424506	-0.07	0.941	-.8631932	.8008398
number_of_certified_beds	-.0028316	.009437	-0.30	0.764	-.0213277	.0156645
average_number_of_residents_per	.0174743	.0108425	1.61	0.107	-.0037766	.0387251
nfp_gov	-.1069181	.5423517	-0.20	0.844	-1.169908	.9560717
chain	.3461901	.3717899	0.93	0.352	-.3825046	1.074885
avg_casemix	3.75081	1.929801	1.94	0.052	-.0315305	7.533151
pctmcare_10	.1135988	.1855456	0.61	0.540	-.2500638	.4772614
reported_total_nurse_staffing_ho	-.624952	.4974027	-1.26	0.209	-1.599843	.3499395
comm_cases_total_10	.002774	.0014759	1.88	0.060	-.0001188	.0056667
pop_est_100k	.0904221	.0856561	1.06	0.291	-.0774609	.258305
_cons	-4.518218	2.27337	-1.99	0.047	-8.973941	-.0624952
glm						
reported_rn_staffing_hours_per_r	-.7529878	.2082693	-3.62	0.000	-1.161188	-.3447874
rating4plus	-.1393702	.0572042	-2.44	0.015	-.2514884	-.027252
nh_mcaid_top_quartile	.1466566	.0655987	2.24	0.025	.0180855	.2752278
nh_minority_top_quartile	.1408507	.0585785	2.40	0.016	.0260389	.2556626
number_of_certified_beds	-.003245	.0011969	-2.71	0.007	-.0055909	-.000899
average_number_of_residents_per	-.0004274	.0014578	-0.29	0.769	-.0032847	.0024298
nfp_gov	.3083876	.1058403	2.91	0.004	.1009444	.5158307
chain	-.064385	.0584186	-1.10	0.270	-.1788834	.0501134
avg_casemix	.5161261	.2925996	1.76	0.078	-.0573586	1.089611
pctmcare_10	.1557923	.0403121	3.86	0.000	.0767821	.2348026
reported_total_nurse_staffing_ho	-.0044477	.085077	-0.05	0.958	-.1711955	.1623
comm_cases_total_10	.0002907	.0001747	1.66	0.096	-.0000517	.0006332
pop_est_100k	.0134351	.014602	0.92	0.358	-.0151842	.0420544
_cons	-2.075015	.4001062	-5.19	0.000	-2.859208	-1.290821

nh_covid_deaths	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
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logit						
reported_rn_staffing_hours_per_r	-1.423774	1.182367	-1.20	0.229	-3.741171	.8936231
rating4plus	.2530681	.3814418	0.66	0.507	-.4945441	1.00068
nh_mcaid_top_quartile	.8057787	.4746591	1.70	0.090	-.124536	1.736093
nh_minority_top_quartile	.0734953	.4356377	0.17	0.866	-.7803389	.9273295
number_of_certified_beds	-.0080992	.0092643	-0.87	0.382	-.0262569	.0100584
average_number_of_residents_per	.0211993	.0107667	1.97	0.049	.0000971	.0423016
nfp_gov	.1283144	.5830474	0.22	0.826	-1.014437	1.271066
chain	.3918125	.3861173	1.01	0.310	-.3649635	1.148588
avg_casemix	5.685781	2.005077	2.84	0.005	1.755902	9.61566
pctmcare_10	.1005642	.2028184	0.50	0.620	-.2969525	.4980809
reported_total_nurse_staffing_ho	-.6649975	.5318093	-1.25	0.211	-1.707325	.3773296
comm_deaths_total_10	.145353	.0480596	3.02	0.002	.0511578	.2395481
pop_est_100k	-.0638086	.1044959	-0.61	0.541	-.2686167	.1409996
_cons	-6.487615	2.509043	-2.59	0.010	-11.40525	-1.56998

glm						
reported_rn_staffing_hours_per_r	-.9024963	.4538606	-1.99	0.047	-1.792047	-.012946
rating4plus	-.0156362	.1221566	-0.13	0.898	-.2550587	.2237863
nh_mcaid_top_quartile	-.0987246	.1332857	-0.74	0.459	-.3599599	.1625106
nh_minority_top_quartile	-.1116143	.1264321	-0.88	0.377	-.3594167	.136188
number_of_certified_beds	-.0060104	.0027475	-2.19	0.029	-.0113953	-.0006254
average_number_of_residents_per	.0006039	.003232	0.19	0.852	-.0057308	.0069385
nfp_gov	.0250506	.222454	0.11	0.910	-.4109513	.4610525
chain	-.1554552	.1206523	-1.29	0.198	-.3919293	.0810189
avg_casemix	-.3450726	.67728	-0.51	0.610	-1.672517	.9823718
pctmcare_10	.0044022	.093378	0.05	0.962	-.1786154	.1874197
reported_total_nurse_staffing_ho	.0129189	.1837605	0.07	0.944	-.347245	.3730829
comm_deaths_total_10	.0308572	.0115761	2.67	0.008	.0081686	.0535459
pop_est_100k	-.0054328	.0351216	-0.15	0.877	-.0742699	.0634043
_cons	-1.881635	.8824347	-2.13	0.033	-3.611175	-.1520948
