The impact of post-hospital monitoring of COVID-19 patients using pulse oximetry: a national observational study using hospital activity data.

Supplementary material

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Figure S1. Length of stay distribution for included Covid-19 spells, split by whether CVW was available or not; proportion (a) and cumulative proportions (b) of each group. Of the discharges where no CVW was available 0.79% had LOS > 60 days. For discharges with CVW available 0.92% had LOS > 60 days. All such discharges were set to 60 days in our models.



Table S1. Sensitivity analyses: variants of analytical models. Adjusted Incidence Rate Ratios (IRR) for LOS of COVID-19 spell, and adjusted Odds Ratios (OR) of COVID-19 readmissions within 28 days: discharges with CVW available, vs not available.

	Leng	th of stay of (COVID-19 spell IRR 95% confidence interval		Readmi	ission for C	OVID-19 within 28 days OR 95% confidence interval	
	IKK	P value	Lower	Upper	UK	r value	Lower	Upper
Base models (figs 2 and 3)	1.05	0.01	1.01	1.09	0.97	0.32	0.91	1.03
Time period: 7 days	1.04	0.07	1.00	1.08	0.98	0.44	0.92	1.04
Time period: 28 days	1.08	0.00	1.04	1.12	0.95	0.14	0.90	1.02
Add Wave 1 data	1.01	0.62	0.97	1.05	0.99	0.76	0.92	1.07
LOS untrimmed at 60 days	1.04	0.04	1.00	1.08	-	-	-	-
LOS disregarding pre- Covid diagnosis	1.05	0.00	1.02	1.09	-	-	-	-

Table S2. Sensitivity analyses 2: Effect of adding adjustment variables in turn. Adjusted Incidence Rate Ratios (IRR) for LOS of COVID-19 spell, and adjusted Odds Ratios (OR) of COVID-19 readmissions within 28 days: discharges with CVW available, vs not available. Only one ordering shown.

	Length of stay of COVID-19 spell IRR 95%			Readmission for COVID-19 within 28 days OR 95% confidence				
	IRR	RR P value	confidence interval		OR	P value	interval	
			Lower	Upper			Lower	Upper
Unadjusted	1.13	<.0001	1.11	1.14	0.98	0.14	0.95	1.01
Adjusted: By time period	1.00	0.88	0.99	1.01	1.03	0.14	0.99	1.06
+ (Cluster by provider trust)	1.05	0.03	1.00	1.10	0.98	0.50	0.92	1.04
+ Age	1.05	0.02	1.01	1.09	0.99	0.67	0.93	1.05
+ Charlson	1.05	0.03	1.01	1.09	0.98	0.56	0.92	1.05
+ Deprivation +Ethnic group +Gender	1.05	0.02	1.01	1.09	0.98	0.47	0.92	1.04
+ Emergency +First +Proportion of beds occupied COVID	1.05	0.01	1.01	1.09	0.97	0.32	0.91	1.03