Supplemental material

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Supplementary data

1.1 **Swallow problems**

In addition to age and sex the following variables were included in the final model chosen by cross validation; South Asian ethnicity, Vocational

level qualification, having depression or being previously treated by a mental health professional, reporting a COVID symptom of cough, sore

throat or runny nose, being overweight, receiving class 6 respiratory support, or receiving anti-biotic therapy during the index admission

1.2 **Voice problems**

The following variables were selected via the lasso cross validation model; age at admission, sex, IMD quintiles 3 and 4, no or primary only

education, depression, previous treatment by a mental health professional, asthma, bronchiectasis, GORD, CKD, infectious disease, recording a

COVID symptom of sore throat, not answering the question about loss of taste, being previously on anti-infectives, ACEIs, NSAIDS or not recording

NSAID usage, being obese, respiratory class 7-9, no answer as to whether the patient had systemic steroids, being proned, having RRT, a new

diagnosis of myocarditis or cardiomyopathy

1.3 **Communication problems**

Along with age and sex the following variables were included in the final model selected by lasso; South Asian, IMD quintiles, 3,4 and 5, education

to undergraduate level, depression, chronic fatigue syndrome, previous treatment by a mental health professional, asthma, liver disease, GORD,

diabetes, hypertension, reporting of fever, sore throat and shortness of breath as COVID symptoms, either reporting confusion as a COVID

symptom or not answering the question, receiving ACEI, NSAID and not answering the question about receiving antibiotic therapy

1.4 **Communication problems visit 2**

In addition to sex and age at admission the following variables were selected to be included in the final model; IMD quintile 2, education to

secondary school level, sixth form level, undergraduate level, ischaemic heart disease, depression, previous treatment by a mental health

professional, asthma, obesity hypoventilation syndrome, GORD, reporting of sore throat or confusion as a COVID symptom, either reporting fever

as a COVID symptom or not answering the question, not answering the question about previously receiving immunosuppressants, receiving

NSAID, receiving systemic steroids, and not answering the question about being treated via proning

1.5 **Cognitive issues visit 1**

The following variables were selected by the lasso regression; Black and South Asian ethnicity, primary level, vocational level, undergraduate and

postgraduate level education, valvular heart disease, depression, previous treatment with an antibiotic and by a mental health professional, COPD, asthma, osteoarthritis, diabetes, cancer, severe obesity not answering whether sore throat was a COVID symptom, reporting headache as a COVID symptom, previous treatment with ABBS, and not answering whether the patient was proned.

1.6 **Cognitive issues visit 2**

The lasso model selected the following variables; all minority ethnic groups, IMD quintile 5 and not recorded, post-graduate level education and

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unknown education level, valvular heart disease, TIA, depression, chronic fatigue, previous treatment using antidepressant and by a mental health
professional, COPD, pleural effusion, osteoarthritis, liver disease, diabetes, hypertension, infectious disease, recording fever, cough or sore throat as a COVID symptom, either reporting shortness of breath as a COVID symptom or not answering the question, not responding to the question about immunosupression, use of NSAID, being overweight or severely obese, respiratory support class 5 or 7-9, treated with antibiotic therapy, not responding to question about being treated via proning, and requiring RRT

Table 6 COVID symptoms and treatments pre- and during the index admission split by whether respondents have communication or cognitive issues at visit 1 or visit 2.

		V1 cognitive issues			V2 cognitive issues			V1 communication issues			V2 communication issues		
		No	Yes	p-value	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value
COVID symptoms[1] duration	median (IQR)ˣ	8 (6-11)	8 (6-11)	p=0.565	8 (6-11)	8 (6-11)	p=0.901	8 (6-11)	8 (6-11)	p=0.542	8 (6-11)	8 (5-11)	p=0.284
COVID symptoms	Fever	501 (78.3%)	1164 (77.3%)	p=0.633	405 (78.5%)	906 (78.6%)	p=0.967	1267 (76.5%)	398 (81.4%)	**p=0.023**	999 (77.6%)	315 (81.8%)	p=0.078
	Cough	542 (83.5%)	1255 (82.6%)	p=0.592	426 (82.7%)	965 (82.2%)	p=0.796	1389 (82.9%)	408 (82.8%)	p=0.952	1075 (81.9%)	319 (83.9%)	p=0.365
	Sore throat	63 (11.8%)	201 (15.7%)	**p=0.028**	57 (12.8%)	158 (16.3%)	p=0.086	184 (13.2%)	79 (19.0%)	**p=0.003**	151 (13.8%)	64 (20.2%)	**p=0.005**
	Runny nose	26 (4.9%)	88 (7.0%)	p=0.095	32 (7.3%)	59 (6.2%)	p=0.442	88 (6.3%)	26 (6.4%)	p=0.951	70 (6.4%)	21 (6.7%)	p=0.862
	Ear pain	6 (1.1%)	33 (2.6%)	**p=0.045**	6 (1.4%)	22 (2.3%)	p=0.274	26 (1.9%)	13 (3.2%)	p=0.101	20 (1.8%)	8 (2.6%)	p=0.421
	Fatigue	330 (57.7%)	847 (61.8%)	p=0.093	268 (58.4%)	655 (62.4%)	p=0.137	881 (58.8%)	296 (66.4%)	**p=0.004**	705 (60.5%)	221 (64.1%)	p=0.229
	Shortness of breath	533 (81.5%)	1315 (85.8%)	**p=0.011**	430 (83.2%)	1000 (84.9%)	p=0.370	1403 (83.4%)	444 (87.9%)	**p=0.014**	1104 (84.0%)	329 (85.7%)	p=0.431
	Loss of taste	124 (23.2%)	316 (24.8%)	p=0.464	100 (22.8%)	241 (24.9%)	p=0.397	331 (23.7%)	109 (26.5%)	p=0.243	259 (23.5%)	82 (26.9%)	p=0.222
	Loss of smell	109 (20.3%)	280 (22.0%)	p=0.417	92 (20.9%)	209 (21.7%)	p=0.751	297 (21.2%)	92 (22.5%)	p=0.575	233 (21.1%)	68 (22.4%)	p=0.615
	Headache	146 (25.9%)	388 (29.7%)	p=0.095	110 (24.2%)	288 (28.9%)	p=0.060	400 (27.7%)	134 (31.5%)	p=0.125	290 (25.7%)	108 (33.3%)	**p=0.006**
	Confusion	67 (11.6%)	181 (13.3%)	p=0.310	53 (11.5%)	153 (14.8%)	p=0.087	171 (11.3%)	77 (17.6%)	**p=0.001**	152 (13.1%)	54 (16.0%)	p=0.164
Pre-admission Medications	Immunosuppressant	58 (9.1%)	172 (11.6%)	p=0.092	47 (9.3%)	119 (10.5%)	p=0.450	173 (10.6%)	57 (11.8%)	p=0.465	129 (10.1%)	37 (10.3%)	p=0.933
	Anti-infectives	65 (10.4%)	200 (13.6%)	**p=0.042**	41 (8.2%)	162 (14.4%)	**p<0.001**	196 (12.1%)	68 (14.1%)	p=0.249	150 (11.8%)	55 (15.2%)	p=0.087
	ACEI	82 (13.0%)	228 (15.4%)	p=0.151	67 (13.3%)	173 (15.4%)	p=0.292	223 (13.7%)	87 (17.9%)	**p=0.022**	186 (14.6%)	54 (15.0%)	p=0.843
	ARBS	32 (5.1%)	122 (8.3%)	p=0.011	29 (5.8%)	86 (7.6%)	p=0.190	113 (7.0%)	41 (8.5%)	p=0.274	91 (7.2%)	24 (6.7%)	p=0.748
	NSAID	35 (5.7%)	140 (9.7%)	**p=0.002**	27 (5.5%)	105 (9.6%)	**p=0.007**	120 (7.6%)	55 (11.7%)	**p=0.005**	91 (7.4%)	41 (11.7%)	**p=0.009**
Respiratory support	Supplemental O2	561 (83.6%)	1309 (83.0%)	p=0.727	450 (84.7%)	1028 (85.1%)	p=0.849	1451 (84.1%)	420 (80.3%)	**p=0.041**	1158 (85.8%)	323 (82.4%)	p=0.099
	CPAP	154 (23.7%)	424 (27.7%)	p=0.055	121 (23.5%)	350 (29.5%)	**p=0.012**	449 (26.8%)	130 (25.7%)	p=0.629	354 (26.9%)	118 (30.4%)	p=0.174
	Bi-level NIV	18 (2.9%)	87 (5.8%)	**p=0.004**	17 (3.4%)	62 (5.3%)	p=0.087	74 (4.5%)	31 (6.2%)	p=0.129	62 (4.8%)	17 (4.5%)	p=0.810
	High Flow Nasal O2	138 (21.6%)	330 (21.7%)	p=0.933	108 (21.2%)	254 (21.7%)	p=0.800	361 (21.8%)	107 (21.4%)	p=0.864	284 (21.9%)	78 (20.4%)	p=0.531
	IMV	113 (17.0%)	278 (17.7%)	p=0.683	90 (17.0%)	231 (19.1%)	p=0.308	293 (17.0%)	98 (18.9%)	p=0.334	243 (18.0%)	79 (20.1%)	p=0.359
	ECMO	9 (1.4%)	22 (1.4%)	p=0.942	6 (1.2%)	13 (1.1%)	p=0.906	*	*	*	*	*	*
Highest respiratory level	WHO class 3-4	111 (16.4%)	270 (16.9%)	p=0.564	81 (15.1%)	180 (14.6%)	p=0.298	274 (15.7%)	103 (19.5%)	p=0.150	193 (14.1%)	68 (17.0%)	p=0.221
	WHO class 5	300 (44.3%)	665 (41.6%)		249 (46.4%)	518 (42.1%)		759 (43.4%)	206 (39.1%)		612 (44.6%)	157 (39.3%)	
	WHO class 6	143 (21.1%)	375 (23.5%)		116 (21.6%)	295 (24.0%)		400 (22.9%)	119 (22.6%)		317 (23.1%)	94 (23.6%)	
	WHO Class 7-9	123 (18.2%)	288 (18.0%)		91 (16.9%)	238 (19.3%)		312 (17.8%)	99 (18.8%)		250 (18.2%)	80 (20.1%)	
Treatments given	Antibiotic therapy	520 (78.5%)	1208 (77.7%)	p=0.642	401 (77.0%)	959 (79.9%)	p=0.177	1327 (78.2%)	398 (76.8%)	p=0.513	1063 (79.6%)	299 (76.9%)	p=0.250
	Systemic steroids	364 (55.9%)	908 (60.1%)	p=0.070	275 (53.5%)	681 (58.6%)	p=0.054	984 (59.2%)	289 (57.7%)	p=0.535	760 (58.3%)	198 (52.5%)	**p=0.045**
	Therapeutic dose anti-coagulation	298 (45.6%)	701 (46.4%)	p=0.736	237 (46.3%)	554 (47.7%)	p=0.590	757(45.6%)	242 (48.1%)	p=0.323	611 (47.1%)	180 (47.5%)	p=0.895
	Proning	131 (21.2%)	276 (19.5%)	p=0.406	100 (20.3%)	221 (20.5%)	p=0.907	305 (19.5%)	103 (22.1%)	p=0.229	249 (20.1%)	73 (21.8%)	p=0.504
	Renal Replacement Therapy	25 (3.8%)	72 (4.7%)	p=0.347	18 (3.5%)	55 (4.7%)	p=0.258	74 (4.4%)	23 (4.5%)	p=0.951	57 (4.4%)	16 (4.2%)	p=0.921
Other Diagnoses made during admission	PE/micro thrombi	76 (11.6%)	138 (9.0%)	p=0.064	58 (11.3%)	108 (9.2%)	p=0.169	169 (10.1%)	45 (8.9%)	p=0.445	135 (10.3%)	31 (8.1%)	p=0.202
	Renal failure requiring dialysis	19 (2.9%)	56 (3.7%)	p=0.381	26 (5.0%)	43 (3.7%)	p=0.186	54 (3.2%)	21 (4.2%)	p=0.305	53 (4.0%)	16 (4.2%)	p=0.876
Admitted to ICU[2]		219 (32.9%)	547 (34.9%)	p=0.365	190 (35.8%)	465 (38.3%)	p=0.337	570 (33.2%)	195 (37.6%)	p=0.063	490 (36.2%)	166 (42.0%)	**p=0.037**
Duration of Stay	Median(IQR)ˣ	8 (4-14)	8 (4-16)	p=0.253	7 (4-14)	8 (4-17)	**p=0.007**	8 (4-16)	8 (4-17)	p=0.287	8 (4-16)	8 (4-18)	p=0.558

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Unless otherwise specified numbers are shown as counts (percentages) and p-values have been calculated using Chi-squared test. [1]This is the duration in days of COVID symptoms for patients who had COVID prior to admission. [2] This information is only available from Tier 2 respondents at either of the follow-up visits for patients who completed the PSQ [a] The denominators vary for most variables, the number of excluded records due to missing data are recorded in supplementary Table s1. *p-value calculated using Kruskall Wallis, p-values <0.05 are bolded. ACEI =Angiotensin-Converting Enzyme Inhibitors, ARBS = Angiotensin II Receptor Blockers, NSAID = Non-Steroidal Anti-Inflammatory Drugs , CPAP= Continuous Positive Airway Pressure, NIV =Non-Invasive Ventilation, ECMO = Extra Corporeal Membrane Oxygenation, WHO =World Health Organisation

Table 7 Outcomes reported during the same visit

		V1 cognitive issues			V2 cognitive issues			V1 communication issues			V2 communication issues		
		No	Yes	p-value	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value
EQ-5D-5L													
Mobility	Improved	30 (6.1%)	98 (8.7%)		28 (6.7%)	92 (9.7%)		100 (8.0%)	28 (7.5%)		95 (8.9%)	25 (8.2%)	
	Stayed the Same	382 (78.3%)	562 (49.6%)	p<0.001	330 (79.3%)	493 (52.0%)	p<0.001	793 (63.5%)	152 (41.0%)	p<0.001	695 (65.4%)	129 (42.4%)	p<0.001
	Worsened	76 (15.6%)	472 (41.7%)		58 (13.9%)	363 (38.3%)		356 (28.5%)	191 (51.5%)		272 (25.6%)	150 (49.3%)	
Self-care ^	Improved	*	*		*	*		15 (1.2%)	7 (1.9%)		13 (1.2%)	7 (2.3%)	
	Stayed the Same	370 (76.0%)	480 (42.5%)	p<0.001	325 (78.3%)	430 (45.4%)	p<0.001	728 (58.4%)	126 (34.1%)	p<0.001	641 (60.4%)	116 (38.2%)	p<0.001
	Worsened	110 (22.6%)	630 (55.8%)		85 (20.5%)	500 (52.7%)		503 (40.4%)	237(64.1%)		704 (66.4%)	181 (59.5%)	
Usual Activities	Improved	21 (4.3%)	77 (6.8%)		19 (4.6%)	64 (6.7%)		72 (5.8%)	26 (7.0%)		63 (5.9%)	20 (6.6%)	
	Stayed the Same	367 (75.4%)	503 (44.5%)	p<0.001	320 (77.1%)	447 (47.1%)	p<0.001	737 (59.1%)	134 (36.1%)	p<0.001	648 (61.0%)	120(39.5%)	p<0.001
	Worsened	99 (20.3%)	551 (48.7%)		76 (18.3%)	438 (46.2%)		438 (35.1%)	211 (56.9%)		351 (33.1%)	164 (53.9%)	
Pain/Discomfort	Improved	94 (19.4%)	268 (23.7%)		88 (21.2%)	253 (26.7%)		287 (23.0%)	75 (20.3%)		272 (25.6%)	70 (23.0%)	
	Stayed the Same	329 (67.8%)	470 (41.6%)	p<0.001	275 (66.3%)	383 (40.4%)	p<0.001	654 (52.5%)	146 (39.5%)	p<0.001	548 (51.6%)	110 (36.2%)	p<0.001
	Worsened	62 (12.8%)	393 (34.8%)		52 (12.5%)	313 (33.0%)		305 (24.5%)	149 (40.3%)		242 (22.8%)	124 (40.8%)	
Anxiety /Depression	Improved	52 (10.6%)	179 (15.9%)		50 (12.0%)	139 (14.7%)		173 (13.9%)	58 (15.6%)		140 (13.2%)	49 (16.2%)	
	Stayed the Same	337 (68.9%)	432 (38.3%)	p<0.001	290 (69.9%)	389 (41.1%)	p<0.001	638 (51.2%)	132 (35.6%)	p<0.001	577 (54.4%)	104 (34.3%)	p<0.001
	Worsened	100 (20.4%)	518 (45.9%)		75 (18.1%)	419 (44.3%)		436 (35.0%)	181 (48.8%)		344 (32.4%)	150 (49.5%)	
Summary - How good or bad is your health overall?	Current - score[x]	80 (70-90)	70 (50-80)	p<0.001	85 (75-90)	70 (50-80)	p<0.001	79 (60-90)	60 (45-77)	p<0.001	80 (62-90)	60 (45-79)	p<0.001
	Improved	79 (17.1%)	165 (15.4%)		90 (22.7%)	165 (18.4%)		185 (15.7%)	59(16.7%)		204 (20.1%)	51 (18.0%)	
	Stayed the Same	144 (31.2%)	216 (20.1%)	p<0.001	107 (27.0%)	128 (14.2%)	p<0.001	315 (26.7%)	45 (12.7%)	p<0.001	206 (20.3%)	29 (10.2%)	p<0.001
	Worsened	239 (51.7%)	693 (64.6%)		199 (50.3%)	606 (67.4%)		682 (57.8%)	250 (70.6%)		603 (59.5%)	204 (71.8%)	
MRC Dyspnoea Scale	Improved	26 (10.9%)	47 (6.6%)		11 (11.8%)	27 (9.4%)		59 (8.5%)	14 (5.4%)		27 (8.9%)	11(14.5%)	
	Stayed the Same	124 (51.9%)	255 (35.6%)	p<0.001	61 (65.6%)	119 (41.5%)	p<0.001	291 (41.9%)	88 (33.7%)	p=0.006	158 (52.0%)	22 (28.9%)	p<0.001
	Worsened	88 (36.8%)	415 (57.9%)		21 (22.6%)	141 (49.1%)		344 (49.6%)	159 (60.9%)		119 (39.1%)	43 (56.6%)	
Dyspnoea 12[x]	Overall score	0 (0-3)	5 (1-13)	p<0.001	0 (0-2)	4 (1-11)	p<0.001	2 (0-7)	9 (3-17)	p<0.001	1 (0-6)	7 (2-17)	p<0.001
	Physical domain	0 (0-2)	4 (1-9)	p<0.001	0 (0-1)	4 (1-8)	p<0.001	2 (0-6)	6 (2-11)	p<0.001	1 (0-5)	6 (2-11)	p<0.001
	Affective domain	0 (0-0)	0 (0-4)	p<0.001	0 (0-0)	0 (0-3)	p<0.001	0 (0-1)	2 (0-6)	p<0.001	0 (0-1)	1 (0-6)	p<0.001
PCL-5	Overall score[x]	3 (0-8)	14 (5-30)	p<0.001	1 (0-5)	12 (4-28)	p<0.001	7 (2-17)	25 (12-43)	p<0.001	5 (1-14)	23 (9-43)	p<0.001
	Overall Score >32	23 (4.9%)	332 (22.0%)	p<0.001	11 (3.2%)	222 (19.5%)	p<0.001	167 (11.5%)	188 (36.1%)	p<0.001	101 (9.2%)	132 (34.3%)	p<0.001
MOCA[1]	Overall Score[x]	27 (24-28)	26 (24-28)	p=0.014	28 (25-29)	27 (25-28)	p<0.001	26 (24-28)	26 (23-28)	p<0.001	27 (25-29)	27 (24.5-28)	p=0.016
	Normal function	329 (63.9%)	768 (59.8%)		317 (74.8%)	667 (67.5%)		873 (63.2%)	225 (53.8%)		762 (70.4%)	223 (67.2%)	
	Mild impairment	177 (34.4%)	470 (36.6%)	p=0.062	97 (22.9%)	295 (29.9%)	p=0.023	471 (34.1%)	175 (41.9%)	p=0.002	295 (27.2%)	99 (29.8%)	p=0.509
	Moderate/severe impairment	9 (1.7%)	46 (3.6%)		10 (2.4%)	26 (2.6%)		37 (2.7%)	18 (4.3%)		26 (2.5%)	10 (3.0%)	
RCF[2]	Frail	11 (1.8%)	115 (8.0%)	p<0.001	7 (1.5%)	77 (6.9%)	p<0.001	69 (4.4%)	57 (12.2%)	p<0.001	43 (3.5%)	41 (11.4%)	p<0.001

Outcomes taken from the same visit as reported visit or swallow problems. Unless otherwise specified numbers are reported as count (percentage) and p-values are the result of a Chi-square test. p-values <0.05 are bolded. [x] are shown as median (IQR) and Kruskall Wallis test is used. [1]Normal cognitive function score > 25, mild cognitive impairment score 18-25, moderate or

severe cognitive impairment score < 18 [2]Frail defined as RCF ≥ 5 [a] The denominators vary for most variables, the number of excluded records due to missing data are recorded in supplementary Table s2

Table 8 Co-morbidities listed at time of initial COVID admission split by whether respondents have communication or cognitive issues at visit 1 or visit 2.

	Visit 1 cognitive issues			Visit 2 cognitive issues			Visit 1 communication issues			Visit 2 communication issues		
	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value	No	Yes	p-value
n (%)	677 (29.8%)	1598 (70.2%)		537(30.4%)	1231 (69.6%)		1748 (76.8%)	527 (23.2%)		1372 (77.5%)	399 (22.5%)	
Myocardial Infarction	28 (4.1%)	78 (4.9%)	p=0.793	19 (3.5%)	62 (5.0%)	p=0.166	72 (4.1%)	26 (4.9%)	p=0.419	63 (4.6%)	18 (4.5%)	p=0.946
Ischaemic Heart Disease	37 (5.5%)	115 (7.2%)	p=0.131	28 (5.2%)	87 (7.1%)	p=0.146	113 (6.5%)	39 (7.4%)	p=0.451	84 (6.1%)	31 (7.8%)	p=0.240
Atrial Fibrillation	27 (4.0%)	81 (5.1%)	p=0.268	26 (4.8%)	64 (5.2%)	p=0.753	78 (4.5%)	30 (5.7%)	p=0.244	71 (5.2%)	19 (4.8%)	p=0.741
Hypertension	235 (34.7%)	554 (34.7%)	p=0.984	172 (32.0%)	466 (37.9%)	**p=0.019**	600 (34.3%)	189 (35.9%)	p=0.515	502 (36.6%)	137 (34.3%)	p=0.409
Congestive Heart Failure	6 (0.9%)	40 (2.5%)	**p=0.012**	9 (1.7%)	28 (2.3%)	p=0.419	31 (1.8%)	16 (3.0%)	p=0.074	27 (2.0%)	10 (2.5%)	p=0.508
Valvular Heart Disease	15 (2.2%)	18 (1.1%)	**p=0.047**	*	*	*	27 (1.5%)	6 (1.1%)	p=0.494	12 (0.9%)	9 (2.3%)	**p=0.025**
Pacemaker/Implantable defibrillator	6 (0.9%)	16 (1.0%)	p=0.798	*	*	*	13 (0.7%)	9 (1.7%)	**p=0.047**	*	*	*
Peripheral vascular disease	*	*	p=0.078	*	*	*	25 (1.4%)	7 (1.3%)	p=0.862	19 (1.4%)	7 (1.8%)	p=0.589
Hypercholerolemia/dyslipidaemia	120 (17.7%)	341 (21.3%)	**p=0.050**	108 (20.1%)	254 (20.6%)	p=0.803	339 (19.4%)	122 (23.1%)	p=0.060	284 (20.7%)	78 (19.5%)	p=0.616
CVA/TIA	26 (3.8%)	78 (4.9%)	p=0.277	19 (3.5%)	56 (4.5%)	p=0.332	71 (4.1%)	33 (6.3%)	p=0.034	52 (3.8%)	23 (5.8%)	p=0.085
Depression or Anxiety	44 (6.5%)	342 (21.4%)	**p<0.001**	47 (8.8%)	237 (19.3%)	**p<0.001**	227 (13.0%)	159 (30.2%)	**p<0.001**	181 (13.2%)	104 (26.1%)	**p<0.001**
Chronic Fatigue Syndrome, Fibromyalgia, Chronic Pain	20 (3.0%)	127 (7.9%)	**p<0.001**	13 (2.4%)	90 (7.3%)	**p<0.001**	88 (5.0%)	59 (11.2%)	**p<0.001**	62 (4.5%)	41 (10.3%)	**p<0.001**
Any previous Treatment with Antidepressant Medication	25 (3.7%)	257 (16.1%)	**p<0.001**	27 (5.0%)	180 (14.6%)	**p<0.001**	168 (9.6%)	114 (21.6%)	**p<0.001**	134 (9.8%)	73 (18.3%)	**p<0.001**
Any previous Treatment by a Mental Health Professional	14 (2.1%)	125 (7.8%)	**p<0.001**	16 (3.0%)	76 (6.2%)	**p=0.005**	77 (4.4%)	62 (11.8%)	**p<0.001**	53 (3.9%)	39 (9.8%)	**p<0.001**
COPD	25 (3.7%)	103 (6.4%)	**p=0.009**	15 (2.8%)	83 (6.7%)	**p=0.001**	93 (5.3%)	35 (6.6%)	p=0.249	79 (5.8%)	20 (5.0%)	p=0.568
Asthma	73 (10.8%)	335 (21.0%)	**p<0.001**	75 (14.0%)	230 (18.7%)	**p=0.016**	280 (16.0%)	128 (24.3%)	**p<0.001**	211 (15.4%)	94 (23.6%)	**p<0.001**
Obstructive Sleep Apnoea	24 (3.5%)	95 (5.9%)	**p=0.019**	18 (3.4%)	73 (5.9%)	**p=0.024**	88 (5.0%)	31 (5.9%)	p=0.443	60 (4.4%)	31 (7.8%)	**p=0.007**
ILD/Bronchiectasis/Obesity Hypoventilation Syndrome/Pleural Effusion	20 (3.0%)	47 (2.9%)	p=0.987	15 (2.8%)	42 (3.4%)	p=0.498	52 (3.0%)	15 (2.8%)	p=0.878	44 (3.2%)	13 (3.3%)	p=0.959
Connective Tissue Disease	*	*	*	*	*	*	10 (0.6%)	9 (1.7%)	**p=0.012**	7 (0.5%)	6 (1.5%)	**p=0.041**
Rheumatoid Arthritis	11 (1.6%)	53 (3.3%)	**p=0.026**	10 (1.9%)	39 (3.2%)	p=0.124	49 (2.8%)	15 (2.8%)	p=0.958	36 (2.6%)	13 (3.3%)	p=0.497
Osteoarthritis	48 (7.1%)	188 (11.8%)	**p=0.001**	42 (7.8%)	142 (11.5%)	**p=0.019**	172 (9.8%)	64 (12.1%)	p=0.128	134 (9.8%)	50 (12.5%)	p=0.111
Peptic Ulcer Disease	8 (1.2%)	24 (1.5%)	p=0.553	*	*	*	26 (1.5%)	6 (1.1%)	p=0.551	*	*	*
Liver Disease	21 (3.1%)	77 (4.8%)	p=0.065	16 (3.0%)	62 (5.0%)	p=0.053	59 (3.4%)	39 (7.4%)	**p<0.001**	55 (4.0%)	23 (5.8%)	p=0.133
Gastro-Oesophageal Reflux Disease	54 (8.0%)	199 (12.5%)	**p=0.002**	43 (8.0%)	139 (11.3%)	**p=0.037**	170 (9.7%)	83 (15.7%)	**p<0.001**	131 (9.5%)	51 (12.8%)	p=0.061
Inflammatory Bowel Disease	12 (1.8%)	26 (1.6%)	p=0.804	9 (1.7%)	21 (1.7%)	p=0.964	30 (1.7%)	8 (1.5%)	p=0.756	22 (1.6%)	8 (2.0%)	p=0.584
Irritable Bowel Syndrome	8 (1.2%)	56 (3.5%)	**p=0.002**	8 (1.5%)	39 (3.2%)	**p=0.044**	38 (2.2%)	26 (4.9%)	**p=0.001**	33 (2.4%)	14 (3.5%)	p=0.277
Diabetes	121 (17.9%)	354 (22.2%)	**p=0.022**	87 (16.2%)	287 (23.3%)	**p=0.001**	346 (19.8%)	129 (24.5%)	**p=0.020**	283 (20.6%)	91 (22.8%)	p=0.348
Hypothyroidism	25 (3.7%)	103 (6.4%)	**p=0.009**	21 (3.9%)	75 (6.1%)	p=0.063	90 (5.1%)	38 (7.2%)	p=0.072	71 (5.2%)	25 (6.3%)	p=0.397

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Hyperthyroidism	7 (1.0%)	16 (1.0%)	p=0.943	8 (1.5%)	10 (0.8%)	p=0.192	15 (0.9%)	8 (1.5%)	p=0.184	*	*	*
Chronic Kidney Disease (Any Stage)	29 (4.3%)	84 (5.3%)	p=0.329	22 (4.1%)	61 (5.0%)	p=0.433	85 (4.9%)	28 (5.3%)	p=0.677	63 (4.6%)	20 (5.0%)	p=0.726
Cancer	58 (8.6%)	106 (6.6%)	p=0.103	41 (7.6%)	101 (8.2%)	p=0.685	135 (7.7%)	29 (5.5%)	p=0.084	108 (7.9%)	35 (8.8%)	p=0.561
Infectious Disease	16 (2.4%)	37 (2.3%)	p=0.945	15 (2.8%)	25(2.0%)	p=0.321	43 (2.5%)	10 (1.9%)	p=0.453	34 (2.5%)	6 (1.5%)	p=0.249
Number of co-morbidities – Median (IQR)	1 (0-3)	2 (1-3)	**p<0.001**	1 (0-2)	2 (1-3)	**p<0.001**	2 (1-3)	2 (1-4)	**p<0.001**	2 (1-3)	2 (1-4)	**p=0.003**

Unless otherwise specified numbers are shown as counts (percentages) and p-values have been calculated using Chi-squared test. * numbers ≤5 have been suppressed, p-values <0.05 are bolded.

Supplementary Table S1- Number of respondents who did not answer questions on Symptoms, previous treatments or events during index admissions

	ICU Swallow		ICU Voice		Cognitive issues – V1		Cognitive issues – V2		Communication issues – V1		Communication issue – V2s	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	767	188	627	319	677	1598	537	1231	1748	527	1372	399
Symptom Duration	91	28	67	50	75	174	64	118	194	55	143	39
Fever	52	19	33	37	37	93	21	79	92	38	85	14
Cough	51	22	33	40	28	79	22	57	73	34	60	19
Sore throat	184	48	133	93	141	321	92	264	352	112	274	82
Runny nose	181	51	130	96	144	340	96	275	361	122	284	87
Shortness of breath	45	17	35	28	23	66	20	53	66	22	58	15
Loss of taste	207	50	144	107	143	326	99	265	354	116	270	94
Loss of smell	203	53	145	105	140	328	97	267	349	118	268	96
Headache	170	50	123	92	114	293	82	236	306	102	242	75
Confusion	141	40	100	76	98	234	75	196	241	89	208	62
Immunosuppressant	90	29	63	55	42	118	33	103	116	43	98	39
Anti-infectives	85	32	62	56	49	124	38	105	129	44	106	38
ACEI	89	26	61	53	47	121	35	104	125	42	100	40
ABBS	92	28	64	55	51	125	39	104	132	43	104	40
NSAID	103	34	71	65	60	161	47	134	165	55	134	48
Supplemental O2	*	*	9	10	6	20	6	23	*	*	22	7
Continuous Positive Airway Pressure	50	16	31	35	27	65	23	44	71	21	56	11
Bi-level Non-Invasive Ventilation	80	24	58	45	46	89	34	66	109	26	79	21
High Flow Nasal O2	72	25	48	48	37	79	27	63	89	27	73	17
Invasive Mechanical Ventilation	*	*	7	9	11	25	8	20	28	8	*	*
Extra-Corporeal Membrane Oxygenation*	42	14	26	29	24	45	19	42	55	15	50	10
Antibiotic therapy	31	7	23	15	15	44	16	30	50	9	36	10
Systemic (oral or IV)steroids	66	24	46	43	26	86	23	68	86	26	69	22
Therapeutic dose anti-coagulation	61	23	45	39	24	88	25	70	88	24	75	20
Proning	97	35	71	60	58	186	44	155	184	60	135	64
Renal Replacement Therapy	58	20	38	40	21	71	21	63	77	15	62	22
Pulmonary embolism/micro thrombi	43	16	28	31	23	73	25	53	73	23	61	17
Renal failure requiring dialysis	44	18	31	31	25	68	21	56	68	23	57	20
ITU admission	N/a	N/a	N/a	N/a	11	30	7	16	32	9	*	*

*Numbers less than 5 have been supressed, where values supressed could be calculated from other values (including those cross-referenced to other tables), other values have been rounded to the nearest 5

Supplementary Table S2- Number of respondents who did not answer questions on outcomes at the follow-up research visits

	ICU Swallow – v1		ICU Swallow – v2		ICU Voice – v1		ICU Voice – v2		Communication issues – V1		Cognitive issues- V2		Communication issue – V2s	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	767	188	767	188	627	319	627	319	677	1598	1748	527	537	1231
Mobility	257	49	315	79	219	85	276	112	189	466	500	156	121	283
Self-care	257	49	246	59	218	86	275	112	190	470	502	157	120	285
Usual Activities	257	49	246	59	218	86	275	112	190	467	502	156	122	282

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Pain/Discomfort	258	49	246	59	219	86	275	112	192	469	503	157	122	283
Anxiety/Depression	258	49	247	59	218	87	275	113	188	470	503	156	122	285
Summary	274	57	262	67	230	99	288	123	215	526	568	173	141	332
MRC Dyspnoea Scale	516	105	676	151	432	184	554	262	438	881	1054	266	444	944
Dyspnoea 12	101	20	225	59	92	13	89	74	45	166	156	57	40	115
PCL-5	98	8	216	56	88	28	89	75	207	92	294	6	192	93
MOCA	201	43	286	66	165	79	241	104	162	314	367	109	113	243
RCF	111	31	197	50	99	52	175	66	80	169	189	60	55	112