# Dynamic CO-CIN report to SAGE and NERVTAG (Recent cases)

Dynamic content updated: 2020-09-29 04:26:05.

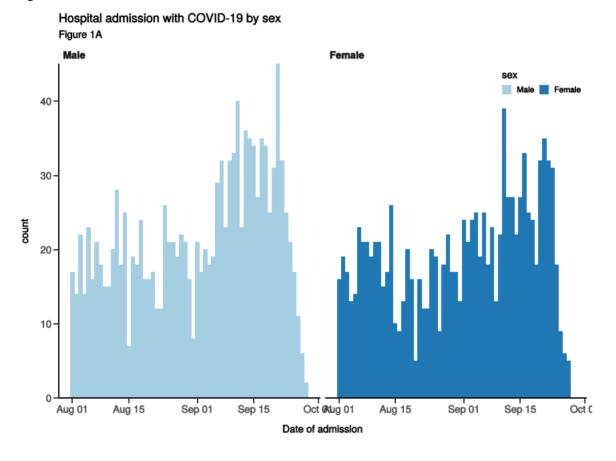
#### **Executive summary**

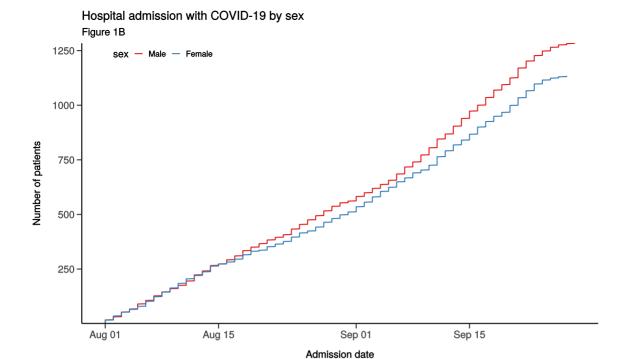
#### Includes patients admitted after 01 August 2020

There are 2426 patients included in CO-CIN. Of these, 217 patient(s) have died and 283 required ICU. 1274 have been discharged home.

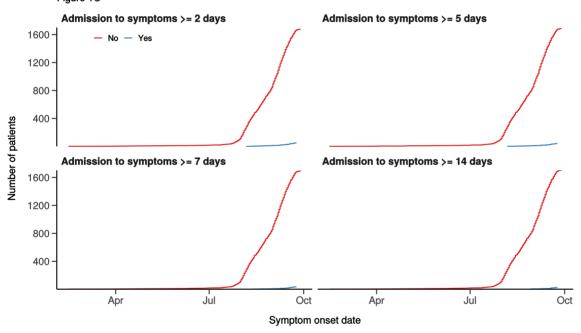
#### Admission

Figure 1



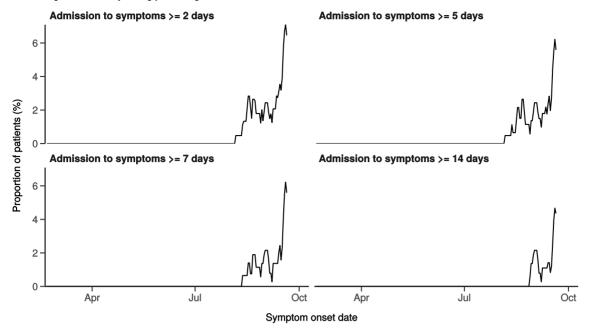


Number with symptom onset occuring after admission to hospital Figure 1C

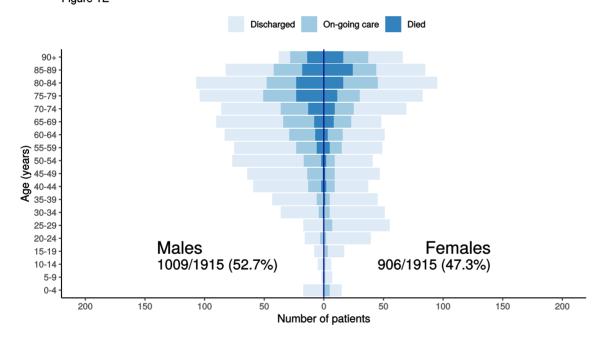


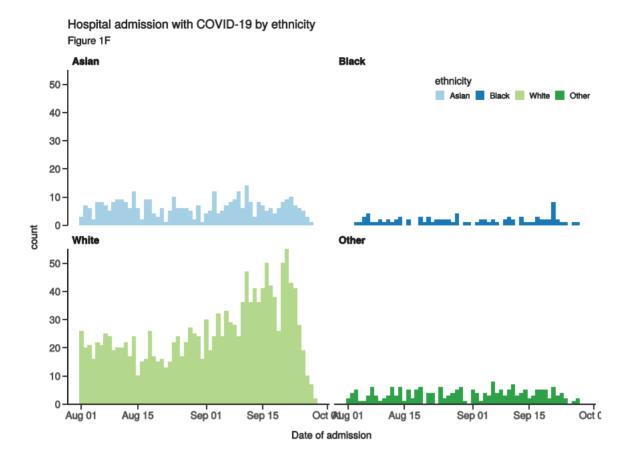
Proportion with symptom onset occuring after hospital admission

Figure 1D - 7-day rolling percentage. n = 1727



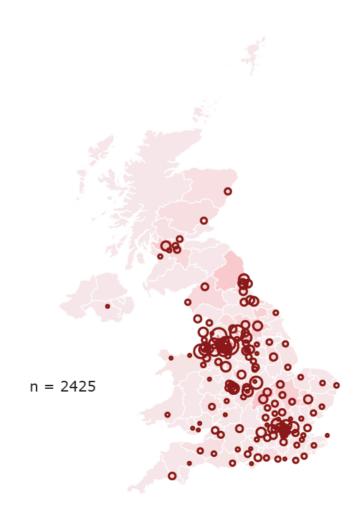
Patients with outcome stratified by age, and sex Figure 1E





## Location by CCG / Healthboard

Figure 2
Click and drag on map to zoom into area. Reset via toolbar at top of map.



## Symptoms and comorbidity

Figure 3A

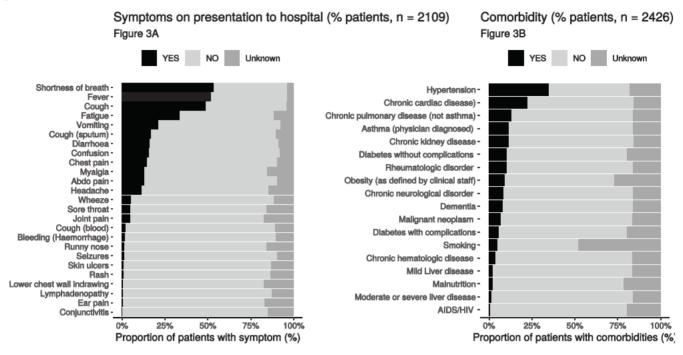
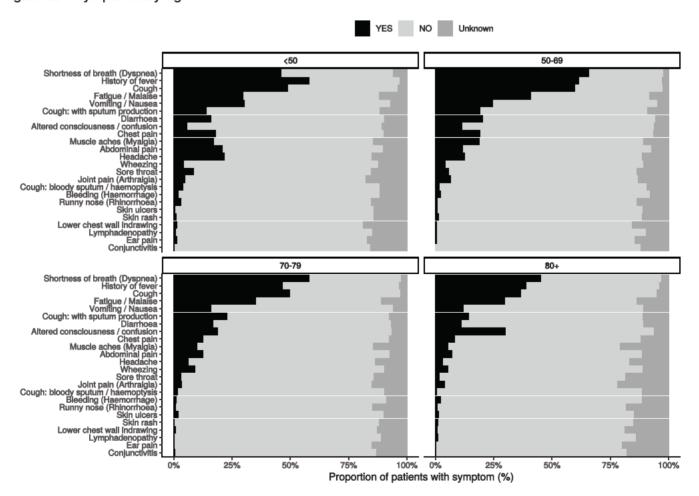


Figure 3B - Symptoms by Age



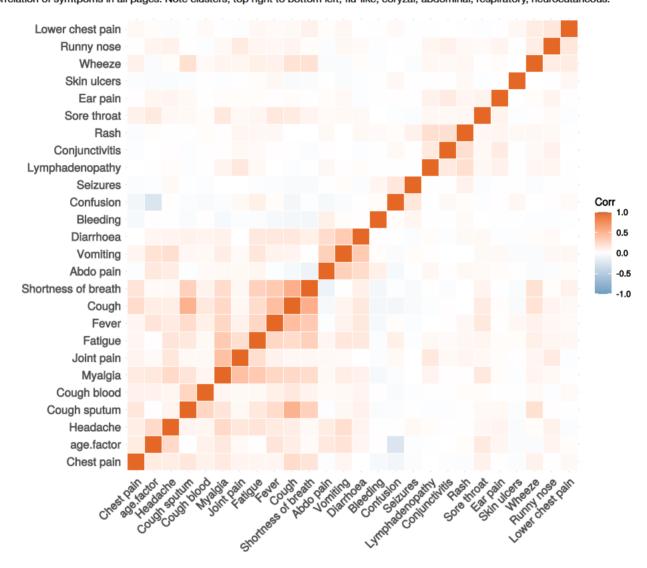
Age Group

Number of Patients included in Symptoms Plot

Age Group	Number of Patients included in Symptoms Plot
50-69	583
70-79	403
80+	541

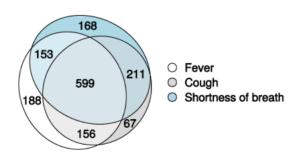
Figure 3C

Correlation of symtpoms in all pages. Note clusters, top right to bottom left, flu-like, coryzal, abdominal, respiratory, neurocutaneous.



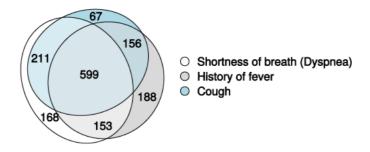
#### Symptoms (diagnostic criteria)

Figure 4A n = 2109



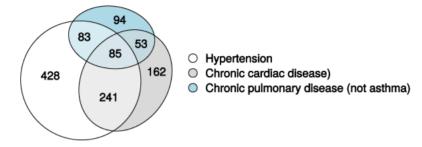
#### Symptoms (most common)

Figure 4B n = 2109



#### Comorbidity (most common)

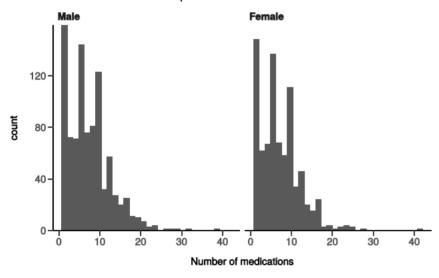
Figure 4C n = 2426



## Medication prior to illness

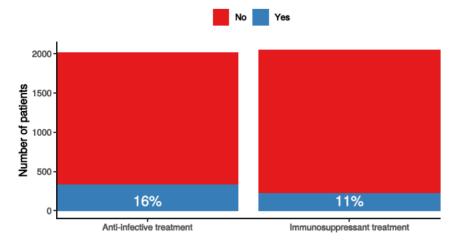
Figure 5

Number of medications prior to admission



#### Preadmission treatment

Figure 6



#### Patient flow

Figure 7A - All patients

N = 2175

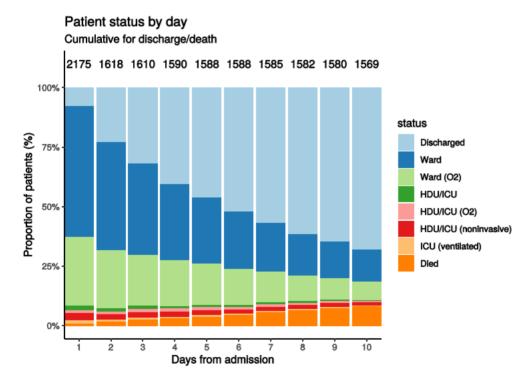
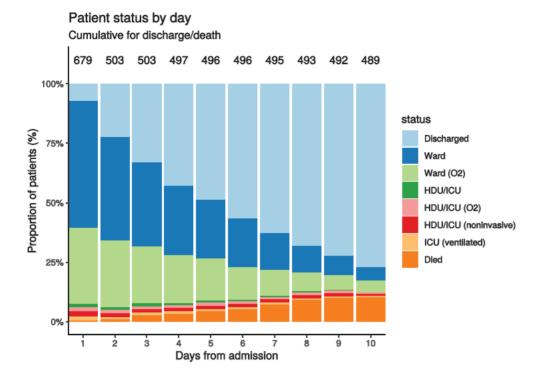


Figure 7B - Patients admitted >=14 days and <=28 days ago

N = 679



## Oxygen requirement

Figure 8A - All patients

N = 2057

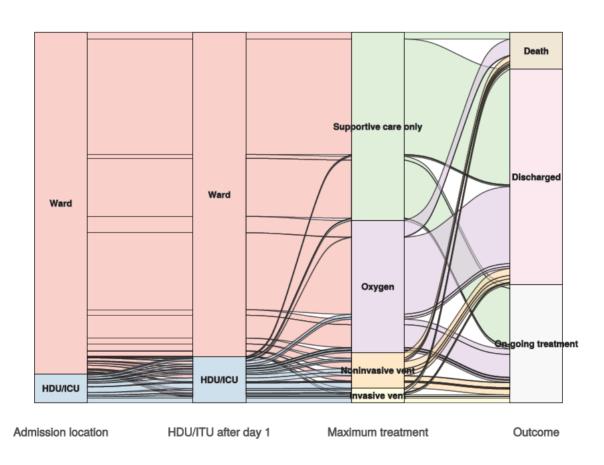


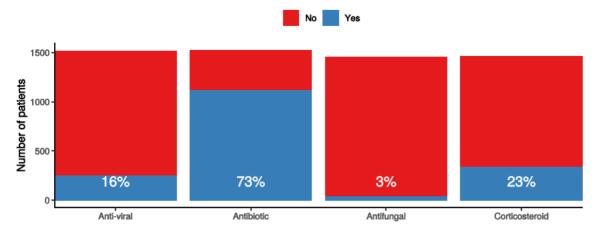
Figure 8B - Patients admitted >=14 days and <=28 days ago N = 649

## In-hospital medical treatment

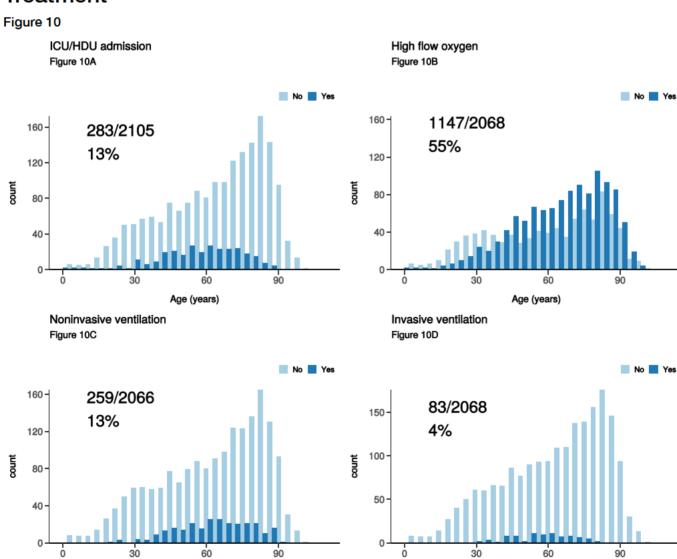
Figure 9

In-hospital treatment

Anti-virals, antibiotics, corticosteroids, and anti-fungals for patients who have completed journey.



#### **Treatment**



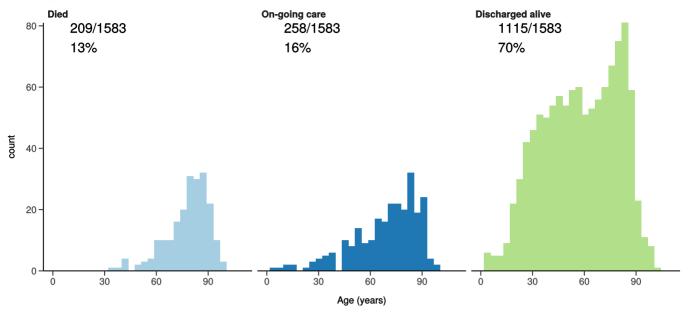
Age (years)

Status in patients admitted >=14 days from today

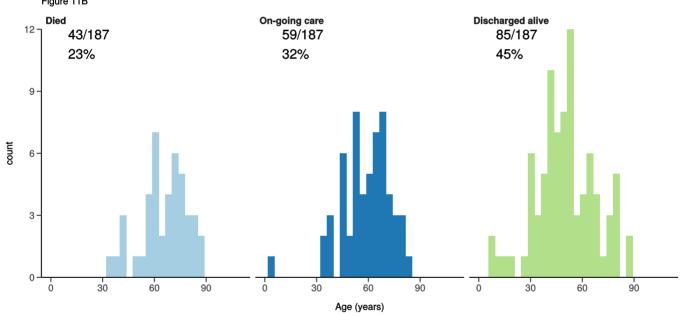
Age (years)

Figure 11

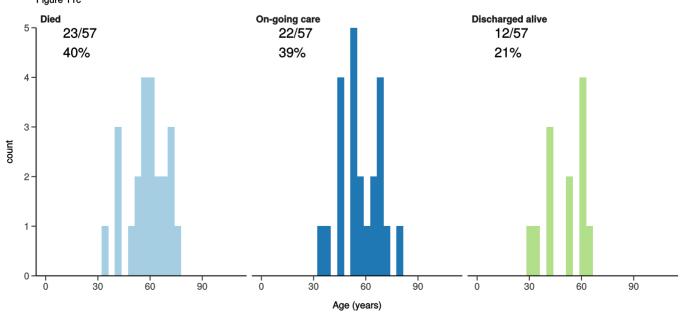
All: status in patients admitted >=14 days ago Figure 11A



ICU/HDU admissions: status in patients admitted >=14 days ago



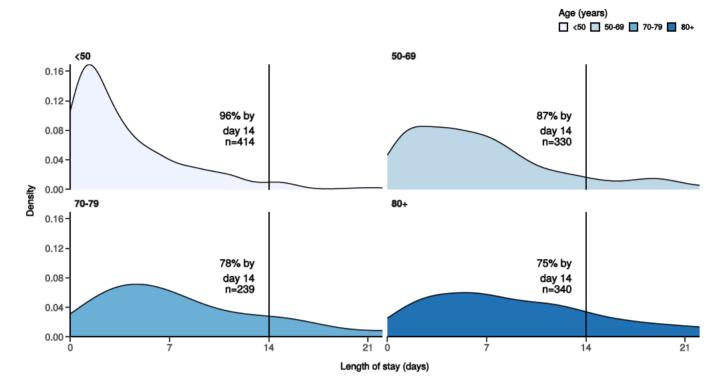
Invasive ventilation: status in patients admitted >=14 days ago Figure 11c



## Length of stay stratified by age

Figure 12

Length of stay stratified by age Proportion who reach outcome by day 14 shown



## Predictors of death: logistic regression multivariable model

Logistic regression model only includes patients admitted >14 days ago from today.

Dependent: death		No	Yes	OR (univariable)	OR (multivariable)
Age on admission (years)	<50	452 (98.5)	7 (1.5)	•	•
	50-69	306 (89.0)	38 (11.0)	8.02 (3.76-19.83, p<0.001)	8.10 (3.34-24.17, p<0.001)
	70-79	192 (78.0)	54 (22.0)	18.16 (8.67-44.44, p<0.001)	12.45 (5.04-37.67, p<0.001)
	80+	243 (69.0)	109 (31.0)	28.96 (14.27-69.49, p<0.001)	17.24 (7.06-51.82, p<0.001)
Sex at Birth	Male	621 (84.5)	114 (15.5)	•	•
	Female	572 (85.9)	94 (14.1)	0.90 (0.67-1.20, p=0.463)	1.12 (0.76-1.65, p=0.559)
	Not specified	0 (NaN)	0 (NaN)	•	•
Chronic cardiac disease)	NO	847 (89.5)	99 (10.5)	•	•
	YES	234 (71.6)	93 (28.4)	3.40 (2.47-4.67, p<0.001)	1.58 (1.04-2.40, p=0.032)
Chronic pulmonary disease (not asthma)	NO	955 (87.7)	134 (12.3)	•	•
	YES	126 (69.6)	55 (30.4)	3.11 (2.15-4.47, p<0.001)	1.39 (0.87-2.18, p=0.164)
Chronic neurological disorder	NO	991 (86.6)	154 (13.4)	•	•
	YES	90 (73.2)	33 (26.8)	2.36 (1.51-3.61, p<0.001)	2.12 (1.23-3.59, p=0.006)

Dependent: death		No	Yes	OR (univariable)	OR (multivariable)
Chronic hematologic disease	NO	1042	171	•	•
		(85.9)	(14.1)		
	YES	31 (67.4)	15 (32.6)	2.95 (1.52-5.49, p=0.001)	1.24 (0.50-2.85, p=0.625)
Chronic kidney disease	NO	972 (87.6)	138	•	•
			(12.4)		
	YES	110 (67.9)	52 (32.1)	3.33 (2.28-4.83, p<0.001)	1.41 (0.85-2.28, p=0.175)
Dementia	NO	1000	147	•	•
		(87.2)	(12.8)		
	YES	87 (69.0)	39 (31.0)	3.05 (2.00-4.59, p<0.001)	1.32 (0.74-2.31, p=0.337)
Obesity (as defined by clinical staff)	NO	823 (85.6)	139		•
			(14.4)		
	YES	114 (88.4)	15 (11.6)	0.78 (0.43-1.33, p=0.389)	0.99 (0.50-1.83, p=0.968)
Malignant neoplasm	NO	1014	152	•	•
		(87.0)	(13.0)		
	YES	62 (64.6)	34 (35.4)	3.66 (2.31-5.72, p<0.001)	2.78 (1.58-4.82, p<0.001)

Number in dataframe = 1840, Number in model = 1062, Missing = 778, AIC = 725.5, C-statistic = 0.804, H&L = Chi-sq(8) 5.90 (p=0.658)

Figure 13 - Adjusted odds ratio plot

Death		
Age on admission (years)	<50	-
	50-69	8.10 (3.34-24.17, p<0.001)
	70-79	12.45 (5.04-37.67, p<0.001)
	+08	17.24 (7.06-51.82, p<0.001)
Sex at Birth	Male	-
F	emale	1.12 (0.76-1.65, p=0.559)
Not sp	ecified	-
Chronic cardiac disease)	YES	1.58 (1.04-2.40, p=0.032)
Chronic pulmonary disease (not ast	hm <b>¥a</b> ∰S	1.39 (0.87-2.18, p=0.164)
Chronic neurological disorder	YES	2.12 (1.23-3.59, p=0.006)
Chronic hematologic disease	YES	1.24 (0.50-2.85, p=0.625)
Chronic kidney disease	YES	1.41 (0.85-2.28, p=0.175)
Dementia	YES	1.32 (0.74-2.31, p=0.337)
Obesity (as defined by clinical staff)	YES	0.99 (0.50-1.83, p=0.968)
Malignant neoplasm	YES	2.78 (1.58-4.82, p<0.001)

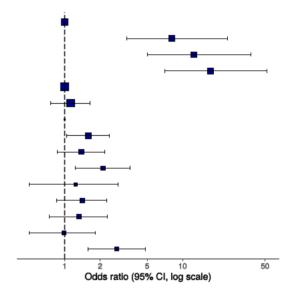
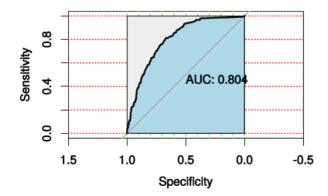


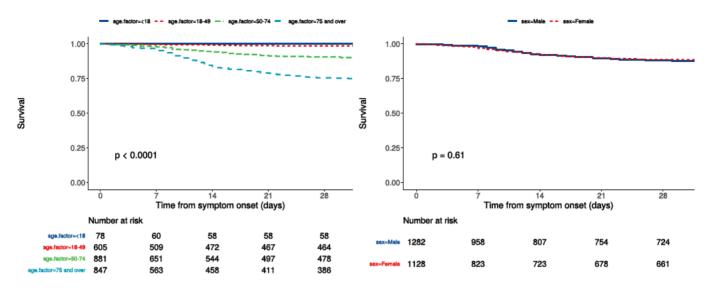
Figure 14 - ROC



## Survival models

## Kaplan-Meier plots for survival from symptom onset stratified by age (left) and sex (right)

Figure 15
P-value is log-rank test.



#### Cox proportional hazards model

The methodology for this is now up and running, but models are still being explored. What is presented here is not a final model, but to demonstrate methodology. The results are correct, but important variables have not yet been included.

Time from symptom onset.

Dependent: Surv(time, status)		all	HR (univariable)	HR (multivariable)
Age on admission (years)	<50	683 (28.3)	•	•
	50-69	666 (27.6)	7.28 (3.27-16.24, p<0.001)	8.00 (2.80-22.89, p<0.001)
	70-79	459 (19.0)	15.98 (7.28-35.07, p<0.001)	14.64 (5.15-41.64, p<0.001)
	80+	604 (25.0)	25.88 (12.06-55.54, p<0.001)	18.79 (6.62-53.37, p<0.001)
Sex at Birth	Male	1282 (53.2)	•	•
	Female	1128 (46.8)	0.93 (0.71-1.22, p=0.614)	1.29 (0.92-1.80, p=0.142)
qSOFA score on admission	0	972 (51.5)	•	•
	1	760 (40.3)	2.24 (1.61-3.13, p<0.001)	2.46 (1.68-3.62, p<0.001)
	2	148 (7.8)	5.66 (3.75-8.55, p<0.001)	3.90 (2.38-6.40, p<0.001)
	3	7 (0.4)	7.30 (1.78-29.93, p=0.006)	3.49 (0.46-26.47, p=0.227)
Symptomatic at presentation	No symptoms	235 (11.0)	•	•
	Symptoms	1895 (89.0)	1.25 (0.78-2.00, p=0.361)	•
Chronic cardiac disease)	NO	1503 (73.6)	•	•
	YES	539 (26.4)	3.08 (2.33-4.06, p<0.001)	1.49 (1.04-2.13, p=0.030)
Chronic kidney disease	NO	1771 (86.9)	•	•
	YES	267 (13.1)	3.03 (2.22-4.14, p<0.001)	1.46 (0.97-2.20, p=0.068)
Moderate or severe liver disease	NO	1993 (98.4)	•	•

Dependent: Surv(time, status)		all		HR (univariable)	HR (multivariable)
	YES	32 (1.6)	2.	02 (0.90-4.55, p=0.091)	2.28 (0.89-5.85, p=0.087)
Chronic neurological disorder	NO	1833 (90.4)	•		•
	YES	194 (9.6)	2.	35 (1.63-3.39, p<0.001)	•
Malignant neoplasm	NO	1864 (92.1)	•		•
	YES	159 (7.9)	3.	26 (2.26-4.70, p<0.001)	2.44 (1.59-3.74, p<0.001)
Chronic hematologic disease	NO	1939 (95.9)	•		•
	YES	82 (4.1)	2.	25 (1.33-3.82, p=0.003)	•
Obesity (as defined by clinical staff)	NO	1547 (87.7)	•		•
	YES	216 (12.3)	0.	71 (0.42-1.21, p=0.212)	0.86 (0.48-1.55, p=0.624)
Diabetes without complications	NO	1699 (87.4)	•		•
	YES	246 (12.6)	1.	43 (0.98-2.10, p=0.064)	•
Rheumatologic disorder	NO	1784 (88.1)	•		•
	YES	240 (11.9)	1.	41 (0.95-2.09, p=0.089)	•
Dementia	NO	1843 (90.7)	•		•
	YES	188 (9.3)	3.	04 (2.14-4.30, p<0.001)	1.34 (0.83-2.14, p=0.232)
Malnutrition	NO	1854 (97.7)	•		•
	YES	43 (2.3)	3.	14 (1.66-5.94, p<0.001)	•
smoking_mhyn_2levels	NO	1137 (54.3)	•		•
	YES	112 (5.3)	1.	00 (0.53-1.86, p=0.995)	•
	N/K	845 (40.4)	1.	45 (1.09-1.93, p=0.010)	•

Number in dataframe = 2415, Number in model = 1520, Missing = 895, Number of events = 145, Concordance = 0.817 (SE = 0.015), R-squared = 0.121 (Max possible = 0.738), Likelihood ratio test = 195.849 (df = 13, p = 0.000)

Figure 16a - Multivariable Cox proportional hazards model

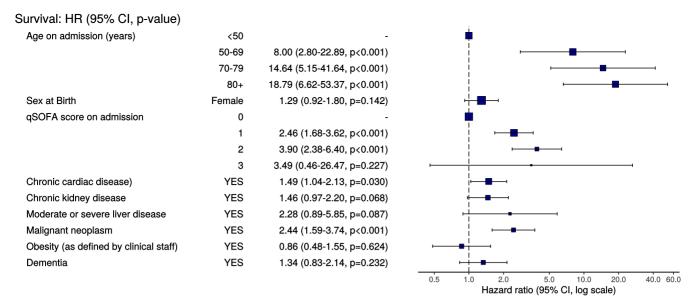
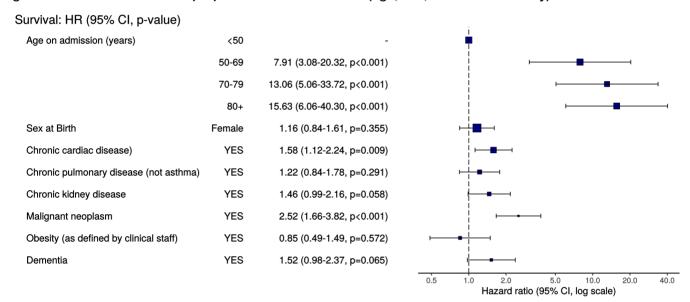


Figure 16b - Multivariable Cox proportional hazards model (age, sex, comorbidities only)



ROC = 0.8178879

Figure 17 - Predictions calibration plot

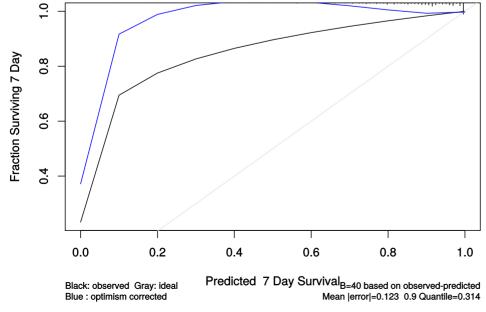
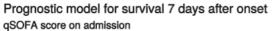


Figure 18 - Prognostic model predictions



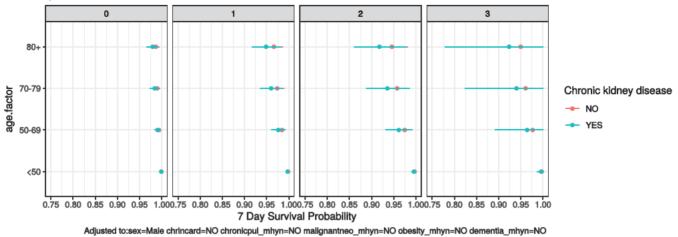


Figure 19 - Death by severity (NEWS) on admission

Number of deaths by NEWS score at admission

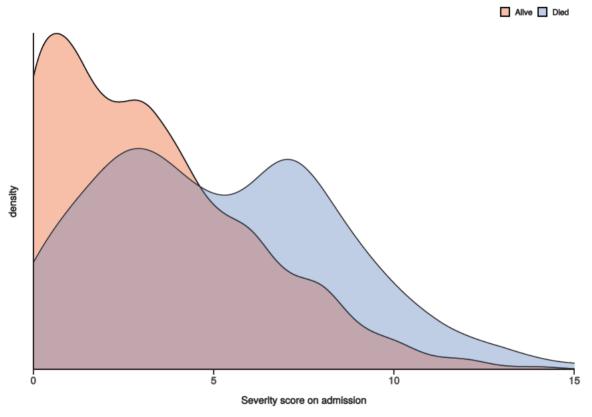


Figure 20 - Death by severity (NEWS) on admission stratified by age

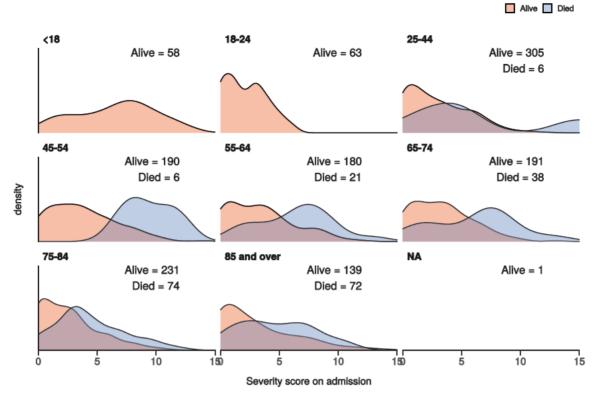
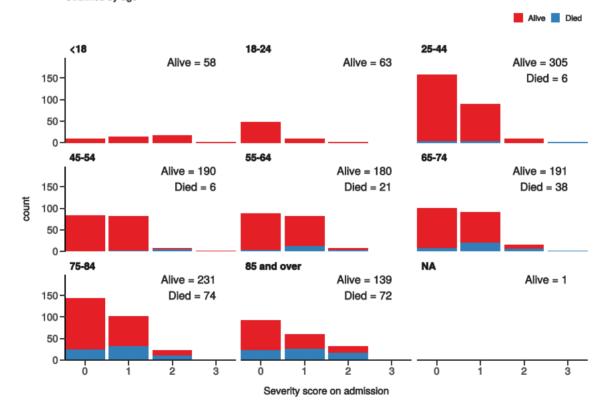


Figure 21 - Death by severity (qSOFA) on admission stratified by age

Number of deaths by qSOFA score at admission Stratified by age



#### Healthcare workers

Employed as a healthcare worker?		NO	YES	р
Total N (%)		2053 (97.2)	59 (2.8)	
NEWS score on admission	Median (IQR)	3.0 (5.0)	4.0 (4.0)	0.109

Employed as a healthcare worker?		NO	YES	р
Death	No	1149 (85.0)	44 (97.8)	0.030
	Yes	203 (15.0)	1 (2.2)	

## Admission (detail)

## Table 1

label	levels	all	value
Total N (%)		2426 (100.0)	
Age on admission (years)	Mean (SD)	62.5 (30.0)	
Sex at Birth	Male	1286 (53.0)	
	Female	1135 (46.8)	
	Not specified	2 (0.1)	
	(Missing)	3 (0.1)	
Employed as a healthcare worker?	YES	59 (2.4)	
	NO	2053 (84.6)	
	N/A	256 (10.6)	
	(Missing)	58 (2.4)	
Employed in a microbiology laboratory?	YES	0 (0.0)	
	NO	97 (4.0)	
	N/A	4 (0.2)	
	(Missing)	2325 (95.8)	
Onset to admission (days)	Mean (SD)	218.8 (8869.0)	
Fransfer from other facility?	Yes-other facility is a study site	22 (0.9)	
	Yes-other facility is not a study site	52 (2.1)	
	No	2064 (85.1)	
	N/A	123 (5.1)	
	(Missing)	165 (6.8)	
Travel in the 14 days prior to first symptom onset?	Yes	4 (0.2)	
	No	70 (2.9)	
	N/A	10 (0.4)	
	(Missing)	2342 (96.5)	
If YES, state location: Country	Afghanistan	0 (0.0)	
	Albania	0 (0.0)	
	Algeria	0 (0.0)	
	Andorra	0 (0.0)	
	Angola	0 (0.0)	
	Antigua and Barbuda	0 (0.0)	

label	levels	all	value
	Argentina	0 (0.0)	
	Armenia	0 (0.0)	
	Aruba	0 (0.0)	
	Australia	0 (0.0)	
	Austria	0 (0.0)	
	Azerbaijan	0 (0.0)	
	Bahamas (The)	0 (0.0)	
	Bahrain	0 (0.0)	
	Bangladesh	0 (0.0)	
	Barbados	0 (0.0)	
	Belarus	0 (0.0)	
	Belgium	0 (0.0)	
	Belize	0 (0.0)	
	Benin	0 (0.0)	
	Bhutan	0 (0.0)	
	Bolivia	0 (0.0)	
	Bosnia and Herzegovina	0 (0.0)	
	Botswana	0 (0.0)	
	Brazil	0 (0.0)	
	Brunei	0 (0.0)	
	Bulgaria	0 (0.0)	
	Burkina Faso	0 (0.0)	
	Burma	0 (0.0)	
	Burundi	0 (0.0)	
	Cambodia	0 (0.0)	
	Cameroon	0 (0.0)	
	Canada	0 (0.0)	
	Cabo Verde	0 (0.0)	
	Central African Republic	0 (0.0)	
	Chad	0 (0.0)	
	Chile	0 (0.0)	
	China	0 (0.0)	
	Colombia	0 (0.0)	
	Comoros	0 (0.0)	
	Congo (Republic of the)	0 (0.0)	
	Costa Rica	0 (0.0)	

label	levels	all	value
	Cote divoire	0 (0.0)	
	Croatia	0 (0.0)	
	Cuba	0 (0.0)	
	Curacao	0 (0.0)	
	Cyprus	0 (0.0)	
	Czechia	0 (0.0)	
	Denmark	0 (0.0)	
	Djibouti	0 (0.0)	
	Dominica	0 (0.0)	
	Dominican Republic	0 (0.0)	
	Ecuador	0 (0.0)	
	Egypt	0 (0.0)	
	El Salvador	0 (0.0)	
	Equatorial Guinea	0 (0.0)	
	Eritrea	0 (0.0)	
	Estonia	0 (0.0)	
	Ethiopia	0 (0.0)	
	Fiji	0 (0.0)	
	Finland	0 (0.0)	
	France	1 (0.0)	
	Gabon	0 (0.0)	
	Gambia (The)	0 (0.0)	
	Georgia	0 (0.0)	
	Germany	0 (0.0)	
	Ghana	0 (0.0)	
	Greece	0 (0.0)	
	Grenada	0 (0.0)	
	Guatemala	0 (0.0)	
	Guinea	0 (0.0)	
	Guinea-Bissau	0 (0.0)	
	Guyana	0 (0.0)	
	Haiti	0 (0.0)	
	Holy See	0 (0.0)	
	Honduras	0 (0.0)	
	Hong Kong	0 (0.0)	
	Hungary	0 (0.0)	

label	levels	all	value
	Iceland	0 (0.0)	
	India	1 (0.0)	
	Indonesia	0 (0.0)	
	Iran	0 (0.0)	
	Iraq	0 (0.0)	
	Ireland	0 (0.0)	
	Israel	0 (0.0)	
	Italy	0 (0.0)	
	Jamaica	0 (0.0)	
	Japan	0 (0.0)	
	Jordan	0 (0.0)	
	Kazakhstan	0 (0.0)	
	Kenya	0 (0.0)	
	Kiribati	0 (0.0)	
	Korea (South)	0 (0.0)	
	Kosovo	0 (0.0)	
	Kuwait	0 (0.0)	
	Kyrgyzstan	0 (0.0)	
	Laos	0 (0.0)	
	Latvia	0 (0.0)	
	Lebanon	0 (0.0)	
	Lesotho	0 (0.0)	
	Liberia	0 (0.0)	
	Libya	0 (0.0)	
	Liechtenstein	0 (0.0)	
	Lithuania	0 (0.0)	
	Luxembourg	0 (0.0)	
	Macau	0 (0.0)	
	Macedonia	0 (0.0)	
	Madagascar	0 (0.0)	
	Malawi	0 (0.0)	
	Malaysia	0 (0.0)	
	Maldives	0 (0.0)	
	Mali	0 (0.0)	
	Malta	1 (0.0)	
	Marshall Islands	0 (0.0)	

label	levels	all	value
	Mauritania	0 (0.0)	
	Mauritius	0 (0.0)	
	Mexico	0 (0.0)	
	Micronesia	0 (0.0)	
	Moldova	0 (0.0)	
	Monaco	0 (0.0)	
	Mongolia	0 (0.0)	
	Montenegro	0 (0.0)	
	Morocco	0 (0.0)	
	Mozambique	0 (0.0)	
	Namibia	0 (0.0)	
	Nauru	0 (0.0)	
	Nepal	0 (0.0)	
	Netherlands	0 (0.0)	
	New Zealand	0 (0.0)	
	Nicaragua	0 (0.0)	
	Niger	0 (0.0)	
	Nigeria	0 (0.0)	
	North Korea	0 (0.0)	
	Norway	0 (0.0)	
	Oman	0 (0.0)	
	Pakistan	0 (0.0)	
	Palau	0 (0.0)	
	Palestinian Territories	0 (0.0)	
	Panama	0 (0.0)	
	Papua New Guinea	0 (0.0)	
	Paraguay	0 (0.0)	
	Peru	0 (0.0)	
	Philippines	0 (0.0)	
	Poland	0 (0.0)	
	Portugal	0 (0.0)	
	Qatar	0 (0.0)	
	Romania	0 (0.0)	
	Russia	0 (0.0)	
	Rwanda	0 (0.0)	
	Saint Kitts and Nevis	0 (0.0)	

label	levels	all	value
	Saint Lucia	0 (0.0)	
	Saint Vincent and the Grenadines	0 (0.0)	
	Samoa	0 (0.0)	
	San Marino	0 (0.0)	
	Sao Tome and Principe	0 (0.0)	
	Saudi Arabia	0 (0.0)	
	Senegal	0 (0.0)	
	Serbia	0 (0.0)	
	Seychelles	0 (0.0)	
	Sierra Leone	0 (0.0)	
	Singapore	0 (0.0)	
	Sint Maarten	0 (0.0)	
	Slovakia	0 (0.0)	
	Slovenia	0 (0.0)	
	Solomon Islands	0 (0.0)	
	Somalia	0 (0.0)	
	South Africa	0 (0.0)	
	South Korea	0 (0.0)	
	South Sudan	0 (0.0)	
	Spain	1 (0.0)	
	Sri Lanka	0 (0.0)	
	Sudan	0 (0.0)	
	Suriname	0 (0.0)	
	Swaziland	0 (0.0)	
	Sweden	0 (0.0)	
	Switzerland	0 (0.0)	
	Syria	0 (0.0)	
	Taiwan	0 (0.0)	
	Tajikistan	0 (0.0)	
	Tanzania	0 (0.0)	
	Thailand	0 (0.0)	
	Timor-Leste	0 (0.0)	
	Togo	0 (0.0)	
	Tonga	0 (0.0)	
	Trinidad and Tobago	0 (0.0)	
	Tunisia	0 (0.0)	

label	levels	all	value
	Turkey	0 (0.0)	
	Turkmenistan	0 (0.0)	
	Tuvalu	0 (0.0)	
	Uganda	0 (0.0)	
	Ukraine	0 (0.0)	
	United Arab Emirates	0 (0.0)	
	United Kingdom	0 (0.0)	
	United States	0 (0.0)	
	Uruguay	0 (0.0)	
	Uzbekistan	0 (0.0)	
	Vanuatu	0 (0.0)	
	Venezuela	0 (0.0)	
	Vietnam	0 (0.0)	
	Yemen	0 (0.0)	
	Zambia	0 (0.0)	
	Zimbabwe	0 (0.0)	
	(Missing)	2422 (99.8)	
	Afghanistan	0 (0.0)	
	Albania	0 (0.0)	
	Algeria	0 (0.0)	
	Andorra	0 (0.0)	
	Angola	0 (0.0)	
	Antigua and Barbuda	0 (0.0)	
	Argentina	0 (0.0)	
	Armenia	0 (0.0)	
	Aruba	0 (0.0)	
	Australia	0 (0.0)	
	Austria	0 (0.0)	
	Azerbaijan	0 (0.0)	
	Bahamas (The)	0 (0.0)	
	Bahrain	0 (0.0)	
	Bangladesh	0 (0.0)	
	Barbados	0 (0.0)	
	Belarus	0 (0.0)	
	Belgium	1 (0.0)	
	Belize	0 (0.0)	

label	levels	all	value
	Benin	0 (0.0)	
	Bhutan	0 (0.0)	
	Bolivia	0 (0.0)	
	Bosnia and Herzegovina	0 (0.0)	
	Botswana	0 (0.0)	
	Brazil	0 (0.0)	
	Brunei	0 (0.0)	
	Bulgaria	0 (0.0)	
	Burkina Faso	0 (0.0)	
	Burma	0 (0.0)	
	Burundi	0 (0.0)	
	Cambodia	0 (0.0)	
	Cameroon	0 (0.0)	
	Canada	0 (0.0)	
	Cabo Verde	0 (0.0)	
	Central African Republic	0 (0.0)	
	Chad	0 (0.0)	
	Chile	0 (0.0)	
	China	0 (0.0)	
	Colombia	0 (0.0)	
	Comoros	0 (0.0)	
	Congo (Republic of the)	0 (0.0)	
	Costa Rica	0 (0.0)	
	Cote divoire	0 (0.0)	
	Croatia	0 (0.0)	
	Cuba	0 (0.0)	
	Curacao	0 (0.0)	
	Cyprus	0 (0.0)	
	Czechia	0 (0.0)	
	Denmark	0 (0.0)	
	Djibouti	0 (0.0)	
	Dominica	0 (0.0)	
	Dominican Republic	0 (0.0)	
	Ecuador	0 (0.0)	
	Egypt	0 (0.0)	
	El Salvador	0 (0.0)	

label	levels	all	value
	Equatorial Guinea	0 (0.0)	
	Eritrea	0 (0.0)	
	Estonia	0 (0.0)	
	Ethiopia	0 (0.0)	
	Fiji	0 (0.0)	
	Finland	0 (0.0)	
	France	0 (0.0)	
	Gabon	0 (0.0)	
	Gambia (The)	0 (0.0)	
	Georgia	0 (0.0)	
	Germany	0 (0.0)	
	Ghana	0 (0.0)	
	Greece	0 (0.0)	
	Grenada	0 (0.0)	
	Guatemala	0 (0.0)	
	Guinea	0 (0.0)	
	Guinea-Bissau	0 (0.0)	
	Guyana	0 (0.0)	
	Haiti	0 (0.0)	
	Holy See	0 (0.0)	
	Honduras	0 (0.0)	
	Hong Kong	0 (0.0)	
	Hungary	0 (0.0)	
	Iceland	0 (0.0)	
	India	1 (0.0)	
	Indonesia	0 (0.0)	
	Iran	0 (0.0)	
	Iraq	0 (0.0)	
	Ireland	0 (0.0)	
	Israel	0 (0.0)	
	Italy	0 (0.0)	
	Jamaica	0 (0.0)	
	Japan	0 (0.0)	
	Jordan	0 (0.0)	
	Kazakhstan	0 (0.0)	
	Kenya	0 (0.0)	

label	levels	all	value
	Kiribati	0 (0.0)	
	Korea (South)	0 (0.0)	
	Kosovo	0 (0.0)	
	Kuwait	0 (0.0)	
	Kyrgyzstan	0 (0.0)	
	Laos	0 (0.0)	
	Latvia	0 (0.0)	
	Lebanon	0 (0.0)	
	Lesotho	0 (0.0)	
	Liberia	0 (0.0)	
	Libya	0 (0.0)	
	Liechtenstein	0 (0.0)	
	Lithuania	0 (0.0)	
	Luxembourg	0 (0.0)	
	Macau	0 (0.0)	
	Macedonia	0 (0.0)	
	Madagascar	0 (0.0)	
	Malawi	0 (0.0)	
	Malaysia	0 (0.0)	
	Maldives	0 (0.0)	
	Mali	0 (0.0)	
	Malta	0 (0.0)	
	Marshall Islands	0 (0.0)	
	Mauritania	0 (0.0)	
	Mauritius	0 (0.0)	
	Mexico	0 (0.0)	
	Micronesia	0 (0.0)	
	Moldova	0 (0.0)	
	Monaco	0 (0.0)	
	Mongolia	0 (0.0)	
	Montenegro	0 (0.0)	
	Morocco	0 (0.0)	
	Mozambique	0 (0.0)	
	Namibia	0 (0.0)	
	Nauru	0 (0.0)	
	Nepal	0 (0.0)	

label	levels	all	value
	Netherlands	0 (0.0)	
	New Zealand	0 (0.0)	
	Nicaragua	0 (0.0)	
	Niger	0 (0.0)	
	Nigeria	0 (0.0)	
	North Korea	0 (0.0)	
	Norway	0 (0.0)	
	Oman	0 (0.0)	
	Pakistan	0 (0.0)	
	Palau	0 (0.0)	
	Palestinian Territories	0 (0.0)	
	Panama	0 (0.0)	
	Papua New Guinea	0 (0.0)	
	Paraguay	0 (0.0)	
	Peru	0 (0.0)	
	Philippines	0 (0.0)	
	Poland	0 (0.0)	
	Portugal	0 (0.0)	
	Qatar	0 (0.0)	
	Romania	0 (0.0)	
	Russia	0 (0.0)	
	Rwanda	0 (0.0)	
	Saint Kitts and Nevis	0 (0.0)	
	Saint Lucia	0 (0.0)	
	Saint Vincent and the Grenadines	0 (0.0)	
	Samoa	0 (0.0)	
	San Marino	0 (0.0)	
	Sao Tome and Principe	0 (0.0)	
	Saudi Arabia	0 (0.0)	
	Senegal	0 (0.0)	
	Serbia	0 (0.0)	
	Seychelles	0 (0.0)	
	Sierra Leone	0 (0.0)	
	Singapore	0 (0.0)	
	Sint Maarten	0 (0.0)	
	Slovakia	0 (0.0)	

label	levels	all	value
	Slovenia	0 (0.0)	
	Solomon Islands	0 (0.0)	
	Somalia	0 (0.0)	
	South Africa	0 (0.0)	
	South Korea	0 (0.0)	
	South Sudan	0 (0.0)	
	Spain	0 (0.0)	
	Sri Lanka	0 (0.0)	
	Sudan	0 (0.0)	
	Suriname	0 (0.0)	
	Swaziland	0 (0.0)	
	Sweden	0 (0.0)	
	Switzerland	0 (0.0)	
	Syria	0 (0.0)	
	Taiwan	0 (0.0)	
	Tajikistan	0 (0.0)	
	Tanzania	0 (0.0)	
	Thailand	0 (0.0)	
	Timor-Leste	0 (0.0)	
	Togo	0 (0.0)	
	Tonga	0 (0.0)	
	Trinidad and Tobago	0 (0.0)	
	Tunisia	0 (0.0)	
	Turkey	0 (0.0)	
	Turkmenistan	0 (0.0)	
	Tuvalu	0 (0.0)	
	Uganda	0 (0.0)	
	Ukraine	0 (0.0)	
	United Arab Emirates	0 (0.0)	
	United Kingdom	0 (0.0)	
	United States	0 (0.0)	
	Uruguay	0 (0.0)	
	Uzbekistan	0 (0.0)	
	Vanuatu	0 (0.0)	
	Venezuela	0 (0.0)	
	Vietnam	0 (0.0)	

label	levels	all value
	Yemen	0 (0.0)
	Zambia	0 (0.0)
	Zimbabwe	0 (0.0)
	(Missing)	2424 (99.9)
Contact with animals, raw meat or insect bisymptom onset?	Yes	0 (0.0)
	No	57 (2.3)
	Unknown	22 (0.9)
	N/A	5 (0.2)
	(Missing)	2342 (96.5)

## Symptoms (detail)

## Table 2

Stratified: all		all
Total N (%)		2426 (100.0)
History of fever	YES	1096 (45.2)
	NO	938 (38.7)
	Unknown	75 (3.1)
	(Missing)	317 (13.1)
Cough	YES	1033 (42.6)
	NO	996 (41.1)
	Unknown	82 (3.4)
	(Missing)	315 (13.0)
Cough: with sputum production	YES	360 (14.8)
	NO	1524 (62.8)
	Unknown	217 (8.9)
	(Missing)	325 (13.4)
Cough: bloody sputum / haemoptysis	YES	43 (1.8)
	NO	1829 (75.4)
	Unknown	228 (9.4)
	(Missing)	326 (13.4)
Sore throat	YES	104 (4.3)
	NO	1660 (68.4)
	Unknown	330 (13.6)
	(Missing)	332 (13.7)
Runny nose (Rhinorrhoea)	YES	29 (1.2)
	NO	1731 (71.4)

	Unknown	331 (13.6)
	(Missing)	335 (13.8)
Ear pain	YES	12 (0.5)
	NO	1722 (71.0)
	Unknown	357 (14.7)
	(Missing)	335 (13.8)
Wheezing	YES	115 (4.7)
	NO	1739 (71.7)
	Unknown	238 (9.8)
	(Missing)	334 (13.8)
Chest pain	YES	310 (12.8)
	NO	1594 (65.7)
	Unknown	196 (8.1)
	(Missing)	326 (13.4)
Muscle aches (Myalgia)	YES	277 (11.4)
	NO	1495 (61.6)
	Unknown	322 (13.3)
	(Missing)	332 (13.7)
Joint pain (Arthralgia)	YES	100 (4.1)
	NO	1629 (67.1)
	Unknown	364 (15.0)
	(Missing)	333 (13.7)
Fatigue / Malaise	YES	706 (29.1)
	NO	1147 (47.3)
	Unknown	242 (10.0)
	(Missing)	331 (13.6)
Shortness of breath (Dyspnea)	YES	1131 (46.6)
	NO	907 (37.4)
	Unknown	81 (3.3)
	(Missing)	307 (12.7)
Lower chest wall indrawing	YES	17 (0.7)
	NO	1714 (70.7)
	Unknown	357 (14.7)
	(Missing)	338 (13.9)
Headache		338 (13.9) 241 (9.9)

	Unknown	304 (12.5)
	(Missing)	336 (13.8)
Altered consciousness / confusion	YES	333 (13.7)
	NO	1600 (66.0)
	Unknown	164 (6.8)
	(Missing)	329 (13.6)
Seizures	YES	28 (1.2)
	NO	1859 (76.6)
	Unknown	201 (8.3)
	(Missing)	338 (13.9)
Abdominal pain	YES	277 (11.4)
	NO	1620 (66.8)
	Unknown	199 (8.2)
	(Missing)	330 (13.6)
Vomiting / Nausea	YES	449 (18.5)
	NO	1493 (61.5)
	Unknown	156 (6.4)
	(Missing)	328 (13.5)
Diarrhoea	YES	336 (13.8)
	NO	1579 (65.1)
	Unknown	179 (7.4)
	(Missing)	332 (13.7)
Conjunctivitis	YES	5 (0.2)
	NO	1770 (73.0)
	Unknown	312 (12.9)
	(Missing)	339 (14.0)
Skin rash	YES	21 (0.9)
	NO	1786 (73.6)
	Unknown	281 (11.6)
	(Missing)	338 (13.9)
Skin ulcers	YES	22 (0.9)
	NO	1796 (74.0)
	Unknown	271 (11.2)
	(Missing)	337 (13.9)
Lymphadenopathy	YES	13 (0.5)
	NO	1809 (74.6)
		7

	Unknown	266 (11.0)
	(Missing)	338 (13.9)
Bleeding (Haemorrhage)	YES	39 (1.6)
	NO	1832 (75.5)
	Unknown	216 (8.9)
	(Missing)	339 (14.0)
If Bleeding (others)	YES	0 (0.0)
	NO	75 (3.1)
	Unknown	5 (0.2)
	(Missing)	2346 (96.7)

## Comorbidity (detail)

## Table 3

Stratified: all		all
Total N (%)		2426 (100.0)
Chronic cardiac disease)	YES	541 (22.3)
	NO	1510 (62.2)
	Unknown	77 (3.2)
	(Missing)	298 (12.3)
Chronic pulmonary disease (not asthma)	YES	315 (13.0)
	NO	1725 (71.1)
	Unknown	83 (3.4)
	(Missing)	303 (12.5)
Asthma (physician diagnosed)	YES	272 (11.2)
	NO	1769 (72.9)
	Unknown	81 (3.3)
	(Missing)	304 (12.5)
Chronic kidney disease	YES	269 (11.1)
	NO	1778 (73.3)
	Unknown	75 (3.1)
	(Missing)	304 (12.5)
Moderate or severe liver disease	YES	32 (1.3)
	NO	2002 (82.5)
	Unknown	87 (3.6)
	(Missing)	305 (12.6)
Mild Liver disease	YES	48 (2.0)

	NO	1983 (81.7)
	Unknown	90 (3.7)
	(Missing)	305 (12.6)
Chronic neurological disorder	YES	195 (8.0)
	NO	1841 (75.9)
	Unknown	85 (3.5)
	(Missing)	305 (12.6)
Malignant neoplasm	YES	159 (6.6)
	NO	1873 (77.2)
	Unknown	90 (3.7)
	(Missing)	304 (12.5)
Chronic hematologic disease	YES	82 (3.4)
	NO	1948 (80.3)
	Unknown	92 (3.8)
	(Missing)	304 (12.5)
AIDS/HIV	YES	13 (0.5)
	NO	1940 (80.0)
	Unknown	169 (7.0)
	(Missing)	304 (12.5)
Obesity (as defined by clinical staff)	YES	217 (8.9)
	NO	1554 (64.1)
	Unknown	345 (14.2)
	(Missing)	310 (12.8)
Diabetes with complications	YES	132 (5.4)
	NO	1820 (75.0)
	Unknown	168 (6.9)
	(Missing)	306 (12.6)
Diabetes without complications	YES	246 (10.1)
	NO	1707 (70.4)
	Unknown	165 (6.8)
	(Missing)	308 (12.7)
Rheumatologic disorder	YES	241 (9.9)
Tillouniatologio disordoi	NO	1792 (73.9)
	Unknown	86 (3.5)
	(Missing)	307 (12.7)
Dementia	YES	189 (7.8)
		.00 (.10)

	NO	1851 (76.3)
	Unknown	84 (3.5)
	(Missing)	302 (12.4)
Malnutrition	YES	44 (1.8)
	NO	1862 (76.8)
	Unknown	214 (8.8)
	(Missing)	306 (12.6)
Smoking	YES	113 (4.7)
	NO	1140 (47.0)
	N/K	850 (35.0)
	(Missing)	323 (13.3)