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

Dynamic content updated: 2020-10-07 04:28:14.

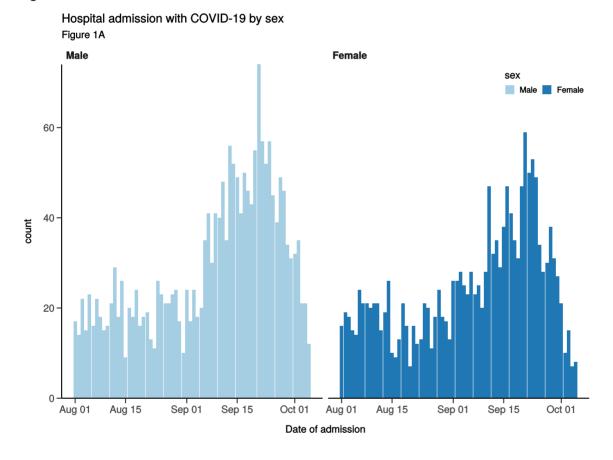
### **Executive summary**

#### Includes patients admitted after 01 August 2020

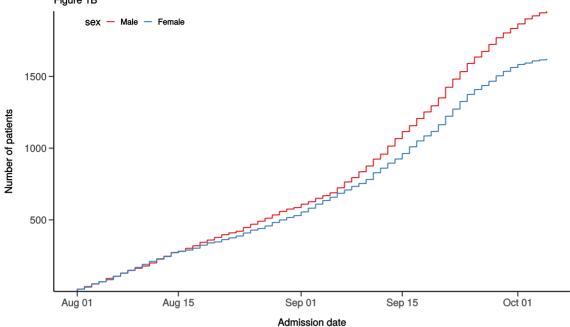
There are 3597 patients included in CO-CIN. Of these, 351 patient(s) have died and 433 required ICU. 1837 have been discharged home.

#### Admission

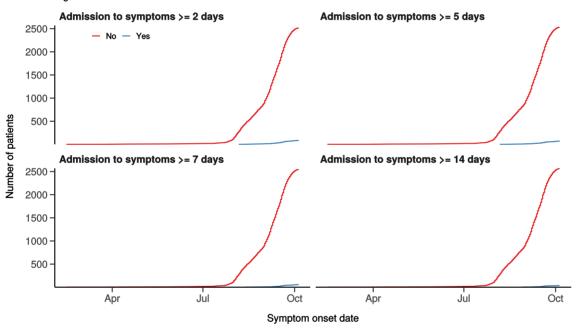
Figure 1





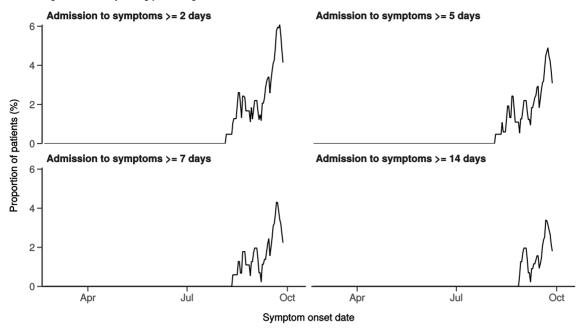


Number with symptom onset occuring after admission to hospital Figure 1C

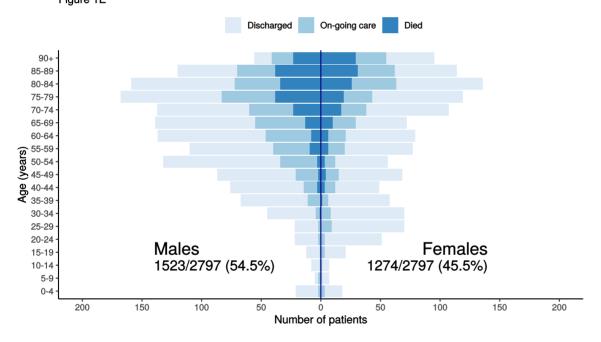


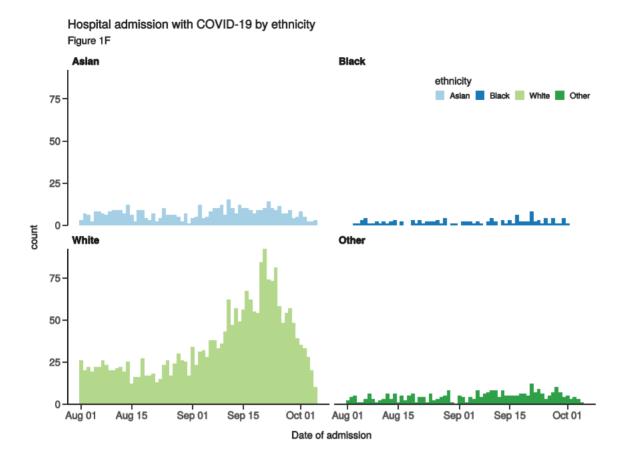
Proportion with symptom onset occuring after hospital admission

Figure 1D - 7-day rolling percentage. n = 2606



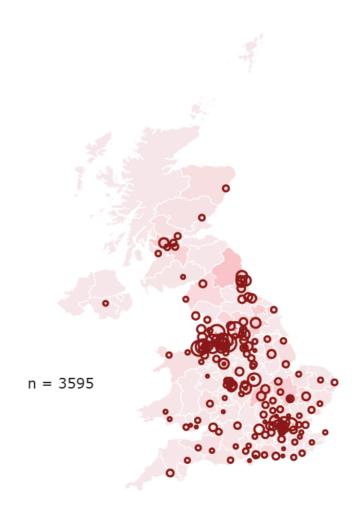
Patients with outcome stratified by age, and sex Figure 1E





## 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

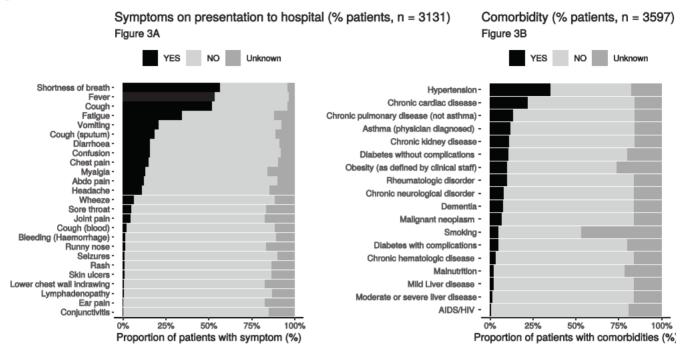
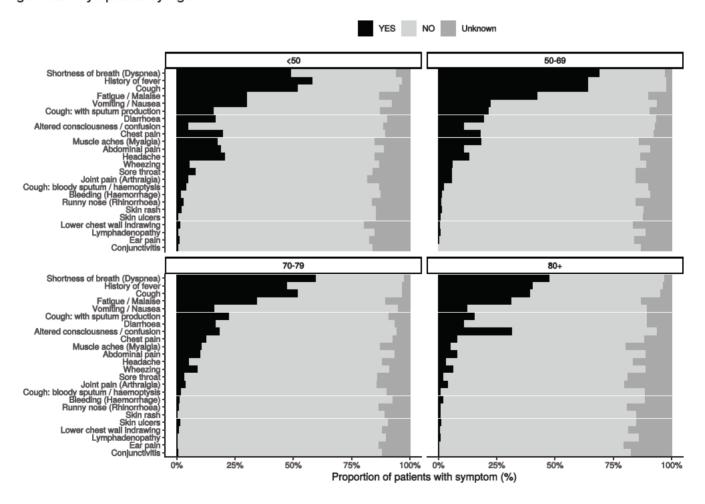


Figure 3B - Symptoms by Age



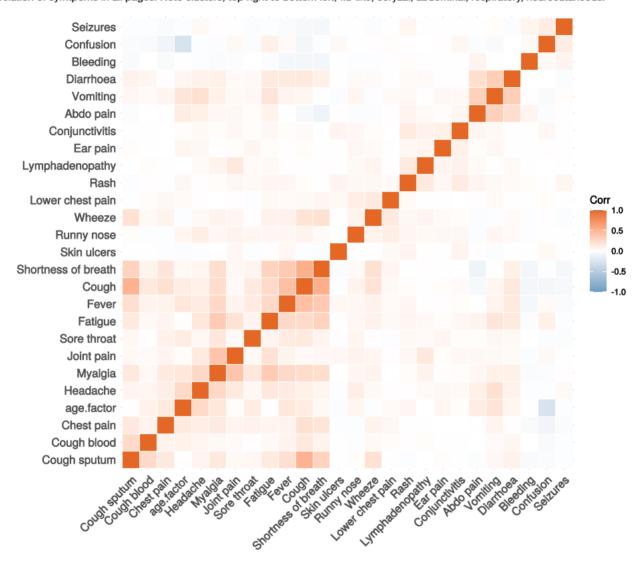
Age Group

Number of Patients included in Symptoms Plot

Age Group	Number of Patients included in Symptoms Plot
50-69	938
70-79	610
80+	782

Figure 3C

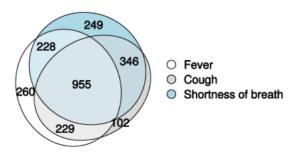
Correlation of symtpoms in all pages. Note clusters, top right to bottom left, flu-like, coryzal, abdominal, respiratory, neurocutaneous.



## Symptoms (diagnostic criteria)

Figure 4A

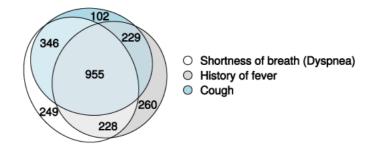
n = 3131



#### Symptoms (most common)

Figure 4B

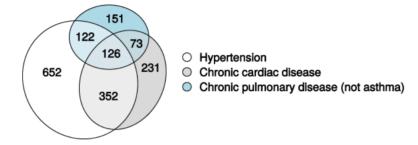
n = 3131



#### Comorbidity (most common)

Figure 4C

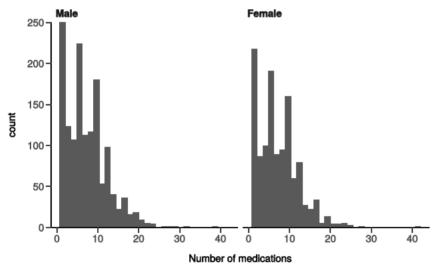
n = 3597



## Medication prior to illness

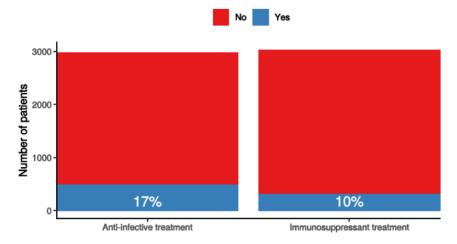
Figure 5

Number of medications prior to admission



## Preadmission treatment

Figure 6



#### Patient flow

#### Figure 7A - All patients

N = 3240

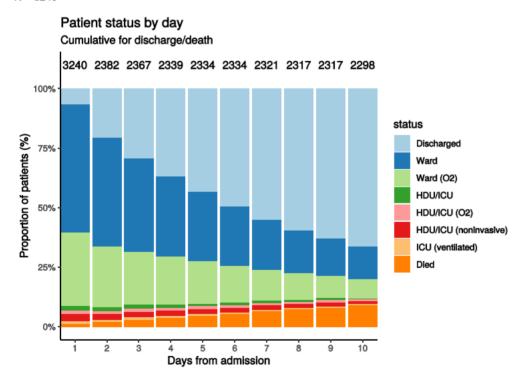
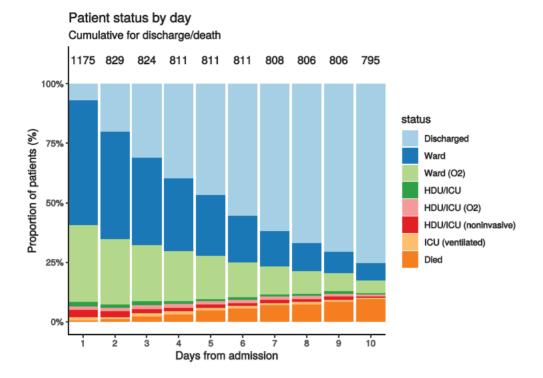


Figure 7B - Patients admitted >=14 days and <=28 days ago

N = 1175



## Oxygen requirement

Figure 8A - All patients

N = 3078

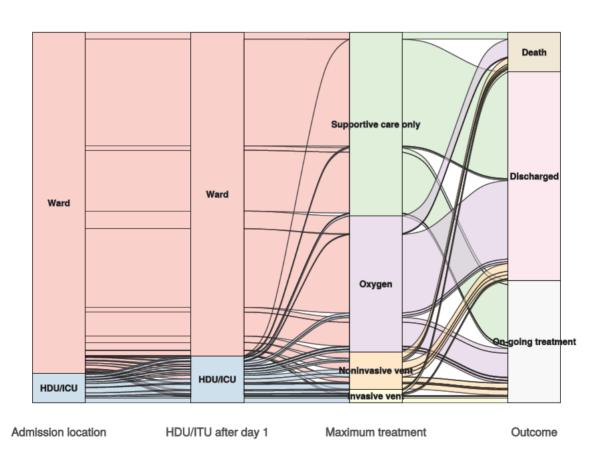


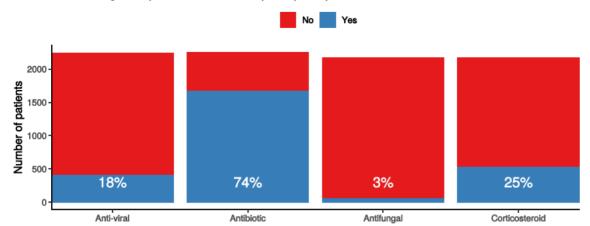
Figure 8B - Patients admitted >=14 days and <=28 days ago N=1113

## In-hospital medical treatment

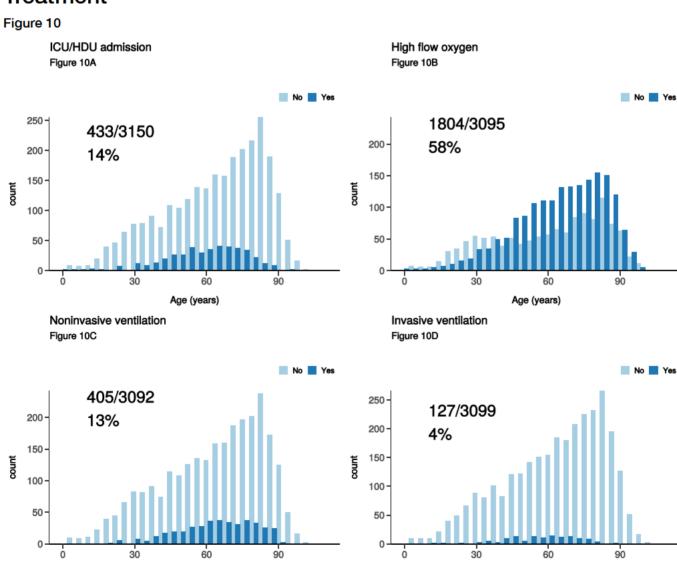
Figure 9

In-hospital treatment

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



#### **Treatment**



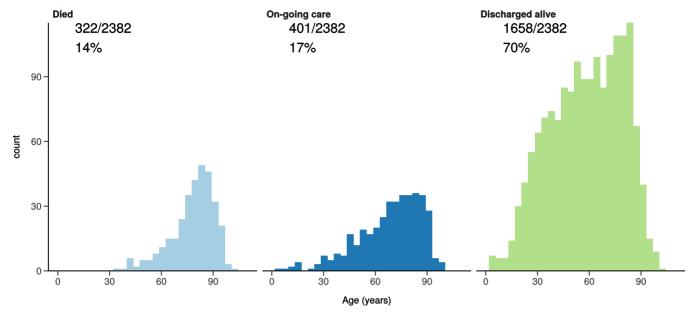
Age (years)

Status in patients admitted >=14 days from today

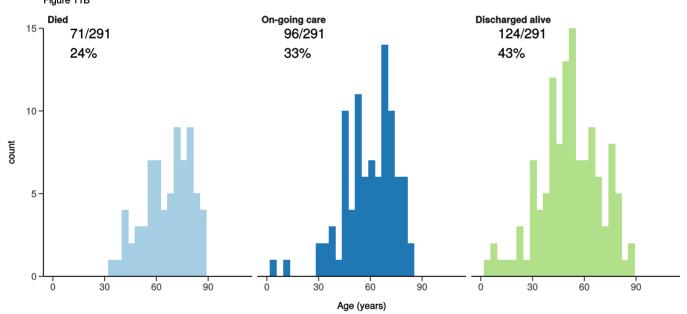
Age (years)

Figure 11

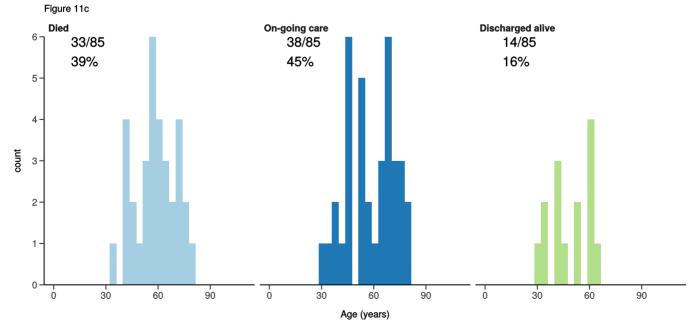
All: status in patients admitted >=14 days ago Figure 11A



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



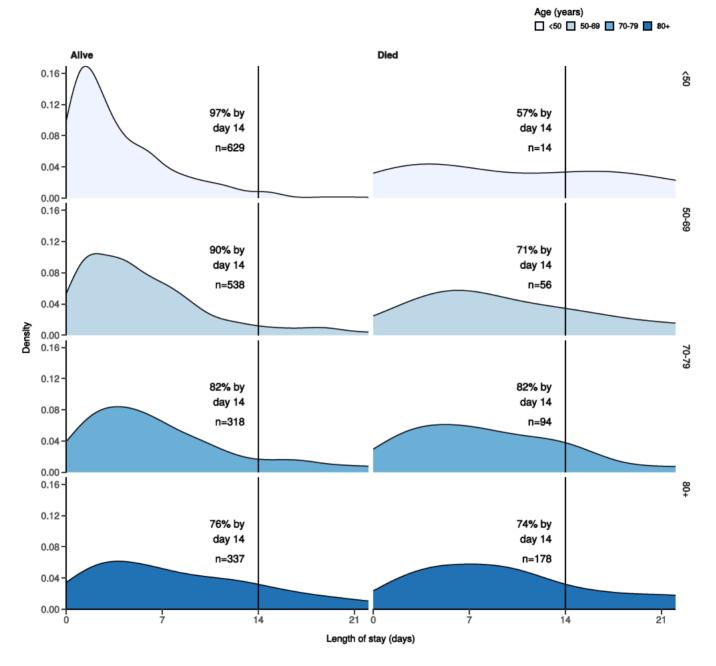
Invasive ventilation: status in patients admitted >=14 days ago



## Length of stay stratified by age

Figure 12

Length of stay stratified by age and mortality 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.

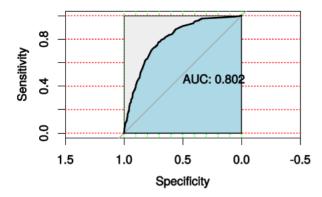
Dependent: death		No	Yes	OR (univariable)	OR (multivariable)
Age on admission (years)	<50	625 (97.8)	14 (2.2)	•	•
	50-69	502 (90.1)	55 (9.9)	4.89 (2.77-9.24, p<0.001)	4.06 (2.16-8.19, p<0.001)
	70-79	303 (77.9)	86 (22.1)	12.67 (7.32-23.61, p<0.001)	8.10 (4.30-16.42, p<0.001)
	80+	331 (66.6)	166 (33.4)	22.39 (13.23-41.02, p<0.001)	12.41 (6.65-25.04, p<0.001)
Sex at Birth	Male	917 (83.7)	178 (16.3)	•	•

Dependent: death		No	Yes	OR (univariable)	OR (multivariable)
	Female	844 (85.5)	143 (14.5)	0.87 (0.69-1.11, p=0.265)	1.01 (0.75-1.37, p=0.927)
	Not specified	0 (NaN)	0 (NaN)	•	•
Chronic cardiac disease	NO	1265 (89.0)	157 (11.0)	•	•
	YES	337 (70.5)	141 (29.5)	3.37 (2.61-4.36, p<0.001)	1.64 (1.19-2.27, p=0.003)
Chronic pulmonary disease (not asthma)	NO	1397 (87.0)	208 (13.0)	•	•
	YES	199 (69.6)	87 (30.4)	2.94 (2.19-3.92, p<0.001)	1.42 (0.99-2.02, p=0.057)
Chronic neurological disorder	NO	1473 (85.7)	246 (14.3)	•	•
	YES	124 (72.9)	46 (27.1)	2.22 (1.53-3.18, p<0.001)	1.77 (1.12-2.74, p=0.012)
Chronic hematologic disease	NO	1541 (85.1)	269 (14.9)	•	•
	YES	51 (68.9)	23 (31.1)	2.58 (1.53-4.25, p<0.001)	1.31 (0.66-2.52, p=0.429)
Chronic kidney disease	NO	1438 (86.7)	221 (13.3)	•	•
	YES	161 (68.2)	75 (31.8)	3.03 (2.22-4.12, p<0.001)	1.26 (0.85-1.87, p=0.244)
Dementia	NO	1497 (86.5)	234 (13.5)	•	•
	YES	112 (67.1)	55 (32.9)	3.14 (2.20-4.44, p<0.001)	1.34 (0.84-2.11, p=0.219)
Obesity (as defined by clinical staff)	NO	1201 (84.1)	227 (15.9)	•	•
	YES	193 (88.9)	24 (11.1)	0.66 (0.41-1.01, p=0.067)	0.93 (0.55-1.50, p=0.764)
Malignant neoplasm	NO	1496 (86.3)	237 (13.7)	•	•
	YES	97 (64.2)	54 (35.8)	3.51 (2.44-5.02, p<0.001)	2.95 (1.90-4.54, p<0.001)

Number in dataframe = 2858, Number in model = 1601, Missing = 1257, AIC = 1145, C-statistic = 0.802, H&L = Chi-sq(8) 12.52 (p=0.130)

Figure 13 - Adjusted odds ratio plot

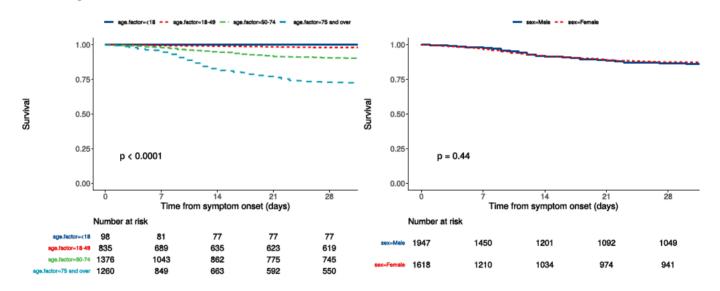
Death			
Age on admission (years)	<50	-	•
	50-69	4.06 (2.16-8.19, p<0.001)	<b>⊢</b>
	70-79	8.10 (4.30-16.42, p<0.001)	·
	<b>80</b> +	12.41 (6.65-25.04, p<0.001)	<del></del>
Sex at Birth	Male	-	•
	Female	1.01 (0.75-1.37, p=0.927)	<b>⊢</b>
Not:	specified	-	•
Chronic cardiac disease	YES	1.64 (1.19-2.27, p=0.003)	<b>├──</b>
Chronic pulmonary disease (not a	sthm <b>¥#</b> S	1.42 (0.99-2.02, p=0.057)	<del></del>
Chronic neurological disorder	YES	1.77 (1.12-2.74, p=0.012)	ļ ———
Chronic hematologic disease	YES	1.31 (0.66-2.52, p=0.429)	<b>—</b>
Chronic kidney disease	YES	1.26 (0.85-1.87, p=0.244)	<b>⊢</b>
Dementia	YES	1.34 (0.84-2.11, p=0.219)	<del>-                                    </del>
Obesity (as defined by clinical sta-	ff) YES	0.93 (0.55-1.50, p=0.764)	·
Malignant neoplasm	YES	2.95 (1.90-4.54, p<0.001)	<b>⊢</b>
			1 2 5 10
			Odds ratio (95% CI, log scale)



#### 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	933 (26.1)	•	•
	50-69	1055 (29.5)	4.73 (2.59-8.62, p<0.001)	4.32 (2.09-8.91, p<0.001)
	70-79	685 (19.2)	12.83 (7.19-22.90, p<0.001)	10.82 (5.35-21.91, p<0.001)
	80+	898 (25.1)	21.28 (12.12-37.36, p<0.001)	16.08 (7.95-32.50, p<0.001)
Sex at Birth	Male	1947 (54.6)	•	•
	Female	1618 (45.4)	0.92 (0.75-1.14, p=0.444)	1.09 (0.84-1.41, p=0.503)
qSOFA score on admission	0	1414 (50.1)	•	•
	1	1192 (42.3)	2.47 (1.89-3.22, p<0.001)	2.73 (2.03-3.68, p<0.001)

Dependent: Surv(time, status)		all	HR (univariable)	HR (multivariable)
	2	200 (7.1)	6.37 (4.56-8.91, p<0.001)	4.12 (2.78-6.13, p<0.001)
	3	14 (0.5)	15.34 (6.69-35.17, p<0.001)	13.19 (5.11-34.08, p<0.001)
Symptomatic at presentation	No symptoms	327 (10.3)	•	•
	Symptoms	2838 (89.7)	1.23 (0.85-1.80, p=0.274)	•
Chronic cardiac disease	NO	2250 (74.3)	•	•
	YES	778 (25.7)	3.04 (2.44-3.78, p<0.001)	1.37 (1.05-1.80, p=0.021)
Chronic kidney disease	NO	2646 (87.4)	•	•
	YES	382 (12.6)	2.73 (2.12-3.52, p<0.001)	1.19 (0.86-1.65, p=0.285)
Moderate or severe liver disease	NO	2965 (98.5)	•	•
	YES	46 (1.5)	2.31 (1.23-4.33, p=0.009)	1.96 (0.90-4.25, p=0.090)
Chronic neurological disorder	NO	2737 (90.9)	•	•
	YES	275 (9.1)	2.15 (1.59-2.91, p<0.001)	•
Malignant neoplasm	NO	2780 (92.1)	•	•
	YES	237 (7.9)	3.06 (2.29-4.08, p<0.001)	2.36 (1.70-3.27, p<0.001)
Chronic hematologic disease	NO	2899 (96.3)	•	•
	YES	110 (3.7)	2.01 (1.32-3.08, p=0.001)	•
Obesity (as defined by clinical staff)	NO	2300 (86.7)	•	•
	YES	352 (13.3)	0.75 (0.51-1.10, p=0.136)	0.90 (0.58-1.39, p=0.628)
Diabetes without complications	NO	2498 (87.1)	•	•
	YES	371 (12.9)	1.43 (1.06-1.94, p=0.019)	•
Rheumatologic disorder	NO	2665 (88.6)	•	•
	YES	343 (11.4)	1.53 (1.13-2.06, p=0.006)	•
Dementia	NO	2750 (91.2)	•	•
	YES	264 (8.8)	3.05 (2.30-4.05, p<0.001)	1.14 (0.78-1.66, p=0.502)
Malnutrition	NO	2756 (97.7)	•	•
	YES	65 (2.3)	2.34 (1.37-4.00, p=0.002)	•
smoking_mhyn_2levels	NO	1728 (55.7)	•	•
	YES	169 (5.4)	0.89 (0.52-1.51, p=0.668)	•
	N/K	1206 (38.9)	1.40 (1.13-1.75, p=0.003)	•

Number in dataframe = 3582, Number in model = 2296, Missing = 1286, Number of events = 246, Concordance = 0.819 (SE = 0.012), R-squared = 0.136( Max possible = 0.796), Likelihood ratio test = 336.814 (df = 13, p = 0.000)

Figure 16a - Multivariable Cox proportional hazards model

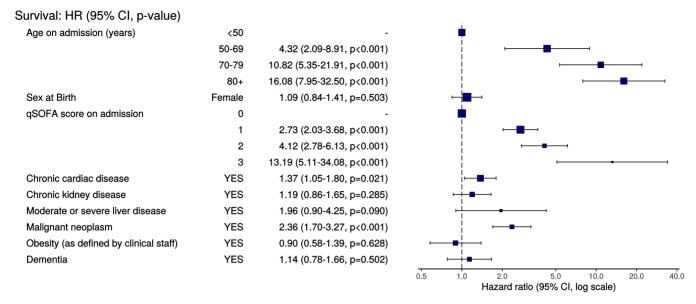
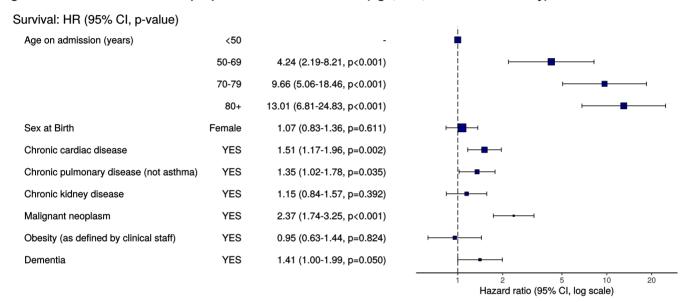


Figure 16b - Multivariable Cox proportional hazards model (age, sex, comorbidities only)



ROC = 0.8182096

Figure 17 - Predictions calibration plot

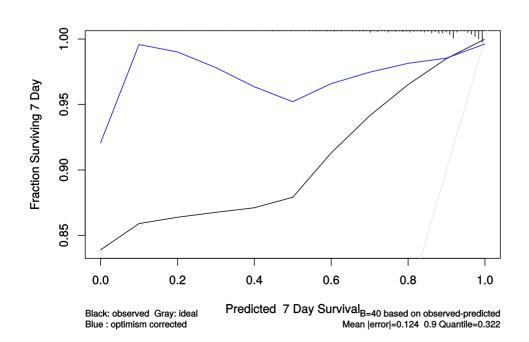


Figure 18 - Prognostic model predictions

Again, for demonstration of methods.

Prognostic model for survival 7 days after onset qSOFA score on admission

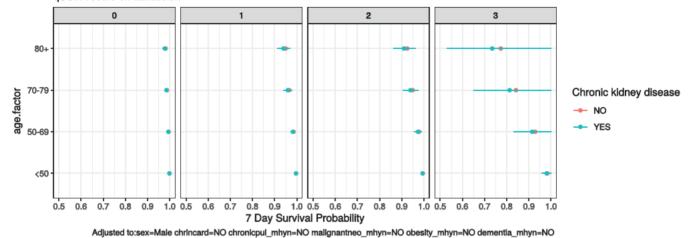


Figure 19 - Death by severity (NEWS) on admission

Number of deaths by NEWS score at admission

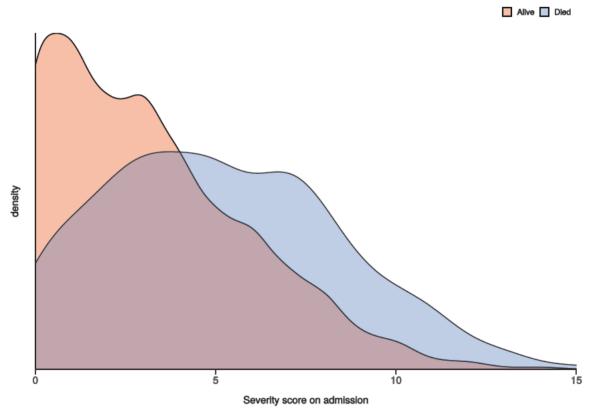


Figure 20 - Death by severity (NEWS) on admission stratified by age

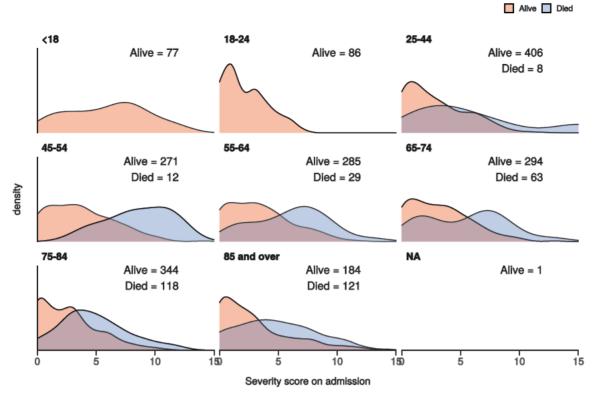
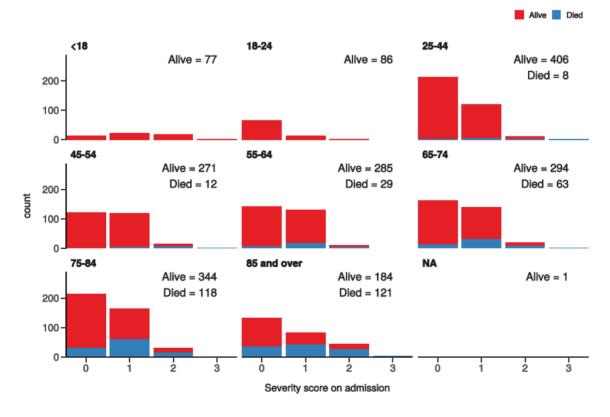


Figure 21 - Death by severity (qSOFA) on admission stratified by age





### Healthcare workers

Employed as a healthcare worker?		NO	YES	р
Total N (%)		3050 (97.4)	83 (2.6)	
NEWS score on admission	Median (IQR)	3.0 (5.0)	3.0 (4.0)	0.257

Employed as a healthcare worker?		NO	YES	р
Death	No	1652 (83.4)	58 (98.3)	0.004
	Yes	330 (16.6)	1 (1.7)	

## Admission (detail)

## Table 1

label	levels	all	value
Total N (%)		3597 (100.0)	
Age on admission (years)	Mean (SD)	63.1 (27.1)	
Sex at Birth	Male	1957 (54.4)	
	Female	1623 (45.1)	
	Not specified	4 (0.1)	
	(Missing)	13 (0.4)	
Employed as a healthcare worker?	YES	83 (2.3)	
	NO	3050 (84.8)	
	N/A	380 (10.6)	
	(Missing)	84 (2.3)	
Employed in a microbiology laboratory?	YES	0 (0.0)	
	NO	122 (3.4)	
	N/A	4 (0.1)	
	(Missing)	3471 (96.5)	
Onset to admission (days)	Mean (SD)	146.6 (7216.5)	
Transfer from other facility?	Yes-other facility is a study site	31 (0.9)	
	Yes-other facility is not a study site	60 (1.7)	
	No	3048 (84.7)	
	N/A	175 (4.9)	
	(Missing)	283 (7.9)	
Travel in the 14 days prior to first symptom onset?	Yes	3 (0.1)	
	No	82 (2.3)	
	N/A	12 (0.3)	
	(Missing)	3500 (97.3)	
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	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)	

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)	3594 (99.9)	
	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 val	ue
	Yemen	0 (0.0)	
	Zambia	0 (0.0)	
	Zimbabwe	0 (0.0)	
	(Missing)	3595 (99.9)	
Contact with animals, raw meat or insect bisymptom onset?	Yes	0 (0.0)	
	No	64 (1.8)	
	Unknown	27 (0.8)	
	N/A	6 (0.2)	
	(Missing)	3500 (97.3)	

## Symptoms (detail)

## Table 2

Stratified: all		all
Total N (%)		3597 (100.0)
History of fever	YES	1672 (46.5)
	NO	1353 (37.6)
	Unknown	106 (2.9)
	(Missing)	466 (13.0)
Cough	YES	1632 (45.4)
	NO	1372 (38.1)
	Unknown	124 (3.4)
	(Missing)	469 (13.0)
Cough: with sputum production	YES	577 (16.0)
	NO	2201 (61.2)
	Unknown	339 (9.4)
	(Missing)	480 (13.3)
Cough: bloody sputum / haemoptysis	YES	66 (1.8)
	NO	2693 (74.9)
	Unknown	354 (9.8)
	(Missing)	484 (13.5)
Sore throat	YES	151 (4.2)
	NO	2443 (67.9)
	Unknown	506 (14.1)
	(Missing)	497 (13.8)
Runny nose (Rhinorrhoea)	YES	43 (1.2)
	NO	2545 (70.8)

		<del></del>
	Unknown	510 (14.2)
	(Missing)	499 (13.9)
Ear pain	YES	14 (0.4)
	NO	2549 (70.9)
	Unknown	534 (14.8)
	(Missing)	500 (13.9)
Wheezing	YES	196 (5.4)
	NO	2550 (70.9)
	Unknown	353 (9.8)
	(Missing)	498 (13.8)
Chest pain	YES	465 (12.9)
	NO	2342 (65.1)
	Unknown	300 (8.3)
	(Missing)	490 (13.6)
Muscle aches (Myalgia)	YES	410 (11.4)
	NO	2204 (61.3)
	Unknown	487 (13.5)
	(Missing)	496 (13.8)
Joint pain (Arthralgia)	YES	141 (3.9)
	NO	2419 (67.3)
	Unknown	540 (15.0)
	(Missing)	497 (13.8)
Fatigue / Malaise	YES	1077 (29.9)
	NO	1659 (46.1)
	Unknown	370 (10.3)
	(Missing)	491 (13.7)
Shortness of breath (Dyspnea)	YES	1778 (49.4)
	NO	1248 (34.7)
	Unknown	122 (3.4)
	(Missing)	449 (12.5)
Lower chest wall indrawing	YES	24 (0.7)
	NO	2540 (70.6)
	Unknown	533 (14.8)
		500 (13.9)
	(Missing)	000 (10.0)
Headache	(Missing) YES	344 (9.6)

	Unknown	453 (12.6)
	(Missing)	499 (13.9)
Altered consciousness / confusion	YES	489 (13.6)
	NO	2373 (66.0)
	Unknown	248 (6.9)
	(Missing)	487 (13.5)
Seizures	YES	38 (1.1)
	NO	2755 (76.6)
	Unknown	304 (8.5)
	(Missing)	500 (13.9)
Abdominal pain	YES	377 (10.5)
	NO	2423 (67.4)
	Unknown	306 (8.5)
	(Missing)	491 (13.7)
Vomiting / Nausea	YES	645 (17.9)
	NO	2228 (61.9)
	Unknown	238 (6.6)
	(Missing)	486 (13.5)
Diarrhoea	YES	495 (13.8)
	NO	2346 (65.2)
	Unknown	266 (7.4)
	(Missing)	490 (13.6)
Conjunctivitis	YES	9 (0.3)
	NO	2624 (72.9)
	Unknown	462 (12.8)
	(Missing)	502 (14.0)
Skin rash	YES	35 (1.0)
	NO	2647 (73.6)
	Unknown	415 (11.5)
	(Missing)	500 (13.9)
Skin ulcers	YES	27 (0.8)
	NO	2660 (74.0)
	Unknown	411 (11.4)
	(Missing)	499 (13.9)
Lymphadenopathy	YES	19 (0.5)

	Unknown	400 (11.1)
	(Missing)	499 (13.9)
Bleeding (Haemorrhage)	YES	46 (1.3)
	NO	2726 (75.8)
	Unknown	325 (9.0)
	(Missing)	500 (13.9)
If Bleeding (others)	YES	0 (0.0)
	NO	89 (2.5)
	Unknown	5 (0.1)
	(Missing)	3503 (97.4)

## Comorbidity (detail)

## Table 3

Stratified: all		all
Total N (%)		3597 (100.0)
Chronic cardiac disease	YES	782 (21.7)
	NO	2256 (62.7)
	Unknown	117 (3.3)
	(Missing)	442 (12.3)
Chronic pulmonary disease (not asthma)	YES	472 (13.1)
	NO	2556 (71.1)
	Unknown	120 (3.3)
	(Missing)	449 (12.5)
Asthma (physician diagnosed)	YES	420 (11.7)
	NO	2608 (72.5)
	Unknown	122 (3.4)
	(Missing)	447 (12.4)
Chronic kidney disease	YES	384 (10.7)
	NO	2654 (73.8)
	Unknown	110 (3.1)
	(Missing)	449 (12.5)
Moderate or severe liver disease	YES	46 (1.3)
	NO	2975 (82.7)
	Unknown	124 (3.4)
	(Missing)	452 (12.6)
Mild Liver disease	YES	64 (1.8)

	NO	2953 (82.1)
	Unknown	129 (3.6)
	(Missing)	451 (12.5)
Chronic neurological disorder	YES	275 (7.6)
	NO	2747 (76.4)
	Unknown	126 (3.5)
	(Missing)	449 (12.5)
Malignant neoplasm	YES	238 (6.6)
	NO	2789 (77.5)
	Unknown	123 (3.4)
	(Missing)	447 (12.4)
Chronic hematologic disease	YES	110 (3.1)
	NO	2909 (80.9)
	Unknown	128 (3.6)
	(Missing)	450 (12.5)
AIDS/HIV	YES	18 (0.5)
	NO	2892 (80.4)
	Unknown	237 (6.6)
	(Missing)	450 (12.5)
Obesity (as defined by clinical staff)	YES	352 (9.8)
	NO	2310 (64.2)
	Unknown	481 (13.4)
	(Missing)	454 (12.6)
Diabetes with complications	YES	169 (4.7)
	NO	2711 (75.4)
	Unknown	267 (7.4)
	(Missing)	450 (12.5)
Diabetes without complications	YES	372 (10.3)
	NO	2507 (69.7)
	Unknown	266 (7.4)
	(Missing)	452 (12.6)
Rheumatologic disorder	YES	344 (9.6)
	NO	2674 (74.3)
	Unknown	131 (3.6)
	(Missing)	448 (12.5)

	NO	2759 (76.7)
	Unknown	128 (3.6)
	(Missing)	445 (12.4)
Malnutrition	YES	66 (1.8)
	NO	2764 (76.8)
	Unknown	316 (8.8)
	(Missing)	451 (12.5)
Smoking	YES	171 (4.8)
	NO	1732 (48.2)
	N/K	1210 (33.6)
	(Missing)	484 (13.5)