

Table 1. The REporting of studies Conducted using Observational Routinely-collected health Data (RECORD) Statement (extended from the STROBE statement)

	Item No.	STROBE items	Location in manuscript where items are reported	Page No.	RECORD items	Location in manuscript where items are reported	Page No.
Title and abstract							
	1	(a) Indicate the study's design with a commonly used term in the title or the abstract (b) Provide in the abstract an informative and balanced summary of what was done and what was found	(a) Study design is named in title (Time Series Regression Study) (b) What was done: Overview in the method section (starting line 21), what was found: Overview in the results section (starting line 28)	(a) Title (b) Abstract	RECORD 1.1: The type of data used should be specified in the title or abstract. When possible, the name of the databases used should be included. RECORD 1.2: If applicable, the geographic region and timeframe within which the study took place should be reported in the title or abstract. RECORD 1.3: If linkage between databases was conducted for the study, this should be clearly stated in the title or abstract.	1.1) Data type was named in the abstract (German statutory health data, line 21-22) 1.2) Geographic region (Germany, line 26) and the timeframe (2009-2023, line 21) was named in the abstract 1.3) Analyses of different regions (line 26)	1.1) Abstract 1.2) Abstract 1.3) Abstract
Introduction							
Background rationale	2	Explain the scientific background and rationale for the investigation being reported	Explain the scientific background and rationale (climate: line 59 following, public health: line 62 following, intensive care unit: line 67 following, evidence: line 66 following)	1			
Objectives	3	State specific objectives, including any prespecified hypotheses	State the aim and the objective (line 76 following)	1			
Methods							
Study Design	4	Present key elements of study design	Named study design in the title and begin of method section (title and line 84)	Title and page 2			

		early in the paper					
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Describe the data source (health: line 100 following, atmosphere: line 134 following), study period (line 102) and the study area (line 124 following)	2-4			
Participants	6	(a) <i>Cohort study</i> - Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up <i>Case-control study</i> - Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls <i>Cross-sectional study</i> - Give the eligibility criteria, and the sources and methods of selection of participants (b) <i>Cohort study</i> - For matched studies, give	(a) – (b) –	(a) – (b) –	RECORD 6.1: The methods of study population selection (such as codes or algorithms used to identify subjects) should be listed in detail. If this is not possible, an explanation should be provided. RECORD 6.2: Any validation studies of the codes or algorithms used to select the population should be referenced. If validation was conducted for this study and not published elsewhere, detailed methods and results should be provided. RECORD 6.3: If the study involved linkage of databases, consider use of a flow diagram or other graphical display to demonstrate the data linkage process, including the number of individuals with linked data at each stage.	6.1) Definition of selection criteria including ICD-10-GM and OPS codes (line 112 following and line 118 following + Supplementary Table 2, 3, 4 and 5) 6.2) Detailed description of the used codes for definition of intensive care medicine and relevant diseases (line 112 following and 116 following) 6.3) Data linkage based on geographical identifiers (Regionalization, line 123 following, Figure 1, line 172 following), regional differences not the focus of the study	6.1) page 3 and Supplementary Table 2, 3, 4 and 5 6.2) 3 6.3) page 2, Figure 1, page 5

		matching criteria and number of exposed and unexposed <i>Case-control study</i> - For matched studies, give matching criteria and the number of controls per case					
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable.	Clear definition of the outcome (line 109 and 115 following) and exposures (line 132 following)	3-4	RECORD 7.1: A complete list of codes and algorithms used to classify exposures, outcomes, confounders, and effect modifiers should be provided. If these cannot be reported, an explanation should be provided.	7.1) Complete list of codes for the outcome definition (Supplementary Table 2, 3, 4 and 5) and classification of the exposure variables (line 134 following and Supplementary Table 6), performed sensitivity studies including the testing for modifiers (line 167 following)	7.1) pages 4-5 and Supplementary Table 2, 3, 4, 5 and 6
Data sources/ measurement	8	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	Definition of outcome data (line 109 and 115 following + Supplementary) and exposure (line 134 following + Supplementary) as well as description of further statistical relevant variables (line 163 following)	Page 3 (+ Supplementary), page 4 (+ Supplementary) and page 5			
Bias	9	Describe any efforts to address potential sources of bias	Bias for exposure data was assessed (line 143 following), bias assessment in model performance (line 188), mentioned the bias due to selected study population (line 368 following) and due	4, 6 and 16			

			to monetary disincentives (line 372)				
Study size	10	Explain how the study size was arrived at	Description of the study sample (line 100 following)	2			
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen, and why	Explanation of data analysis for outcome and exposure data (line 150 following), subgroups due to the selected study sample (line 104 following)	2-3, 5-6			
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding (b) Describe any methods used to examine subgroups and interactions (c) Explain how missing data were addressed (d) <i>Cohort study</i> - If applicable, explain how loss to follow-up was addressed <i>Case-control study</i> - If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i> - If applicable, describe	(a) All statistical methods (line 150 – 195) (b) Subgroup definition due to study sample (line 104 following) (c) Whole section to data quality including outcome and exposure variables (line 141 following) (d) – (e) Sensitivity studies for model creation (line 167 following, 171 following and 194 following) and definition of predictor set (line 170 following)	(a) 4-6 (b) 2-3 (c) 4 (d) – (e) 5-6			

		analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses					
Data access and cleaning methods		..			RECORD 12.1: Authors should describe the extent to which the investigators had access to the database population used to create the study population. RECORD 12.2: Authors should provide information on the data cleaning methods used in the study.	12.1) Data sharing statement (line 411) 12.2) Data quality assessment section (line 141 following)	12.1) 18 12.2) 4
Linkage		..			RECORD 12.3: State whether the study included person-level, institutional-level, or other data linkage across two or more databases. The methods of linkage and methods of linkage quality evaluation should be provided.	12.3) Linkage of health and atmospheric data for regionalization (line 123 following, line 138 following and line 172 following)	12.3) 3-5
Results							
Participants	13	(a) Report the numbers of individuals at each stage of the study (<i>e.g.</i> , numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed)	(a) Report the number of individuals overall and for every subgroup (line 199 following and Table 1) (b) – (c) No flow diagram because all individuals were included	(a) page 7 and Table 1 (b) – (c) No flow diagram because all individuals were included	RECORD 13.1: Describe in detail the selection of the persons included in the study (<i>i.e.</i> , study population selection) including filtering based on data quality, data availability and linkage. The selection of included persons can be described in the text and/or by means of the study flow diagram.	13.1) Description of the health data (line 198-216), no study flow diagram was necessary because of the selected study population (narrow definition), data quality (line 141 following), data sharing statement (line 411 following)	13.1) 4, 7-8, 18, no flow diagram was necessary

		(b) Give reasons for non-participation at each stage. (c) Consider use of a flow diagram					
Descriptive data	14	(a) Give characteristics of study participants (<i>e.g.</i>, demographic, clinical, social) and information on exposures and potential confounders (b) Indicate the number of participants with missing data for each variable of interest (c) <i>Cohort study</i> - summarise follow-up time (<i>e.g.</i>, average and total amount)	(a) Characteristics of study participants which were available were described (line 199 following + Table 1) and information of the exposure data was given (line 217 following) (b) No missing variables due to study sample definition (data quality was ensured (line 141 following)) (c) –	(a) page 7 + Table 1, page 8 (b) 4 (c) –			
Outcome data	15	<i>Cohort study</i> - Report numbers of outcome events or summary measures over time <i>Case-control study</i> - Report numbers in each exposure category, or summary measures of exposure	The disease frequency for each subgroup was described (line 209 following + Table 1)	Page 8 + Table 1			

		<i>Cross-sectional study</i> - Report numbers of outcome events or summary measures					
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	(a) Overview of all model results (no details, because of the high number of models) (line 234 following), evaluate model performance (line 278 following) and detailed model results for the best-performing model (line 286 following) (b) – (c) Relative risks and 95% confidence interval of the best performing model (including all subgroups) (line 297 following)	(a) 10-12 (b) – (c) 12			
Other analyses	17	Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses	Analysis of age and sex specific differences (line 255 following)	10-11			

Discussion							
Key results	18	Summarise key results with reference to study objectives	Summary (line 308 following)	14			
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	Discussion the limitations and potential bias of the study (line 368 following)	16	RECORD 19.1: Discuss the implications of using data that were not created or collected to answer the specific research question(s). Include discussion of misclassification bias, unmeasured confounding, missing data, and changing eligibility over time, as they pertain to the study being reported.	19.1) Strengths as well as limitations of the study (line 360 following), specifically named the type of health data (line 360 following)	19.1) 16
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Interpretation and discussion of the study results (line 311 following)	14-15			
Generalisability	21	Discuss the generalisability (external validity) of the study results	Discuss the external validity (line 369 following)	16			
Other Information							
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which	The original study name (line 75 and 388) and the funding (line 393 following) are mentioned	1, 17			

		the present article is based					
Accessibility of protocol, raw data, and programming code		..			RECORD 22.1: Authors should provide information on how to access any supplemental information such as the study protocol, raw data, or programming code.	22.1) Supplemental information is added to the paper (Supplementary section) and a data sharing statement (line 411 following) is included	Page 18 + Supple- mentary

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Table 2. Definition of the intensive care unit according to Operation and Procedure (OPS) codes

Category	OPS-Code	Description	Remark
Intensive care complex treatment	8-98f	Complex intensive care treatment (basic procedure)	Relevant since 2013
Intensive care complex treatment	8-980	Intensive care treatment (basic procedure)	
Patient monitoring	8-920	EEG monitoring (at least 2 channels) for more than 24 h	
Patient monitoring	8-921	Monitoring by means of evoked potentials	
Patient monitoring	8-923	Monitoring of cerebral venous oxygen saturation	Since 2019 differentiation between invasive and non-invasive
Patient monitoring	8-924	Invasive neurological monitoring	
Patient monitoring	8-930	Monitoring of respiration, heart and circulation without measurement of pulmonary artery pressure and central venous pressure	
Patient monitoring	8-931	Monitoring of respiration, heart and circulation with measurement of central venous pressure	
Patient monitoring	8-932	Monitoring of respiration, heart and circulation with measurement of pulmonary artery pressure	

Table 3. Definition of intensive care unit according to specialist department code

Specialist department code	Description	Remark
36XX	Intensive care medicine	All department codes in the range 3600 to 3699 are included
0436	Nephrology/Intensive care medicine	
1536	General surgery/ Intensive care medicine	
2036	Thoracic surgery/ Intensive care medicine	
2050	Thoracic surgery/ Focus on cardiac surgery Intensive care medicine	
2136	Cardiac surgery/ Intensive care medicine	
2150	Cardiac surgery/ Focus on thoracic surgery Intensive care medicine	

Table 4. Definition of the intensive care unit (ICU) relevant diseases including International Statistical Classification Of Diseases And Related Health Problems, 10th revision, German Modification (ICD-10-GM) codes and the pick-up criterion

Category	Disease	ICD-10-GM code	Pick-up criterion
Cardiovascular	Heart insufficiency	I11.0, I13.0, I13.2, I50	ICU
	Coronary heart diseases (ST-segment elevation myocardial infarction - STEMI)	I21.0, I21.1, I21.2, I21.3	Independent of ICU
	Coronary heart disease (Non ST-segment elevation myocardial infarction – NSTEMI)	1: I21.4, I21.9, I20.0	1: Independent of ICU
		2: I20.1, I20.8, I20.9, I25.6, I25.8, I25.9	2: ICU
		3: I25.11, I25.12, I25.13, I25.14, I25.15, I25.16	3: ICU exclusive OPS code of 5-361
	Tachycardia	I47.0, I47.1, I47.2, I47.9, I48.00, I48.01, I48.10, I48.11, I47.0, I47.1, I47.2, I47.9, I48.0, I48.2, I48.3, I48.4	ICU
Pulmonary	Pulmonary artery embolism	I26	1: ICU independent of OPS code 8-020.8 2: Independent of ICU with the condition of OPS code 8-020.8
	Pneumonia	J10, J11, J12, J13, J14, J15, J16, J17, J18, J20, J21, J22	1: ICU 2: Independent of ICU but with ventilation (OPS code 8-71 and/or 8-70)
	Chronic obstructive pulmonary disease (COPD)	J44	1: ICU 2: Independent of ICU but with ventilation (OPS code 8-71 and/or 8-70)
Neurological	Ischemic insult	I63	Independent of ICU or Stroke Unit OPS code
	Transient ischemic attack	G45	Independent of ICU or Stroke Unit OPS code
	Non-Subdural hemorrhage	I60, I61	Independent of ICU or Stroke Unit OPS code
	Epilepsy	G40, G41	ICU
General internal	Sepsis	A40, A41, R65*	ICU
Traumatic	Trauma	S*, T00 – T14	ICU

*Subsidiary diagnosis

Table 5. Definition of stroke unit cases according to Operation and Procedure (OPS) codes

OPS code	Description
8-981	Neurological complex treatment
8-981.2	Stroke unit without thrombectomy/intracranial procedures
8-981.3	Stroke unit with thrombectomy/intracranial procedures
8-98b	Other complex neurological treatment of acute stroke
8-98b.2	Without telemedicine
8-98b.3	With telemedicine

Table 6. Overview of atmospheric and air hygiene variables and their calculation

Variable	Long name	Unit	Calculation
T	Mean temperature	°C	$T_D = \frac{\sum_{h=1}^{24} T_{Dh}}{24}$
SLP	Mean sea-level pressure	hPa	$SLP_D = \frac{\sum_{h=1}^{24} SLP_{Dh}}{24}$
SLPD	Substantial change in sea-level pressure compared to the previous day	-1 0 1	$SLPD_D = \begin{cases} SLP_D - SLP_{D-1} > +10 = +1 \\ -10 \leq SLP_D - SLP_{D-1} \leq +10 = 0 \\ SLP_D - SLP_{D-1} < -10 = -1 \end{cases}$
WD	Wind day	0 1	$WS_D = \frac{\sum_{h=1}^{24} WS_{Dh}}{24}$ $WD_D = \begin{cases} WS_D \leq WS_{Q95} = 0 \\ WS_D > WS_{Q95} = 1 \end{cases}$
WBGT	Wet-bulb globe temperature	°C	according to Lilijegren: $WBGT_{Dh} = 0.7T_{Wh} + 0.2T_{Gh} + 0.1T_{Ah}$ $WBGT_D = \max\{WBGT_{Dh}\}$
WCI	Windchill index	°C	$WCI_{Dh} = 13.12 + 0.6215T_{Dh} - 11.37WS_{Dh}^{0.16} + 0.3965T_{Dh}WS_{Dh}^{0.16}$ $WCI_D = \min\{WCI_{Dh}\}$
PM _{2.5}	Particular matter < 2.5µm	µg/m ³	$PM_{2.5D} = \frac{\sum_{h=1}^{24} PM_{2.5Dh}}{24}$
PM ₁₀	Particular matter < 10µm	µg/m ³	$PM_{10D} = \frac{\sum_{h=1}^{24} PM_{10Dh}}{24}$
NO ₂	Nitrogen dioxide	ppbv	$NO_{2D} = \frac{\sum_{h=1}^{24} NO_{2Dh}}{24}$
O ₃	Ozone	pbbv	$O_{3D} = \max\left\{\frac{\sum_{h=-1}^{-7} O_{3Dh}}{8}\right\}$
ID	Ice day	0 1	if $\max\{T_{Dh}\} < 0^\circ\text{C}$, 1 else 0
FD	Frost day	0 1	if $\min\{T_{Dh}\} < 0^\circ\text{C}$, 1 else 0
SD	Summer day	0 1	if $\max\{T_{Dh}\} > 25^\circ\text{C}$, 1 else 0
HD	Heat Day	0 1	if $\max\{T_{Dh}\} > 30^\circ\text{C}$, 1 else 0
TN	Tropical night	0 1	if $\min\{T_{Dh}\} > 20^\circ\text{C}$, 1 else 0
HWI	Heatwave intensity	°C	$HWI_D = \begin{cases} \text{if } T_D > T_{Q95}, \sum_{i=1}^n (T_D - T_{Q95}) \\ \text{if } T_D \leq T_{Q95}, \sum_{i=1}^n (T_D - T_{Q95}) \cdot N_D \end{cases}$ if $HWI_D < 0 \rightarrow HWI_D = 0$ if $HWI > 0$, 1 else 0
HWD _{Day}	Heatwave day	0 1	if $HWI > 0$, 1 else 0
HWD _{Dur}	Heatwave duration	N	Number of consecutive days with $HWI > 0$
HW	Heatwave	0 1	if $HWD_{Dur} > 2$, 1 else 0
HSWI	Heatstresswave intensity	°C	see HWI, but for WBGT instead of T
HSW _{Day}	Heatstresswave day	0 1	if $HSWI > 0$, 1 else 0
HSW _{Dur}	Heatstresswave duration	N	Number of consecutive days with $HSWI > 0$
HSW	Heatstresswave	0 1	if $HSW_{Dur} > 2$, 1 else 0
CWI	Coldwave intensity	°C	$CWI_D = \begin{cases} \text{if } T_D < T_{Q5}, \sum_{i=1}^n (T_D - T_{Q5}) \\ \text{if } T_D \geq T_{Q5}, \sum_{i=1}^n (T_D - T_{Q5}) \cdot N_D \end{cases}$ if $CWI_D > 0 \rightarrow CWI_D = 0$ if $CWI < 0$, 1 else 0
CW _{Day}	Coldwave day	0 1	if $CWI < 0$, 1 else 0
CW _{Dur}	Coldwave duration	N	Number of consecutive days with $CWI < 0$
CW	Coldwave	0 1	if $CW_{Dur} > 2$, 1 else 0
CSWI	Coldstresswave intensity	°C	see CWI, but for WCI instead of T
CSW _{Day}	Coldstresswave day	0 1	if $CSWI < 0$, 1 else 0
CSW _{Dur}	Coldstresswave duration	N	Number of consecutive days with $CSWI < 0$
CSW	Coldstresswave	0 1	if $CSW_{Dur} > 2$, 1 else 0

D = Day; h = Hour; Q95 = 95th quantile; Q5 = 5th quantile; N_D = Number of consecutive days with $T_D \geq T_{Q5}$ (cold), $WCI_D \geq WCI_{Q5}$ (coldstress), $T_D \leq T_{Q95}$ (heat) or $WBGT_D \geq WBGT_{Q95}$ (heatstress); n = Number of days with HWI or HSWI > 0 or CWI or CSWI < 0

Table 7. Proportion of significant models per disease for intensive care units in Germany (across regions and subgroups), data are given in percent [%]

Disease	Predictors									
	HSWDay	SLPD	TN	WBG	HSWI	ID	CSW	CSWDur	CWDur	CSWI
Chronic obstructive pulmonary disease (COPD)	0.0	47.7	0.0	20.5	0.0	22.7	20.5	0.0	13.6	9.1
Epilepsy	0.0	38.6	0.0	9.1	9.1	0.0	20.5	0.0	9.1	9.1
Heart Failure	0.0	0.0	20.5	11.4	0.0	0.0	0.0	0.0	0.0	13.6
Ischemic stroke	0.0	0.0	34.1	0.0	15.9	0.0	0.0	9.1	0.0	4.6
Ischemic stroke (stroke unit)	34.1	34.1	25.0	25.0	15.9	11.4	9.1	6.8	6.8	4.6
Pulmonary artery embolism	27.3	34.1	34.1	0.0	13.6	31.8	0.0	0.0	0.0	0.0
Myocardial infarction (NSTEMI)	0.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	0.0	31.8	29.6	6.8	0.0	0.0	0.0	0.0	0.0	15.9
Non subdural hemorrhage (stroke unit)	0.0	0.0	18.2	40.9	0.0	0.0	0.0	0.0	0.0	0.0
Pneumonia	0.0	36.4	43.2	0.0	18.2	0.0	0.0	18.2	20.5	18.2
Myocardial infarction (STEMI)	0.0	0.0	29.6	0.0	0.0	0.0	0.0	0.0	15.9	0
Sepsis	0.0	45.5	0.0	15.9	0.0	0.0	0.0	0.0	0.0	11.4
Transient ischemic attack	0.0	54.6	20.5	13.6	0.0	0.0	6.8	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	0.0	0.0	9.1	0.0	0.0	0.0	13.6	0.0	0.0
Tachycardia	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0	20.5	0.0
Trauma	6.8	0.0	18.2	25.0	0.0	29.6	0.0	0.0	36.4	11.4

Table 7. Continued

Disease	Predictors									
	WD	SLP	HD	SD	T	O ₃	PM ₁₀	CWI	FD	HW
Chronic obstructive pulmonary disease (COPD)	0.0	29.6	0.0	0.0	11.4	9.1	13.6	11.4	25.0	0.0
Epilepsy	40.9	0.0	0.0	0.0	0.0	18.2	0.0	0.0	34.1	0.0
Heart Failure	0.0	43.2	0.0	45.5	15.9	0.0	18.2	0.0	0.0	0.0
Ischemic stroke	50.0	47.7	27.3	27.3	22.7	20.5	20.5	15.9	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	45.5	36.4	0.0	20.5	0.0	54.6	34.1	0.0	0.0	0.0
Myocardial infarction (NSTEMI)	36.4	59.1	0.0	0.0	0.0	0.0	29.6	0.0	34.1	34.1
Non subdural hemorrhage	40.9	34.1	18.2	25.0	13.6	13.6	0.0	6.8	0.0	13.6
Non subdural hemorrhage (stroke unit)	52.3	0.0	27.3	0.0	0.0	27.3	0.0	0.0	0.0	0.0
Pneumonia	15.9	36.4	0.0	0.0	11.4	29.6	0.0	6.8	43.2	0.0
Myocardial infarction (STEMI)	0.0	45.5	29.6	45.5	0.0	34.1	0.0	0.0	0.0	0.0
Sepsis	29.6	29.6	0.0	31.8	9.1	0.0	0.0	0.0	38.6	0.0
Transient ischemic attack	0.0	0.0	0.0	36.4	0.0	6.8	0.0	0.0	0.0	20.5
Transient ischemic attack (stroke unit)	36.4	25.0	0.0	52.3	0.0	0.0	18.2	0.0	40.9	0.0
Tachycardia	50.0	40.9	29.6	0.0	0.0	20.5	0.0	0.0	0.0	0.0
Trauma	0.0	40.9	29.6	0.0	4.6	15.9	11.4	0.0	20.5	13.6

Table 7. Continued

Disease	Predictors									
	WCI	HSWDur	HSW	CW	HWI	HWDur	PM _{2.5}	HSWDur	CSWDur	NO ₂
Chronic obstructive pulmonary disease (COPD)	0.0	0.0	34.1	25.0	15.9	0.0	0.0	0.0	0.0	0.0
Epilepsy	0.0	0.0	0.0	0.0	0.0	34.1	27.3	0.0	0.0	0.0
Heart Failure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.6	13.6	0.0
Ischemic stroke	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	18.2	0.0	0.0	0.0	13.6	0.0	0.0	22.7	0.0	0.0
Myocardial infarction (NSTEMI)	34.1	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	20.5	0.0	0.0	0.0	0.0	0.0	36.4	9.1	27.3	0.0
Non subdural hemorrhage (stroke unit)	34.1	0.0	0.0	0.0	15.9	0.0	0.0	0.0	0.0	0.0
Pneumonia	9.1	0.0	0.00	34.1	0.0	0.0	0.0	0.0	0.0	22.7
Myocardial infarction (STEMI)	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sepsis	6.8	0.0	0.0	0.0	0.0	36.4	0.0	0.0	0.0	0.0
Transient ischemic attack	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	6.8	0.0
Transient ischemic attack (stroke unit)	15.9	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	13.6
Tachycardia	22.7	0.0	0.0	0.0	18.2	31.8	0.0	0.0	0.0	0.0
Trauma	4.6	0.0	0.0	0.0	18.2	13.6	20.5	0.0	0.0	25.0

Table 8. Proportion of significant models per disease for intensive care units for men in Germany (across regions and subgroups), data are given in percent [%], red numbers = not significant in any model but part of the predictor set

Disease	Predictors								
	SLPD	WBG	HSWDay	TN	CSW	CWDur	ID	HSWI	CSWDur
Chronic obstructive pulmonary disease (COPD)	45.5	22.7	0.0	0.0	9.1	13.6	22.7	0.0	0.0
Epilepsy	36.4	13.6	0.0	0.0	18.2	9.1	0.0	9.1	0.0
Heart Failure	0.0	13.6	0.0	22.7	0.0	0.0	0.0	0.0	0.0
Ischemic stroke	0.0	0.0	0.0	36.4	0.0	0.0	0.0	22.7	13.6
Ischemic stroke (stroke unit)	31.8	31.8	22.7	22.7	13.6	13.6	13.6	9.1	4.6
Pulmonary artery embolism	27.3	0.0	31.8	31.8	0.0	0.0	36.4	18.2	0.0
Myocardial infarction (NSTEMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	0.0
Non subdural hemorrhage	18.2	13.6	0.0	18.2	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage (stroke unit)	0.0	50.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0
Pneumonia	40.9	0.0	0.0	45.5	0.0	27.3	0.0	9.1	18.2
Myocardial infarction (STEMI)	0.0	0.0	0.0	31.8	0.0	13.6	0.0	0.0	0.0
Sepsis	36.4	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Transient ischemic attack	45.5	4.6	0.0	22.7	4.6	0.0	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	13.6
Tachycardia	0.0	0.0	0.0	13.6	0.0	13.6	0.0	0.0	0.0
Trauma	0.0	40.9	13.6	13.6	0.0	36.4	27.3	0.0	0.0

Table 8. Continued

Disease	Predictors									
	CSWI	WD	SLP	O ₃	HD	CWI	SD	T	PM ₁₀	HW
Chronic obstructive pulmonary disease (COPD)	4.6	0.0	22.7	9.1	0.0	9.1	0.0	4.6	9.1	0.0
Epilepsy	9.1	40.9	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
Heart Failure	18.2	0.0	45.5	0.0	0.0	0.0	59.1	13.6	22.7	0.0
Ischemic stroke	4.6	59.1	45.5	27.3	22.7	18.2	18.2	18.2	4.6	0.0
Ischemic stroke (stroke unit)	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	0.0	36.4	40.9	54.6	0.0	0.0	22.7	0.0	40.9	0.0
Myocardial infarction (NSTEMI)	0.0	36.4	63.6	0.0	0.0	0.0	0.0	0.0	27.3	40.9
Non subdural hemorrhage	27.3	40.9	45.5	18.2	18.2	4.6	27.3	13.6	0.0	13.6
Non subdural hemorrhage (stroke unit)	0.0	50.0	0.0	18.2	22.7	0.0	0.0	0.0	0.0	0.0
Pneumonia	18.2	22.7	40.9	18.2	0.0	4.6	0.0	4.6	0.00	0.0
Myocardial infarction (STEMI)	0.0	0.0	50.0	27.3	22.7	0.0	45.5	0.0	0.0	0.0
Sepsis	4.6	31.8	36.4	0.0	0.0	0.0	22.7	4.6	0.0	0.0
Transient ischemic attack	0.0	0.0	0.0	4.6	0.0	0.0	40.9	0.0	0.0	13.6
Transient ischemic attack (stroke unit)	0.0	36.4	27.3	0.0	0.0	0.00	54.6	0.0	22.7	0.0
Tachycardia	0.0	45.5	50.0	13.6	36.4	0.0	0.0	0.0	0.0	0.0
Trauma	9.1	0.0	31.8	18.2	40.9	0.0	0.0	9.1	0.0	22.7

Table 8. Continued

Disease	Predictors										
	WCI	FD	HSWDur	HSW	CW	HWI	HWDur	PM _{2.5}	HWDur	CSWDay	NO ₂
Chronic obstructive pulmonary disease (COPD)	0.0	22.7	0.0	31.8	27.3	22.7	0.0	0.0	0.0	0.0	0.0
Epilepsy	0.0	31.8	0.0	0.0	0.00	0.0	40.9	31.8	0.0	0.0	0.0
Heart Failure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45.5	9.1	0.0
Ischemic stroke	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	27.3	0.0	0.0	0.0	0.0	13.6	0.0	0.0	27.3	0.00	0.0
Myocardial infarction (NSTEMI)	40.9	36.4	9.1	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	18.2	0.0	0.0	0.0	0.0	0.0	0.0	36.4	13.6	27.3	0.0
Non subdural hemorrhage (stroke unit)	31.8	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0
Pneumonia	9.1	45.5	0.0	0.00	40.9	0.0	0.0	0.0	0.0	0.0	18.2
Myocardial infarction (STEMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sepsis	9.1	31.8	0.0	0.00	0.0	0.0	40.9	0.0	0.0	0.0	0.0
Transient ischemic attack	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	22.7	36.4	0.0	27.3	0.0	0.0	0.0	0.00	0.0	0.0	18.2
Tachycardia	13.6	0.0	0.0	0.0	0.0	18.2	31.8	0.0	0.0	0.0	0.0
Trauma	0.0	18.2	0.0	0.0	0.0	22.7	22.7	18.2	0.0	0.0	36.4

Table 9. Proportion of significant models per disease for intensive care units for women in Germany (across regions and subgroups), data are given in percent [%], red numbers = not significant in any model but part of the predictor set

Disease	Predictors									
	HSWDay	SLPD	TN	HSWI	WBGT	CSWDur	ID	CSW	CSWI	SLP
Chronic obstructive pulmonary disease (COPD)	0.0	50.0	0.0	0.0	18.2	0.0	22.7	31.8	13.6	36.4
Epilepsy	0.0	40.9	0.0	9.1	4.6	0.0	0.0	22.7	9.1	0.0
Heart Failure	0.0	0.0	18.2	0	9.1	0.0	0.0	0.0	9.1	40.9
Ischemic stroke	0.0	0.0	31.8	9.1	0.0	4.6	0.0	0.0	4.6	50.0
Ischemic stroke (stroke unit)	45.5	36.4	27.3	22.7	18.2	9.1	9.1	4.6	4.6	0.0
Pulmonary artery embolism	22.7	40.9	36.4	9.1	0.0	0.0	27.3	0.0	0.0	31.8
Myocardial infarction (NSTEMI)	0.0	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	54.6
Non subdural hemorrhage	0.0	45.5	40.9	0.0	0.0	0.0	0.0	0.0	4.6	22.7
Non subdural hemorrhage (stroke unit)	0.0	0.0	27.3	0.0	31.8	0.0	0.0	0.0	0.0	0.0
Pneumonia	0.0	31.8	40.9	27.3	0.0	18.2	0.0	0.0	18.2	31.8
Myocardial infarction (STEMI)	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	0.0	40.9
Sepsis	0.0	54.6	0.0	0.0	18.2	0.0	0.0	0.0	18.2	22.7
Transient ischemic attack	0.0	63.6	18.2	0.0	22.7	0.0	0.0	9.1	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	0.0	0.0	0.0	13.6	13.6	0.0	0.0	0.0	22.7
Tachycardia	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0	0.0	31.8
Trauma	0.0	0.0	22.7	0.0	9.1	0.0	31.8	0.0	13.6	50.0

Table 9. Continued

Disease	Predictors									
	WD	PM ₁₀	SD	HD	T	CWI	O ₃	CWDur	FD	HW
Chronic obstructive pulmonary disease (COPD)	0.0	18.2	0.0	0.0	18.2	13.6	9.1	13.6	27.3	0.0
Epilepsy	40.9	0.0	0.0	0.0	0.0	0.0	18.2	9.1	36.4	0.0
Heart Failure	0.0	13.6	31.8	0.0	18.2	0.0	0.0	0.0	0.0	0.0
Ischemic stroke	40.9	36.4	36.4	31.8	27.3	13.6	13.6	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	54.6	27.3	18.2	0.0	0.0	0.0	54.6	0.0	0.0	0.0
Myocardial infarction (NSTEMI)	36.4	31.8	0.0	0.0	0.0	0.0	0.0	0.0	31.8	27.3
Non subdural hemorrhage	40.9	0.0	22.7	18.2	13.6	9.1	9.1	0.0	0.0	13.6
Non subdural hemorrhage (stroke unit)	54.6	0.0	0.0	31.8	0.0	0.0	36.4	0.0	0.0	0.0
Pneumonia	9.1	0.0	0.0	0.0	18.2	9.1	40.9	13.6	40.9	0.0
Myocardial infarction (STEMI)	0.0	0.0	45.5	36.4	0.0	0.0	40.9	18.2	0.0	0.0
Sepsis	27.3	0.0	40.9	0.0	13.6	0.0	0.0	0.0	45.5	0.0
Transient ischemic attack	0.0	0.0	31.8	0.0	0.0	0.0	9.1	0.0	0.0	27.3
Transient ischemic attack (stroke unit)	36.4	13.6	50.0	0.0	0.0	0.0	0.0	0.0	45.5	0.0
Tachycardia	54.6	0.0	0.0	22.7	0.0	0.0	27.3	27.3	0.0	0.0
Trauma	0.0	22.7	0.0	18.2	0.0	0.0	13.6	36.4	22.7	4.6

Table 9. Continued

Disease	Predictors									
	WCI	HSWDur	HSW	CW	HWI	HWDay	PM _{2.5}	HWDur	CSWDay	NO ₂
Chronic obstructive pulmonary disease (COPD)	0.0	0.0	36.4	22.7	9.1	0.0	0.0	0.0	0.0	0.0
Epilepsy	0.0	0.0	0.0	0.0	0.0	27.3	22.7	0.0	0.0	0.0
Heart Failure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8	18.2	0.0
Ischemic stroke	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	9.1	0.0	0.0	0.0	13.6	0.0	0.0	18.2	0.0	0.0
Myocardial infarction (NSTEMI)	27.3	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	22.7	0.0	0.0	0.0	0.0	0.0	36.4	4.6	27.3	0.0
Non subdural hemorrhage (stroke unit)	36.4	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0
Pneumonia	9.1	0.0	0.0	27.3	0.0	0.0	0.0	0.0	0.0	27.3
Myocardial infarction (STEMI)	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sepsis	4.6	0.0	0.0	0.0	0.0	31.8	0.0	0.0	0.0	0.0
Transient ischemic attack	0	0.0	0.0	13.6	0.0	0.0	0.0	0.0	13.6	0.0
Transient ischemic attack (stroke unit)	9.1	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Tachycardia	31.8	0.0	0.0	0.0	18.2	31.8	0.0	0.0	0.0	0.0
Trauma	9.1	0.0	0.0	0.0	13.6	4.6	22.7	0.0	0.0	13.6

Table 10. Proportion of significant models per disease for intensive care units for persons aged ≥ 60 years in Germany (across regions and subgroups), data are given in percent [%], red numbers = not significant in any model but part of the predictor set

Disease	Predictors									
	SLPD	TN	HSWDay	CSW	HSWI	WBG	CWDur	CSWDur	CSWI	ID
Chronic obstructive pulmonary disease (COPD)	50.0	0.0	0.0	22.7	0.0	13.6	18.2	0.0	9.1	22.7
Epilepsy	31.8	0.0	0.0	18.2	9.1	9.1	4.6	0.0	9.1	0.0
Heart Failure	0.0	13.6	0.0	0.0	0.0	13.6	0.0	0.0	18.2	0.0
Ischemic stroke	0.0	31.8	0.0	0.0	27.3	0.0	0.0	4.6	0.0	0.0
Ischemic stroke (stroke unit)	36.4	31.8	18.2	13.6	13.6	13.6	9.1	4.6	4.6	4.6
Pulmonary artery embolism	31.8	45.5	36.4	0.0	13.6	0.0	0.0	0.0	0.0	31.8
Myocardial infarction (NSTEMI)	0.0	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	36.4	18.2	0.0	0.0	0.0	9.1	0.0	0.0	9.1	0.0
Non subdural hemorrhage (stroke unit)	0.0	13.6	0.0	0.0	0.0	45.5	0.0	0.0	0.0	0.0
Pneumonia	27.3	54.6	0.0	0.0	18.2	0.0	22.7	27.3	18.2	0.0
Myocardial infarction (STEMI)	0.0	22.7	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0
Sepsis	54.6	0.0	0.0	0.0	0.0	13.6	0.0	0.0	9.1	0.0
Transient ischemic attack	63.6	13.6	0.0	13.6	0.0	13.6	0.0	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	0.0	0.0	0.0	0.0	9.1	0.0	13.6	0.0	0.0
Tachycardia	0.0	22.7	0.0	0.0	0.0	0.0	27.3	0.0	0.0	0.0
Trauma	0.0	9.1	0.0	0.0	0.0	13.6	22.7	0.0	4.6	36.4

Table 10. Continued

Disease	Predictors									
	SLP	WD	HD	SD	T	O ₃	CWI	PM ₁₀	HW	FD
Chronic obstructive pulmonary disease (COPD)	36.4	0.0	0.0	0.0	13.6	9.1	13.6	4.6	0.0	36.4
Epilepsy	0.0	27.3	0.0	0.0	0.0	13.6	0.0	0.0	0.0	27.3
Heart Failure	50.0	0.0	0.0	59.1	9.1	0.0	0.0	9.1	0.0	0.0
Ischemic stroke	54.6	36.4	31.8	27.3	27.3	18.2	9.1	4.6	0.0	0.00
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	40.9	36.4	0.0	22.7	0.0	59.1	0.0	40.9	0.0	0.0
Myocardial infarction (NSTEMI)	68.2	31.8	0.0	0.0	0.0	0.0	0.0	27.3	54.6	50.0
Non subdural hemorrhage	27.3	27.3	18.2	18.2	22.7	18.2	4.6	0.0	13.6	0.0
Non subdural hemorrhage (stroke unit)	0.0	54.6	31.8	0.0	0.0	18.2	0.0	0.0	0.0	0.0
Pneumonia	40.9	22.7	0.0	0.0	0.0	36.4	9.1	0.0	0.0	36.4
Myocardial infarction (STEMI)	40.9	0.0	36.4	45.5	0.0	31.8	0.0	0.0	0.0	0.0
Sepsis	27.3	22.7	0.0	40.9	4.6	0.0	0.0	0.0	0.0	31.8
Transient ischemic attack	0.0	0.0	0.0	45.5	0.0	9.1	0.0	0.0	27.3	0.0
Transient ischemic attack (stroke unit)	31.8	31.8	0.0	72.7	0.0	0.0	0.0	13.6	0.0	31.8
Tachycardia	40.9	40.9	31.8	0.0	0.0	13.6	0.0	0.0	0.0	0.0
Trauma	50.0	0.0	27.3	0.0	0.0	22.7	0.0	13.6	18.2	22.7

Table 10. Continued

Disease	Predictors									
	WCI	HSWDur	HSW	HWI	CW	HWDur	PM _{2.5}	HWDur	CSWDay	NO ₂
Chronic obstructive pulmonary disease (COPD)	0.0	0.0	36.4	22.7	18.2	0.0	0.0	0.0	0.0	0.0
Epilepsy	0.0	0.0	0.0	0.0	0.0	63.6	31.8	0.0	0.0	0.0
Heart Failure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.6	4.6	0.0
Ischemic stroke	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	18.2	0.0	0.0	13.6	0.0	0.0	0.0	27.3	0.0	0.0
Myocardial infarction (NSTEMI)	27.3	13.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	22.7	0.0	0.0	0.0	0.0	0.0	22.7	13.6	22.7	0.0
Non subdural hemorrhage (stroke unit)	45.5	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.0
Pneumonia	4.6	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	18.2
Myocardial infarction (STEMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sepsis	9.1	0.0	0.0	0.0	0.0	54.6	0.0	0.0	0.0	0.0
Transient ischemic attack	0.0	0.0	0.0	0.0	9.1	0.0	0.0	0.0	4.6	0.0
Transient ischemic attack (stroke unit)	18.2	0.0	36.4	0.0	0.0	0.0	0.0	0.0	0.0	9.1
Tachycardia	27.3	0.0	0.0	22.7	0.0	31.8	0.0	0.0	0.0	0.0
Trauma	0.0	0.0	0.0	18.2	0.0	22.7	22.7	0.0	0.0	18.2

Table 11. Proportion of significant models per disease for intensive care units for persons aged < 60 years in Germany (across regions and subgroups), data are given in percent [%], red numbers = not significant in any model but part of the predictor set

Disease	Predictors									
	HSWDay	WBG	SLPD	HSWI	ID	TN	CSWDur	CSWI	CSW	CWDur
Chronic obstructive pulmonary disease (COPD)	0.0	27.3	45.5	0.0	22.7	0.0	0.0	9.1	18.2	9.1
Epilepsy	0.0	9.1	45.5	9.1	0.0	0.0	0.0	9.1	22.7	13.6
Heart Failure	0.0	9.1	0.0	0.0	0.0	27.3	0.0	9.1	0.0	0.0
Ischemic stroke	0.0	0.0	0.0	4.6	0.0	36.4	13.6	9.1	0.0	0.0
Ischemic stroke (stroke unit)	50.0	36.4	31.8	18.2	18.2	18.2	9.1	4.6	4.6	4.6
Pulmonary artery embolism	18.2	0.0	36.4	13.6	31.8	22.7	0.0	0.0	0.0	0.0
Myocardial infarction (NSTEMI)	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	0.0	4.6	27.3	0.0	0.0	40.9	0.0	22.7	0.0	0.0
Non subdural hemorrhage (stroke unit)	0.0	36.4	0.0	0.0	0.0	22.7	0.0	0.0	0.0	0.0
Pneumonia	0.0	0.0	45.5	18.2	0.0	31.8	9.1	18.2	0.0	18.2
Myocardial infarction (STEMI)	0.0	0.0	0.0	0.0	0.0	36.4	0.0	0.0	0.0	18.2
Sepsis	0.0	18.2	36.4	0.0	0.0	0.0	0.0	13.6	0.00	0.0
Transient ischemic attack	0.0	13.6	45.5	0.0	0.0	27.3	0.0	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	9.1	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0
Tachycardia	0.0	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0	13.6
Trauma	13.6	36.4	0.0	0.0	22.7	27.3	0.0	18.2	0.0	50.0

Table 11. Continued

Disease	Predictors									
	WD	SLP	PM ₁₀	SD	CWI	HD	O ₃	T	WCI	FD
Chronic obstructive pulmonary disease (COPD)	0.0	22.7	22.7	0.0	9.1	0.0	9.1	9.1	0.0	13.6
Epilepsy	54.6	0.0	0.0	0.0	0.0	0.0	22.7	0.0	0.0	40.9
Heart Failure	0.0	36.4	27.3	31.8	0.0	0.0	0.0	22.7	0.0	0.0
Ischemic stroke	63.6	40.9	36.4	27.3	22.7	22.7	22.7	18.2	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	54.6	31.8	27.3	18.2	0.0	0.0	50.0	0.0	18.2	0.0
Myocardial infarction (NSTEMI)	40.9	50.0	31.8	0.0	0.0	0.0	0.0	0.0	40.9	18.2
Non subdural hemorrhage	54.6	40.9	0.0	31.8	9.1	18.2	9.1	4.6	18.2	0.0
Non subdural hemorrhage (stroke unit)	50.0	0.0	0.0	0.0	0.0	22.7	36.4	0.0	22.7	0.0
Pneumonia	9.1	31.8	0.0	0.0	4.6	0.0	22.7	22.7	13.6	50.0
Myocardial infarction (STEMI)	0.0	50.0	0.0	45.5	0.0	22.7	36.4	0.0	0.0	0.0
Sepsis	36.4	31.8	0.0	22.7	0.0	0.0	0.0	13.6	4.6	45.5
Transient ischemic attack	0.0	0.0	0.0	27.3	0.0	0.0	4.6	0.0	0.0	0.0
Transient ischemic attack (stroke unit)	40.9	18.2	22.7	31.8	0.0	0.0	0.0	0.0	13.6	50.0
Tachycardia	59.1	40.9	0.0	0.0	0.0	27.3	27.3	0.0	18.2	0.0
Trauma	0.0	31.8	9.1	0.0	0.0	31.8	9.1	9.1	9.1	18.2

Table 11. Continued

Disease	Predictors									
	HW	HSWDur	CW	HSW	HWI	PM _{2.5}	HWDay	CSWDay	HWDur	NO ₂
Chronic obstructive pulmonary disease (COPD)	0.0	0.0	31.8	31.8	9.1	0.0	0.0	0.0	0.0	0.0
Epilepsy	0.0	0.0	0.0	0.0	0.0	22.7	4.6	0.0	0.0	0.0
Heart Failure	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.7	22.7	0.0
Ischemic stroke	0.0	0.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0	0.0
Ischemic stroke (stroke unit)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pulmonary artery embolism	0.0	0.0	0.0	0.0	13.6	0.0	0.0	0.0	18.2	0.0
Myocardial infarction (NSTEMI)	13.6	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non subdural hemorrhage	13.6	0.0	0.0	0.00	0.0	50.0	0.0	31.8	4.6	0.0
Non subdural hemorrhage (stroke unit)	0.0	0.00	0.0	0.0	18.2	0.0	0.0	0.0	0.0	0.0
Pneumonia	0.0	0.0	59.1	0.0	0.0	0.0	0.0	0.0	0.0	27.3
Myocardial infarction (STEMI)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sepsis	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	0.0	0.0
Transient ischemic attack	13.6	0.0	9.1	0.0	0.0	0.0	0.0	9.1	0.0	0.0
Transient ischemic attack (stroke unit)	0.0	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	18.2
Tachycardia	0.0	0.0	0.0	0.0	13.6	0.0	31.8	0.0	0.0	0.0
Trauma	9.1	0.0	0.0	0.0	18.2	18.2	4.6	0.0	0.0	31.8