

Changes in Life-Sustaining Treatment Limitations in Swedish ICUs During the COVID-19 Pandemic

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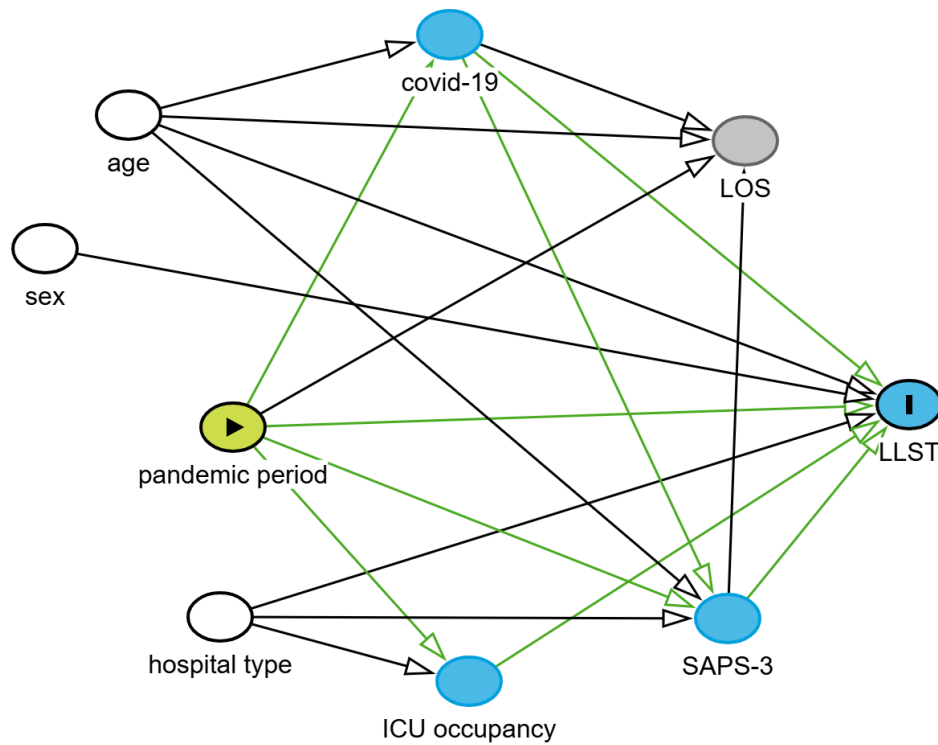
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SUPPLEMENT 1 Missingness for the most important predictors of LLST

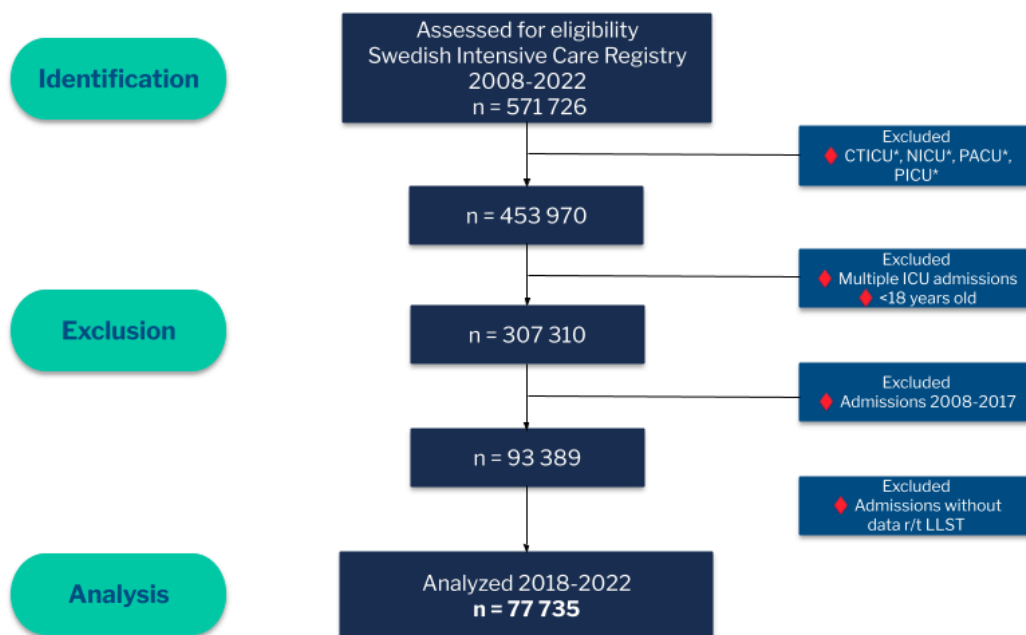
Variable	Missingness (%)
Sex	0,0
Age	0,0
WardName	0,0
HospitalType	0,0
AdmissionTime	0,0
DischargeTime	0,0
CareTimeMinutes	0,0
ArrivalPath	0,0
EmergencyAdmission	0,0
Operated	0,0
CareResult	0,0
DischargeTo	0,0
NumberOfMissingPhy	0,0
EMR_Sve	0,0
EMR_Org	0,0
Score	0,0
Cancer	0,0
CancerTreatment	0,0
ChronicHeartFailure	0,0
BloodMalignancy	0,0
Cirrhosis	0,0
AIDS	0,0
Therapy	0,0
TimeInHospital	0,0
Ward	0,0
AcuteInfectionNosocomial	0,0
AcuteInfectionDeepAirway	0,0
OperationsType	0,0
TreatmentStrategy	0,0
Year	0,0
OnlyObservation	0,4

Mortality	2,2
HeartRateMax	2,5
SystolicBloodPressureMin	2,7
HomeClinic	5,0
BodyTempMax	6,3
CreatinineMax	7,6
LeukocytesMax	7,9
PlateletsMin	8,0
AdmissionCauseCardiovascular	10,4
AdmissionCauseLiver	10,4
AdmissionCauseGastrointestinal	10,4
AdmissionCauseNeurological	10,4
AdmissionCauseRenal	10,4
AdmissionCauseRespiratory	10,4
AdmissionCauseHematological	10,4
AdmissionCauseMetabolic	10,4
AdmissionCauseTrauma	10,4
AdmissionCauseOther	10,4
pHMin	10,5
BilirubinMax	13,1
TimeToDecision	13,5
TreatmentLimitation	13,5
TreatmentNo	13,5
TreatmentLimitBeforeICU	13,5
TreatmentStrat	13,5
DecisionLimit	13,5
DecisionAbort	13,5
PaO2	15,7
Ventilator	16,0
RLS85	35,8
FiO2	54,7

SUPPLEMENT 2 Directed Acyclic Graphs



SUPPLEMENT 3 Flowchart of the study cohort



SIR - Swedish Intensive Care Registry; CTICU - Cardiothoracic ICU; NICU - Neuro ICU; PACU - Post Anesthesia Care Unit; PICU - Pediatric ICU

SUPPLEMENT 4 Mediation analysis of predictors of LLST among ICU treated patients in Sweden 2018-2022 with ICU occupancy

Variable		N	Odds ratio	p
Age_group	18-33	8808	Reference	
	34-48	8307	2.00 (1.71, 2.34)	<0.001
	49-64	17593	5.70 (5.00, 6.54)	<0.001
	65-78	28750	14.20 (12.51, 16.21)	<0.001
	>78	14277	39.25 (34.50, 44.86)	<0.001
Sex	M	45631	Reference	
	F	32104	1.02 (0.99, 1.06)	0.189
HospitalType	Community hospital	19360	Reference	
	County hospital	34624	1.28 (1.22, 1.34)	<0.001
	District hospital	23751	1.01 (0.96, 1.06)	0.700
Time_period	Prepandemic	39396	Reference	
	Pandemic	38339	1.06 (1.02, 1.10)	0.007
ICU_occupancy	Normal	59421	Reference	
	High	18314	1.01 (0.97, 1.06)	0.588

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SUPPLEMENT 5 Mediation analysis of predictors of LLST among ICU treated patients in Sweden 2018-2022 with SAPS3-score

Variable		N	Odds ratio	p	
Age_group	18-33	8808		Reference	
	34-48	8307		1.23 (1.05, 1.46)	0.01
	49-64	17593		2.43 (2.12, 2.80)	<0.001
	65-78	28750		3.95 (3.45, 4.54)	<0.001
	>78	14277		9.12 (7.96, 10.49)	<0.001
Sex	M	45631		Reference	
	F	32104		1.14 (1.10, 1.19)	<0.001
HospitalType	Community hospital	19360		Reference	
	County hospital	34624		1.04 (0.99, 1.09)	0.17
	District hospital	23751		0.77 (0.73, 0.82)	<0.001
Time_period	Prepandemic	39396		Reference	
	Pandemic	38339		1.11 (1.07, 1.16)	<0.001
SAPS3_Score		77735		1.08 (1.08, 1.08)	<0.001

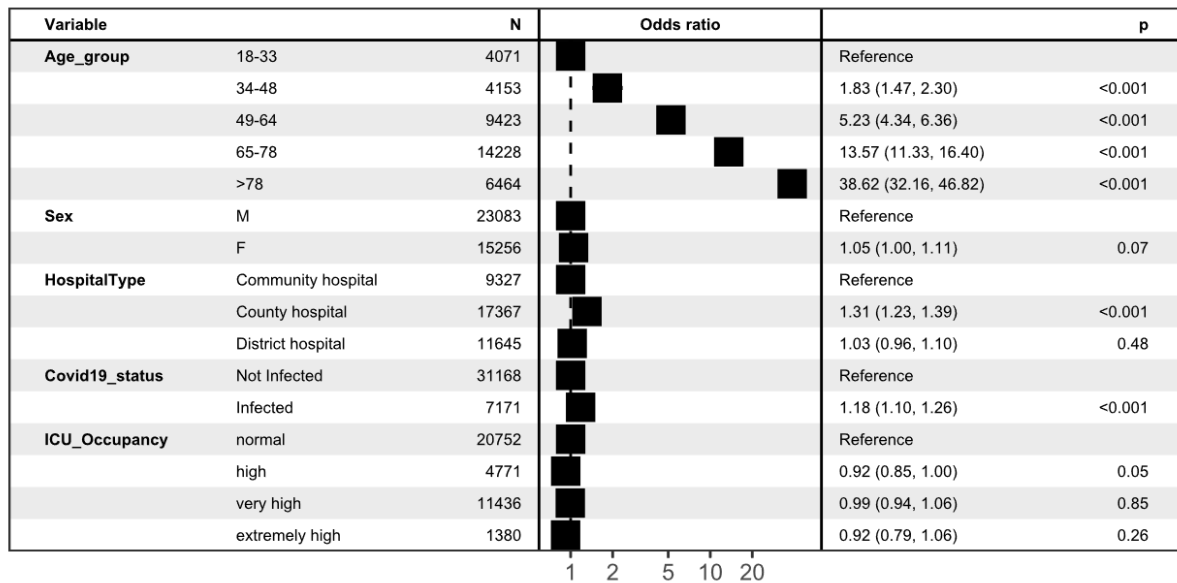
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SUPPLEMENT 6 Mediation analysis of predictors of LLST among ICU treated patients in Sweden 2018-2022 with LOS

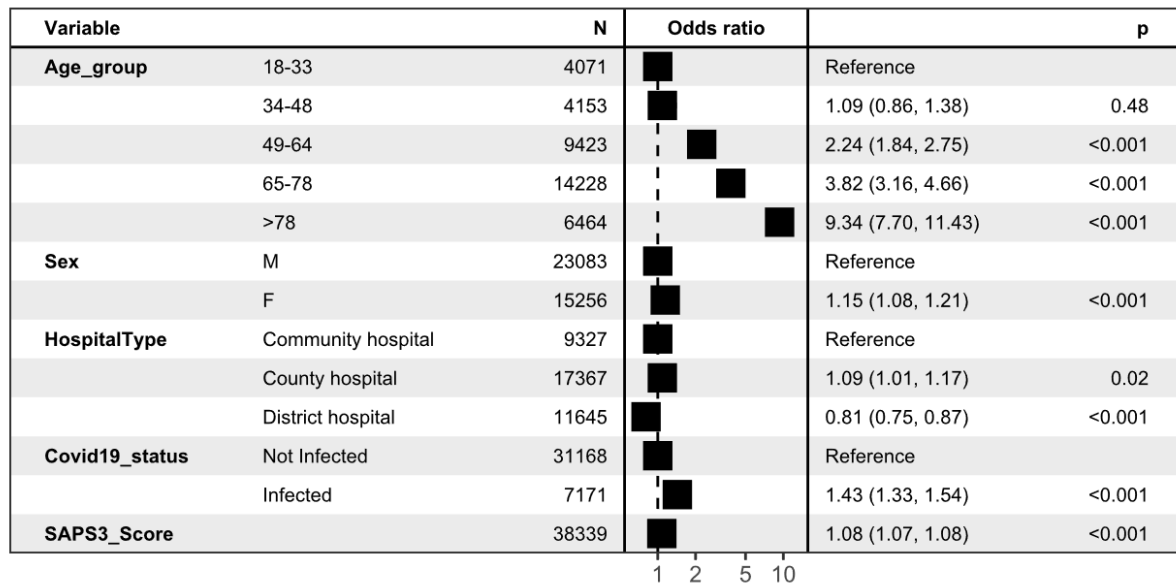
Variable		N	Odds ratio		p
Age_group	18-33	8808		Reference	
	34-48	8307		1.86 (1.59, 2.19)	<0.001
	49-64	17593		5.00 (4.38, 5.74)	<0.001
	65-78	28750		13.09 (11.52, 14.95)	<0.001
	>78	14277		38.92 (34.19, 44.51)	<0.001
Sex	M	45631		Reference	
	F	32104		1.07 (1.03, 1.11)	<0.001
HospitalType	Community hospital	19360		Reference	
	County hospital	34624		1.24 (1.19, 1.30)	<0.001
	District hospital	23751		0.98 (0.93, 1.03)	0.3
Time_period	Prepandemic	39396		Reference	
	Pandemic	38339		0.99 (0.96, 1.03)	0.8
LOS		77735		1.05 (1.05, 1.05)	<0.001

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SUPPLEMENT 7 Mediation analysis of predictors of LST limitations among ICU treated patients during the COVID-19 pandemic with ICU occupancy



SUPPLEMENT 8 Mediation analysis of predictors of LST limitations among ICU treated patients during the COVID-19 pandemic with SAPS3-Score



SUPPLEMENT 9 Mediation analysis of predictors of LST limitations among ICU treated patients during the COVID-19 pandemic with LOS

Variable		N	Odds ratio	p	
Age_group	18-33	4071	Reference		
	34-48	4153	1.77 (1.42, 2.23)	<0.001	
	49-64	9423	4.70 (3.90, 5.72)	<0.001	
	65-78	14228	12.65 (10.56, 15.31)	<0.001	
	>78	6464	38.58 (32.11, 46.80)	<0.001	
Sex	M	23083	Reference		
	F	15256	1.09 (1.03, 1.15)	0.001	
HospitalType	Community hospital	9327	Reference		
	County hospital	17367	1.29 (1.21, 1.38)	<0.001	
	District hospital	11645	0.99 (0.92, 1.06)	0.794	
Covid19_status	Not Infected	31168	Reference		
	Infected	7171	0.75 (0.69, 0.81)	<0.001	
LOS		38339	1.05 (1.05, 1.06)	<0.001	

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