

Data Dictionary
Version 1.0
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Effect of a Point-Of-Care Ultrasound-Driven vs Standard Diagnostic Pathway on 24-Hour Hospital Stay in
Emergency Department Patients with Dyspnea — a Randomized Controlled Trial

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Field label	Variable code	Variable type	Variable choices	Source	Description
Before consent, all screened patients					
Record ID	record_id	text		Electronic CRF	Automatically generated numbers
Survey Identifier	redcap_survey_identifier				
	ecrf_timestamp	Datetime (dd-mm-yyyy hh:mm)		Electronic CRF	Automatically generated
Region	region	Categorical, one select	1. Midt 2. Syd 3. Sjælland 4. Hovedstaden 5. Nord	Electronic CRF	
Site Central Denmark Region	site_midt	Categorical, one select	hors, Horsens aarh, Aarhus gods, Gødstrup rand, Randers vibo, Viborg	Electronic CRF	Branching if region==1 (Midt)
Site Southern Denmark Region	site_syd	Categorical, one select	oden, Odense esbj, Esbjerg	Electronic CRF	Branching if region==2 (Syd)
Site Zealand Denmark Region	site_sjaelland	Categorical, one select	slag, Slagelse koge, Køge	Electronic CRF	Branching if region==3 (Sjælland)
Site Capital Denmark Region	site_hovedstaden	Categorical, one select	herl, Herlev	Electronic CRF	Branching if region==4 (Hovedstaden)
Site Northern Denmark Region	site_nord	Categorical, one select	nord, Nord dummy	Electronic CRF	Branching if region==5 (Nord)
Investigator	investigator_hors	Categorical, one select	111111xxxJoeeyyyDo e...joe---joe.dk, Joe Doe	Electronic CRF	Branching if site is Horsens Variabel value: [mobile number]xxx[First name]yyy[Surname]...[Mail address] Variable label: Investigator name
Investigator	investigator_aarh	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_gods	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_rand	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_vibo	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_oden	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_esbj	Categorical, one select	same	Electronic CRF	same

Investigator	investigator_slag	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_koge	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_herl	Categorical, one select	same	Electronic CRF	same
Investigator	investigator_nord	Categorical, one select	same	Electronic CRF	same

Inclusion criteria					
ED contact	inclusion_1	categorical yesno	1, Yes 0, No	Electronic CRF	Emergency department contact
Age ≥ 18 years	inclusion_2	categorical yesno	1, Yes 0, No	Electronic CRF	Age ≥ 18 years
Dyspnea in triage score	inclusion_3	categorical yesno	1, Yes 0, No	Electronic CRF	Triaged with Dyspnea 3.A Triageret med åndenød som primært symptom i det lokale triage system ELLER det præhospitale triage system (DEPT kontaktårsagskort nr. 46 Vejrtræknings symptomer, eller lign. fra anden triage-score)
Dyspnea w.o. triage	inclusion_3b	Categorical, one select	1, Henvisningsnotat fra praksislæge eller vagtlæge indeholder ord fra søgestreng 2, Notat i den præhospitale journal (PPJ) indeholder ord fra søgestreng 3, Præhospitalt visiteret med Kapitel 28, Vejrtrækningsproblemer, i Dansk Indeks for Akuthjælp. 4, Ingen	Electronic CRF	Dyspnea chief complaint documenter, without a chief complaint-incorporated triage score. Opfylder patienten ét af følgende inklusionskriterier. (Din afdeling bruger ikke kontaktårsagskort, eller intet kontaktårsagskort er angivet i det lokale eller præhospitale triage system) Se søgestrengen nedenfor. Søgestreng: "dyspnø" ELLER "åndenød" ELLER "vejrtrækningsbesvær" ELLER "vejrtrækningsproblemer" ELLER "ortopnø" ELLER "taledyspnø" ELLER "stakåndet" ELLER "resp* besvær" ELLER "næsten ikke trække vejret" ELLER "følelse af ikke at få luft" ELLER "kvælningssymptom"
Age	age	Continuous		BI data	Age upon admission
Sex	sex	Categorical	1, male 2, female	BI data	
Length of stay	los	Continuous		BI data	Hours from ED arrival to hospital discharge
Exclusion criteria					
Coded rapid-response	exclusion_1	categorical yesno	1, Yes 0, No	Electronic CRF	"yesno" should be interpreted more like true/false for criteria fulfillment Coded rapid-response teams (i.e., trauma, surgical or medical emergencies).

Prior pocus	exclusion_2	categorical yesno	1, Yes 0, No	Electronic CRF	Prior focused lung or focused cardiac ultrasound in the current ED stay
Prior enrollment	exclusion_3	categorical yesno	1, Yes 0, No	Electronic CRF	Prior enrollment in the trial
Unable to consent	exclusion_4	categorical yesno	1, Yes 0, No	Electronic CRF	Unable to consent
Non Danish-speaking	exclusion_5	categorical yesno	1, Yes 0, No	Electronic CRF	Non Danish-speaking
Refuse to participate	exclusion_6	categorical yesno	1, Yes 0, No	Electronic CRF	The patient wish not to participate

Field label	Variable code	Variable type	Variable choices	Source	Description
After consent, all included patients					
CPR number, patient	cpr	text		Electronic CRF	Personal identification number (CPR number) as XXXXXX-XXXX. If the patient is not a Danish citizen, then write XXXXXX-0000 (where the X's represent the patient's birthday) and write the correct CPR number in the notes field. An unidentified patient will be matched with the data through a unique prehospital record ID until the patient is identified.
Randomiseringsnummer	randnr	text		Electronic CRF	[site prefix][number]
Randomization	random	Categorical, one select	1, POCUS PATHWAY (Intervention) 2, SDP (Control)		
Investigator mail, default	investigator_mail_default	text		Calculated	Derived from investigator variables
Investigator first name	investigator_fornavn	text		Calculated	same
Investigator full name	investigator_fuldenavn	text		Calculated	same
Investigator telephone, default	investigator_mobil_default	text		Calculated	same
Investigator mail, chosen	investigator_mail	text			Default input from [default]-variable. But investigator may choose to customize input from inclusion to inclusion
Investigator telephone, chosen	investigator_mobil	text			same

Field label	Variable code	Variable type	Variable choices	Source	Description
DIAGNOSTIC SURVEY I (FIRST)					
Full POCUS performed	pocus_complete	Categorical yesno2	1, Yes 2, No		Udførte og gemte du videoer fra en komplet POCUS jævnfør protokollen ?
Missing POCUS modality	pocus_missing	Categorical, Many select	1, Lung 2, Cardiac		Manglede du at gemme hjerte-videoer, lunge-videoer, eller begge?
Missing POCUS reason	pocus_missing_aarsag	Categorical, Many select	1, Ubestemmelig/ej fortolkningsbar 2, Patient kunne ikke medvirke 99, Anden årsag		
Other missing POCUS reason	pocus_missing_other	Text			Hvad var den anden årsag?
Additional POCUS views	pocus_extraview	Categorical yesno2	1, Yes 2, No		
Which additional POCUS views	pocus_extraview_which	text			
Which differential diagnoses	ddx	Categorical, Many select	1 Asthma exacerbation 2 Bakteriel pneumoni 3 Hjertesvigt 4 KOL exacerbation 5 Lungeemboli 6 Lungeødem 7 Malignitet 8 Perikardie effusion 9 Pleural effusion 10 Pneumothorax 11 Viral pneumoni (f.eks. COVID-19, influenza, RSV) 12 Øvre luftvejsinfektion 99 Andet		
Other differential diagnoses	ddx_other	text			

Which primary diagnosis	prim_diag	Categorical, one select	1 Asthma exacerbation 2 Bakteriell pneumoni 3 Hjertesvigt 4 KOL exacerbation 5 Lungeemboli 6 Lungeødem 7 Malignitet 8 Perikardie effusion 9 Pleural effusion 10 Pneumothorax 11 Viral pneumoni (f.eks. COVID-19, influenza, RSV) 12 Øvre luftvejsinfektion 99 Andet		
Other primary diagnosis	prim_diag_other	text			
Probability in primary diagnosis	prim_prob	Discrete	Slider (0-100)		
	tests_avail_ekg	Categorical onenone	1, EKG		
	tests_avail_biokemi	Categorical onenone	1, Venøse blodprøver		
	tests_avail_agas	Categorical onenone	1, Arteriel blodgas		
	tests_avail_vgas	Categorical onenone	1, Venøs blodgas		
	tests_avail_dvt	Categorical onenone	1, DVT ultralyd		
	tests_avail_abdul	Categorical onenone	1, Abdominal ultralyd		
	tests_avail_pleura	Categorical onenone	1, Radiologisk pleura ultralyd		
	tests_avail_ekko	Categorical onenone	1, Ekkokardiografi		
	tests_avail_andenpocus	Categorical onenone	1, Anden point-of- care ultralyd		
	tests_avail_andenradul	Categorical onenone	1, Anden radiologisk ultralyd		

	tests_avail_cxr	Categorical onenone	1, Røntgen thorax		
	tests_avail_ct	Categorical onenone	1, CT-thorax		
	tests_avail_angio	Categorical onenone	1, CT-angiography (thorax)		
	tests_avail_anden_1_2	Categorical onenone	1,		
	tests_other_1_2	Text			
	tests_avail_anden_2_2	Categorical onenone	1,		
	tests_other_2_2	text			
	tests_avail_anden_3_2	Categorical onenone	1,		
	tests_other_3_2	text			
	sum_benefit_physicals	Categorical one select	1, No new information 2, New Pathology, but no further action needed 3, New Pathology, further diagnostics needed 4, New Pathology, presumptive diagnosis changed 5, New Pathology, immediate treatment needed		
	sum_benefit_pocus	Categorical one select	same		
	sum_benefit_ekg	Categorical one select	same		
	sum_benefit_biokemi	Categorical one select	same		
	sum_benefit_agas	Categorical one select	same		
	sum_benefit_vgas	Categorical one select	same		
	sum_benefit_cxr	Categorical one select	same		
	sum_benefit_dvt	Categorical one select	same		
	sum_benefit_abdul	Categorical one select	same		

	sum_benefit_pleura	Categorical one select	same		
	sum_benefit_andenpocus	Categorical one select	same		
	sum_benefit_andenradul	Categorical one select	same		
	sum_benefit_ct	Categorical one select	same		
	sum_benefit_angio	Categorical one select	same		
	sum_benefit_ekko	Categorical one select	same		
	sum_benefit_other_1	Categorical one select	same		
	sum_benefit_other_2	Categorical one select	same		
	sum_benefit_other_3	Categorical one select	same		

Field label	Variable code	Variable type	Variable choices	Source	Description
DIAGNOSTIC SURVEY II (SECOND)					
Skift behandlende læge	shifting_phys	Categorical yesno2	1, Yes 2, No		Er du stadig både behandlende læge og investigatoren, som inkluderede patienten ?
Bekræft	shifting_phys_confirm	Categorical onenone	1, Yes		Kan du bekræfte at patienten har skiftet "behandlende læge" siden det første diagnostiske spørgeskema blev udfyldt?
Which differential diagnoses	ddx_v2	Categorical, Many select	1 Asthma exacerbation 2 Bakteriel pneumoni 3 Hjertesvigt 4 KOL exacerbation 5 Lungeemboli 6 Lungeødem 7 Malignitet 8 Perikardie effusion 9 Pleural effusion 10 Pneumothorax 11 Viral pneumoni (f.eks. COVID-19, influenza, RSV) 12 Øvre luftvejsinfektion 99 Andet		
Other differential diagnoses	ddx_other_v2	text			

		Categorical one select	1 Asthma exacerbation 2 Bakteriell pneumoni 3 Hjertesvigt 4 KOL exacerbation 5 Lungeemboli 6 Lungeødem 7 Malignitet 8 Perikardie effusion 9 Pleural effusion 10 Pneumothorax 11 Viral pneumoni (f.eks. COVID-19, influenza, RSV) 12 Øvre luftvejsinfektion 99 Andet		
Which primary diagnosis	prim_diag_v2				
Other primary diagnosis	prim_diag_other_v2	text			
Probability in primary diagnosis	prim_prob_v2	Slider (0-100)			
	tests_avail_ekg_2	Categorical onenone	1, EKG		
	tests_avail_biokemi_2	Categorical onenone	1, Venøse blodprøver		
	tests_avail_agas_2	Categorical onenone	1, Arteriel blodgas		
	tests_avail_vgas_2	Categorical onenone	1, Venøs blodgas		
	tests_avail_dvt_2	Categorical onenone	1, DVT ultralyd		
	tests_avail_abdul_2	Categorical onenone	1, Abdominal ultralyd		
	tests_avail_pleura_2	Categorical onenone	1, Radiologisk pleura ultralyd		
	tests_avail_ekko_2	Categorical onenone	1, Ekkokardiografi		
	tests_avail_andenpocus_2	Categorical onenone	1, Anden point-of- care ultralyd		
	tests_avail_andenradul_2	Categorical onenone	1, Anden radiologisk ultralyd		

	tests_avail_cxr_2	Categorical onenone	1, Røntgen thorax		
	tests_avail_ct_2	Categorical onenone	1, CT-thorax		
	tests_avail_angio_2	Categorical onenone	1, CT-angiography (thorax)		
	tests_avail_anden_1_2	Categorical onenone	1,		
	tests_other_1_2	Text			
	tests_avail_anden_2_2	Categorical onenone	1,		
	tests_other_2_2	text			
	tests_avail_anden_3_2	Categorical onenone	1,		
	tests_other_3_2	text			
	sum_benefit_ekg_2	Categorical one select	1, No new information 2, New Pathology, but no further action needed 3, New Pathology, further diagnostics needed 4, New Pathology, presumptive diagnosis changed 5, New Pathology, immediate treatment needed		
	sum_benefit_biokemi_2	Categorical one select	same		
	sum_benefit_agas_2	Categorical one select	same		
	sum_benefit_vgas_2	Categorical one select	same		
	sum_benefit_cxr_2	Categorical one select	same		
	sum_benefit_dvt_2	Categorical one select	same		
	sum_benefit_abdul_2	Categorical one select	same		
	sum_benefit_pleura_2	Categorical one select	same		
	sum_benefit_andenpocus_2	Categorical one select	same		

	sum_benefit_andenradul_2	Categorical one select	same		
	sum_benefit_ct_2	Categorical one select	same		
	sum_benefit_angio_2	Categorical one select	same		
	sum_benefit_ekko_2	Categorical one select	same		
	sum_benefit_other_1_2	Categorical one select	same		
	sum_benefit_other_2_2	Categorical one select	same		
	sum_benefit_other_3_2	Categorical one select	same		

Field label	Variable code	Variable type	Variable choices	Source	Description
PATIENTS' EXPERIENCES					
	vent4003	Categorical, one select	1, Slet ikke (1) 2, I ringe grad (2) 3, I nogen grad (3) 4, I høj grad (4) 5, I meget høj grad (5) 6, Ved ikke 7, Ikke relevant for mig		Var længden af ventetiden fra du ankom, til du blev undersøgt, acceptabel? Svar "ikke relevant", hvis du ikke oplevede ventetid
	pers1009	Categorical, one select	same		Var personalet venligt og imødekommende?
	indr1001	Categorical, one select	same		Spurgte personalet ind til din beskrivelse af din sygdom/tilstand?
	indr1021	Categorical, one select	same		Var du med til at træffe beslutninger om din undersøgelse/behandling i det omfang, du havde behov for? Svar "ikke relevant", hvis du ikke har behov for at træffe beslutninger
	info1001	Categorical, one select	same		Fik du alle de informationer, du havde behov for?
	info4518	Categorical, one select	same		Modtog du den information, som du havde behov for i forhold til din behandling/undersøgelse?
	info4506	Categorical, one select	same		Blev du løbende informeret om, hvad der skulle foregå?
	info1509	Categorical, one select	same		Var den mundtlige information, du fik under dit besøg, forståelig?
	info1002	Categorical, one select	same		Gav personalet dig tilstrækkelig information til, at du var tryk ved tiden efter dit besøg?
	saml1006	Categorical, one select	same		Er du tilfreds med den behandling, som du modtog for din sygdom/tilstand?
	saml1001	Categorical, one select	same		Er du alt i alt tilfreds med dit besøg?
	komm4001	Categorical, one select	same		Skriv venligst her, hvis du synes, [akutmodtagelsen] kunne gøre noget bedre eller gjorde noget særligt godt: Det, du skriver i kommentarfeltet, sendes uredigeret videre til hospitalet. Undlad at skrive personlige oplysninger såsom navn, cpr-nummer, adresse m.v.

Field label	Variable code	Variable type	Variable choices	Source	Description
PATIENT DEMOGRAPHICS AND CHARACTERISTICS					
Age	age	Calc, Continuous		Calc	Derived from [cpr], from birthday to inclusion-date
Sex	sex	Calc, categorical	1, male 2, female	Calc	Derived from [cpr], last digit odd == male last digit even == female
Height	height	Continuous		Manuel record extraction	Closest measured to current admission
Weight	weight	Continuous		Manuel record extraction	Closest measured to current admission
BMI	bmi	Continuous		Calc	
Prior hospital-days within the last year	hosp_days_oneyear	Continuous		BI-data	Number of days with an hospital-admission, 365 days before current admission.
Prior admissions within the last year	hosp_admission_oneyear	Continuous		BI-data	Number of hospital admissions (no out clinic or causality ward), 365 days before current admission.
Prior chest or cardiac imaging within last month	prior_imaging_30days	categorical yesno	0, No 1, Yes	BI-data	Any imaging of the chest or heart within 30 days prior to the current admission. Including: CT-modalities (I.e. angio, thorax, cardiac), Echocardiography, Radiologic pleural ultrasound, or PET- CT
Prior chest or cardiac imaging within last month	prior_imaging_30days_mo dality [n]	text		BI-data	I.e. "CT-thorax", "CT-angio", "CT-cardiac", "Echocardiography", "Radiologic pleural ultrasound", "PET-CT" Dimensional data
Prior chest or cardiac imaging within last month	prior_imaging_30days_da tetime [n]	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023) Dimensional data
Prior emergency ultrasound within last month	prior_pocus_30days	categorical yesno	0, No 1, Yes	Manuel record extraction	Manual searching in the medical record in patients with an admission to an emergency department.
Co-morbidities (ref. Prior A et al. The Association Between Perceived Stress and Mortality Among People With Multimorbidity: A Prospective Population-Based Cohort Study. American Journal of Epidemiology. 2016;184(3):199-210.)					
Ischemic heart disease	ihd	categorical yesno	0, No 1, Yes	BI data	a- or b-diagnosis==I20-I25, ever in the electronic medical record AND/OR ATC ==C01DA (antianginal drug) prescribed twice the last year.
Atrial fibrillation	afli	categorical yesno	0, No 1, Yes	BI data	a- or b-diagnosis==I48, ever in the electronic medical record
Heart failure	hf	categorical yesno	0, No 1, Yes	BI data	a- or b-diagnosis==I50, ever in the electronic medical record
Chronic pulmonary disease	cpd	categorical yesno	0, No 1, Yes	BI data	ATC==R03 prescribed twice the last year.

Chronic kidney disease	ck	categorial yesno	0, No 1, Yes	BI data	a- or b-diagnosis== N03, N11, N18- N19, ever in the electronic medical record
Anemias	anemia	categorial yesno	0, No 1, Yes	BI data	a- or b-diagnosis== D50-D53, D55-D59, D60-D61, D63-D64, in the electronic medical record within last two years
Cancer	cancer	categorial yesno	0, No 1, Yes	BI data	a- or b-diagnosis== C00-C43, C45-C97 , in the electronic medical record within last five years

Field label	Variable code	Variable type	Variable choices	Source	Description
OUT OF HOSPITAL					
EMS					
Prehospital requestor	prehosp_requestor	Categorical calc, One select	1, 112 2, Out-of-hours GP 3, GP 4, Hospital 5. Missing	Prehospital disposition system	The requestor for EMS is systematically registered through the prehospital disposition system.
Primary informant	informant	Categorical calc, One select	1, General practice 2, Out-of-hours GP 3, Emergency medical service	Calc	If prehosp_requestor==5 then GP note to determine GP or out-of-hours GP, Else prehosp_requestor.
Prehospital dispatch	prehosp_dispatch	text		BI-data	i.e. B.28.01 or C.05.01. According to "Dansk Indeks for Akuthjælp"
Prehospital ultrasound	prehosp_ul	categorical yesno	0, No 1, Yes	Manuel record extraction from PPJ or BI-data	Lung or cardiac ultrasound described in the prehospital electronic medical record. (VURDERING NOTEFELT, andre regioner gad vide hvordan?)
Prehospital ultrasound modality	prehos_ul_mod	Categorical many select	1, Lung 2, Cardiac 3, Abdominal 4, DVT 5, FAST/E-FAST 6, Procedure guidance 7, Other	Manuel record extraction from PPJ or BI-data	Verbatim descriptions of any ultrasound usage. If only lung and/or cardiac in terms of FAST/E-FAST, then no "1, Lung" or "2, Cardiac".
Prehospital ultrasound findings	prehosp_ul_findings	Categorical many select	1, Pneumothorax 2, Focal multiple B- lines 3, Consolidation 4, Pleural effusion 5, Interstitial syndrome/global multiple B-lines 6, Pericardial effusion 7, Dilated right ventricle 8, Left ventricular systolic contractility 9, other	Manuel record extraction from PPJ or BI-data	Extractor interpretation based on sonographers written documentation.

Prehospital ultrasound findings, other	prehosp_ul_findings_oth	text		Manuel record extraction from PPJ or BI-data	Extractor interpretation based on sonographers written documentation.
Prehospital electronic medical record note	prehosp_note	text		BI-data	Text string with written text in the prehospital crew notes.
Primary care					
General practitioner referral note	gp_note	text		BI-data	Text string with written text in the general practitioner referral note. Can be family physician or out-of-hours GP.
EMS/Primary care [informant]					
Out-of-hospital presumptive diagnosis	out_presu_diag	Categorical, many select	1 Asthma exacerbation 2 Bakteriel pneumoni 3 Hjertesvigt 4 KOL exacerbation 5 Lungeemboli 6 Lungeødem 7 Malignitet 8 Perikardie effusion 9 Pleural effusion 10 Pneumothorax 11 Viral pneumoni (f.eks. COVID-19, influenza, RSV) 12 Øvre luftvejsinfektion 20, Unclear 30, Not reported 99 Andet	Manual extraction	Extractor interpretation based on conclusive notes in refering text.
Out-of-hospital presumptive diagnosis, Other	out_presu_diag_other	text			

Field label	Variable code	Variable type	Variable choices	Source	Description
TRIAGE AND ED METRICS					
Chief complaints	chief_complaint_[n]	text			I.e. "46, Vejtrækningssymptomer". If more than one, string format In sites with a triage score that incorporates chief complaint (not Zealand or Capital Region).
Vital parameters triaged					
Saturation triaged	sat_triage	Discrete		BI-data	
Saturation triaged datetime	sat_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Respiratory rate triaged	rr_triage	Continuous		BI-data	
Respiratory rate triaged datetime	rr_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Heart rate triaged	hr_triage	Continuous		BI-data	
Heart rate triaged datetime	hr_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Diastolic BP triaged	dia_triage	Continuous		BI-data	
Systolic BP triaged	sys_triage	Continuous		BI-data	
BP triaged datetime	bp_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
GCS triaged	gcs_triage	Ordinal		BI-data	
GCS triaged datetime	gcs_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Temperature triaged	temp_triage	Continuous		BI-data	
Temperature datetime	temp_triage_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Triage color	triage_colour	Categorical	1, Blue 2, Green 3, Yellow 4, Orange 5, Red		
Seen by physician	investigator_hours	Categorical	0, No 1, Yes 9, Not reported	BI-data	Physicians are assigned responsibility for patients through clinical logistic systems. Hours that the investigator was assigned to the included patient.

Field label	Variable code	Variable type	Variable choices	Source	Description
History findings					
History record	hist_string	Text		Manual extraction	
Sudden onset dyspnea	hist_dysp	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= if slow onset or worsening chronic dyspnea
Orthopnea	hist_orthopnea	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= verbatim negative finding
Chest pain string	hist_cp_string	Text		Manual extraction	
Chest pain	hist_cp	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= verbatim negative finding
Chills	hist_chills	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= verbatim negative finding
Cough	hist_cough	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= verbatim negative finding
Hemoptysis	hist_hemoptysis	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record No= verbatim negative finding

Field label	Variable code	Variable type	Variable choices	Source	Description
Physical examination findings					
Physical exam record	phys_string	text		Manual extraction	
Cardiac auscultation normal	phys_stc	categorical yesno	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Cardiac auscultation pathology	phys_stc_path	text		Manual extraction	
Jugular venous distention	phys_jvd	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Pulmonary auscultation normal	phys_stp	categorical yesno	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Pulmonary auscultation pathology	phys_stp_path	text		Manual extraction	
Crackles	phys_crac	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Unilateral decreased breath sounds	phys_desound	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Unilateral crackles	phys_unicrac	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Rhonchi	phys_rhonchi	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Dullness to percussion	phys_dull	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Unilateral leg swelling	phys_unileg	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Bilateral lower extremity edema	phys_bileg	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record

Field label	Variable code	Variable type	Variable choices	Source	Description
Point-of-care ultrasound characteristics (Intervention)					
POCUS performed	pocus_yesno	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	
POCUS raw	pocus_raw	DICOM		Manual and/or imaging servers	Investigators' saved cine-loops exported in raw DICOM format. When cine-loops are lost locally, they are sought for in the regional PACS/imaging servers.
POCUS series start	pocus_series_start	Datetime text		DICOM (Manual extraction)	Extracting the TM value representation from the raw DICOM series start Any format will be wrangled into stata %td (21mar2023)
POCUS series start	pocus_cineloop_start	Datetime text		DICOM (Manual extraction)	Extracting the TM value representation from the first raw DICOM cine-loop start Any format will be wrangled into stata %td (21mar2023)
POCUS exam end	pocus_end	Datetime text		DICOM (Manual extraction)	Extracting the TM value representation from the last raw DICOM cine-loop start Any format will be wrangled into stata %td (21mar2023)
Missed views	pocus_missed	Categorical	0, No 1, Yes	DIAGNOSTIC SURVEY I (FIRST)	
Missed views specific	pocus_missed	Categorical	1, S4C 2, PLAX 3, PSAX 4, A4C 5, LUNG	Manual extraction	
POCUS string	pocus_string	text		Manual extraction	
Pneumothorax	pocus_ptx	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Focal multiple B-lines	pocus_focalblines	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Consolidation	pocus_cons	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Pleural effusion	pocus_effu	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record

Interstitial syndrome	pocus_is	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Pericardial effusion	pocus_pericard	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Dilated right ventricle	pocus_right	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Left ventricular systolic contractility	pocus_left	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Extractor interpretation based on electronic medical record
Other pathology	pocus_other	text		Manual extraction	

Field label	Variable code	Variable type	Variable choices	Source	Description
Diagnostic pathway characteristics, ED					
Blood analyses first & ED					
Blood analysis, first within admission	blood_npu	text		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses
Results date and time	blood_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023) Dimensional data, grain blood analyses
Blood analysis, unit	blood_unit	text		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses
Blood analysis results, first within admission	blood_result	continuous		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses
Electrocardiogram first & ED					
Electrocardiogram, first within admission	ecg_yesno	Categorical	0, No 1, Yes 9, Not reported	BI-data	
Performed date and time	ecg_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023)
Electrocardiogram, normality	ecg_norm	Categorical		BI-data	Predetermined category in EPJ reporting.
Electrocardiogram, interpretation	ecg_interpretation	text		BI-data	
Electrocardiogram_raw				MUSE	format??
Microbiology					
POCT microbiology	micro_yesno	Categorical	0, No 1, Yes	BI-data	Any POCT microbiology under ED admission (i.e. Influenza POCT)
POCT microbiology datetime	micro_datetime	Datetime text		BI-data	Dimensional data
POCT microbiology modality	micro_modality	text		BI-data	Dimensional data
POCT microbiology result	micro_result	text		BI-data	Dimensional data
POCUS					
Lung	pocus_lung	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Yes if any reporting of it in the electronic medical journal while in ED.
Cardiac	pocus_card	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Yes if any reporting of it in the electronic medical journal while in ED.

Abdominal	pocus_abd	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Yes if any reporting of it in the electronic medical journal while in ED.
Lower compression	pocus_dvt	Categorical	0, No 1, Yes 9, Not reported	Manual extraction	Yes if any reporting of it in the electronic medical journal while in ED.
Radiology Ultrasound					
Radiology Ultrasound	radul_yesno	categorical yesno	0, No 1, Yes	BI-data	Any radiologic ultrasound under ED admission.
Radiology Ultrasound modality	radul_modality	text		BI-data	Dimensional data
Radiology Ultrasound datetime	radul_datetime	Datetime text		BI-data	Dimensional data
Radiology Ultrasound interpretation	radul_text	text		BI-data	Radiologic description Dimensional data
Chest x-ray first & ED					
Chest x-ray, first within admission	cxr_yesno	categorical yesno	0, No 1, Yes	BI-data	Any chest x-ray performed under ED admission.
Performed date and time	cxr_datetime	Datetime text		BI-data	
Chest x-ray modality	cxr_modality	categorical	1, Standing 2, Sitting 3, Supine 4, Unclear	BI-data	Extracted from procedure coding or manually from radiologic description if no coding.
Chest x-ray interpretation	cxr_text	text		BI-data	Radiologic description Dimensional data
Chest x-ray raw	cxr_raw	DICOM		Manual and/or imaging servers	Extracted in raw DICOM from the regional PACS/imaging servers.
CT thorax first & ED					
CT thorax, first within admission	ct_yesno	categorical yesno	0, No 1, Yes	BI-data	Any chest x-ray performed under ED admission.
Performed date and time	ct_datetime	Datetime text		BI-data	
CT thorax interpretation	ct_text	text		BI-data	Radiologic description Dimensional data
CT thorax raw	ct_raw	DICOM		Manual and/or imaging servers	Extracted in raw DICOM from the regional PACS/imaging servers.
CT angio first & ED					
CT angio, first within admission	ctangio_yesno	categorical yesno	0, No 1, Yes	BI-data	Any CT angio performed under ED admission.
Performed date and time	ctangio_datetime	Datetime text		BI-data	

CT angio interpretation	ctangio_text	text		BI-data	Radiologic description Dimensional data
CT angio raw	ctangio_raw	DICOM		Manual and/or imaging servers	Extracted in raw DICOM from the regional PACS/imaging servers.
Echocardiography first & ED					
Echocardiography, first within admission	echo_yesno	categorical yesno	0, No 1, Yes	BI-data	Any echocardiography performed under ED admission.
Performed date and time	echo_datetime	Datetime text		BI-data	
Echocardiography interpretation	echo_text	text		BI-data	Cardiologic description Dimensional data
Echocardiography, raw	echo_raw	DICOM		EchoPAC, or other cardiology DICOM server	

Field label	Variable code	Variable type	Variable choices	Source	Description
Treatments ED, First of each kind					
Antibiotics					
Antibiotics administration	med_anti_yesno	categorial yesno	0, No 1, Yes	BI-data	First administration (IV) or dispensing (oral) of antibiotic while in the ED admission. ACT = J01
Antibiotics date and time	med_anti_datetime	Datetime text		BI-data	
Antibiotics full ACT	med_anti_act	text		BI-data	
Antibiotics administration route	med_anti_admin	text		BI-data	i.e. IV or oral
Diuretics					
Diuretics administration	med_diu_yesno	categorial yesno	0, No 1, Yes	BI-data	First administration (IV) or dispensing (oral) of antibiotic while in the ED admission. ACT = C03
Diuretics date and time	med_diu_datetime	Datetime text		BI-data	
Diuretics full ACT	med_diu_act	text		BI-data	
Diuretics administration route	med_diu_admin	text		BI-data	i.e. IV or oral
Antitrombotic					
Antitrombotic administration	med_tromb_yesno	categorial yesno	0, No 1, Yes	BI-data	First administration (IV) or dispensing (oral) of antibiotic while in the ED admission. ACT = B01
Antitrombotic date and time	med_tromb_datetime	Datetime text		BI-data	
Antitrombotic full ACT	med_tromb_act	text		BI-data	
Antitrombotic administration route	med_tromb_admin	text		BI-data	i.e. IV or oral
Bronchodilators					
Bronchodilators administration	med_broncho_yesno	categorial yesno	0, No 1, Yes	BI-data	First administration (IV) or dispensing (oral) of antibiotic while in the ED admission. ACT = R03AC or R03CC
Bronchodilators date and time	med_broncho_datetime	Datetime text		BI-data	
Bronchodilators full ACT	med_broncho_act	text		BI-data	
Bronchodilators administration route	med_broncho_admin	text		BI-data	i.e. IV or oral
Systemic steriods					
Systemic steriods administration	med_steriod_yesno	categorial yesno	0, No 1, Yes	BI-data	First administration (IV) or dispensing (oral) of antibiotic while in the ED admission. ACT = H02AB

Systemic steriods date and time	med_steriod_datetime	Datetime text		BI-data	
Systemic steriods full ACT	med_steriod_act	text		BI-data	
Systemic steriods administration route	med_steriod_admin	text		BI-data	i.e. IV or oral

Field label	Variable code	Variable type	Variable choices	Source	Description
Admission metrics					
Departments/units	con_afd	text		BI-data	Index ED contact and following contacts if <4 hours between contacts. Department SHAK. Dimensional data
Contact start	con_start_datetime	Datetime text		BI-data	Contact start Dimensional data
Contact end	con_end_datetime	Datetime text		BI-data	Contact end Dimensional data
Arrival	arriv_datetime	Datetime text		BI-data	Index contact start
Discharge	disch_datetime	Datetime text		BI-data	Last consecutive contact end
Diagnosis registrations	diagnosis_string	text		BI-data	Dimensional data
Discharging physician	investigator_disch	Categorical	0, No 1, Yes 9, Not reported	BI-data	Is the physician responsible for the discharge summary the same as the investigator.
Continuous measurements					
Vital parameters (index admission) type	vital_type	Categorical	1, Saturation 2, Respiratory rate 3, Systolic blood pressure 4, Diastolic blood pressure 5, Pulse 6, Temperature 7, GCS/AVPU	BI-data	Any vital parameter registered during index admission (i.e., during EWS registration) Saturation, respiratory rate, blood pressure, pulse, temperature, and consciousness. Dimensional data
Vital parameters (index admission) date and time	vital_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023) Dimensional data
Vital parameters (index admission) result	vital_result	text		BI-data	Vital parameter result Dimensional data
Blood analyses (index admission) type	blood_npu	text		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses
Blood analyses (index admission) datetime	blood_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023) Dimensional data, grain blood analyses
Blood analyses (index admission) unit	blood_unit	text		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses

Blood analyses (index admission) result	blood_result	continous		BI-data	Blood gas and venous blood sample analyses as appear as the first within admission. Dimensional data, grain blood analyses
Admission imaging					
Imaging (index admission)	imaging_yesno	categorical yesno	0, No 1, Yes	BI-data	Any imaging of the chest or heart during index admission
Imaging (index admission) modality	imaging_modality	text		BI-data	I.e. "CT-thorax", "CT-angio", "CT-cardiac", "Echocardiography", "Radiologic pleural ultrasound", "PET-CT" Dimensional data
Imaging (index admission) datetime	imaging_datetime	Datetime text		BI-data	Any format will be wrangled into stata %td (21mar2023) Dimensional data
Imaging (index admission) interpretation	imaging_text	text		BI-data	Imaging interpretation Dimensional data
Imaging (index admission), raw	imaging_raw	DICOM		DICOM server	

Field label	Variable code	Variable type	Variable choices	Source	Description
Outcomes					
Length-of-stay	los	continuous		Calc	[disch_datetime - arriv_datetime] hours
24-hour hospital stay	24los	categorical yesno	0, No 1, Yes	Calc	Yes = [los]<24 hours
Hospital contacts after discharge (30 days) start	con_disch_start_datetime	Datetime text		BI-data	Contact start Dimensional data
Hospital contacts after discharge (30 days) end	con_disch_end_datetime	Datetime text		BI-data	Contact end Dimensional data
Hospital contacts after discharge (30 days) priority	con_disch_priority	categorical	1, Acute 2, Planned 3, Other	BI-data	Contact priority Dimensional data
Hospital contacts after discharge (30 days) type	con_disch_type	categorical	1, Admission 2, Outpatient 3, Other	BI-data	Contact type Dimensional data
			1, bopael_i_danmark 3, bopael_i_danmark_ho ej_vejkode 5, bopael_i_groenland 7,bopael_i_groenlan_ hoej_vejkode 20, ej_bopael 30, annulleret 50, nedlagt_person 60, (Overføres ikke til Datafordeler) 70, forsvundet 80, udrejst 90, doed		
Status	status	categorical		BI-data	Status code from CPR register
Status_datetime	status_datetime	Datetime text		BI-data	Contact end Dimensional data

72-hour revisits	72hour_revisit	categorical yesno	0, No 1, Yes	calc	72-hour revisits will be defined as a composite outcome including any unplanned [con_disch_priority=acute] hospital stay within 72 hours [con_disch_start_datetime] from the previous hospital discharge [disch_datetime], in-hospital mortality [status/status_datetime], and mortality within 72 hours [status/status_datetime] from the previous hospital discharge [disch_datetime].
30-day hospital-free days	30d_hfd	Continuous (proportion, 0-1)		calc	Hospital-free days will be defined as the number of days within the 30-day period following hospital discharge where the patient is not hospitalized and alive. In-hospital death will be computed as zero hospital-free days [status/status_datetime]. Registrations showing that a patient has left home for a hospital errand will be computed as one day that was not hospital-free (i.e., outpatient or paraclinical follow-up visits) [con_disch_start_datetime]. Long- or short-stay nursing facilities, inpatient hospice facilities, or rehabilitation facilities will count as hospital-free, as will all days at home, including those with home-based medical services. For technical reasons we will divide the number of hospital-free days by 30 to produce an outcome in the range 0 to 1 where high is good.
Time to treatment					
Time to antibiotics	time_anti	Continuous		calc	Minutes [med_anti_datetime - arriv_datetime]
Time to diuretics	time_diu	Continuous		calc	Minutes [med_diu_datetime - arriv_datetime]
Time to antitrombotics	time_tromb	Continuous		calc	Minutes [med_tromb_datetime - arriv_datetime]
Time to bronchodilators	time_broncho	Continuous		calc	Minutes [med_broncho_datetime - arriv_datetime]
Time to systemic steroids	time_steriod	Continuous		calc	Minutes [med_steriod_datetime - arriv_datetime]

Field label	Variable code	Variable type	Variable choices	Source	Description
WRITTEN CONSENT					
Information about study findings	info_find_pat	categorical yesno	0, No 1, Yes	Consent form	Whether or not the patient wishes to be informed about the study findings at the end of the trial.
Information distribution, digital	info_dig_pat	categorical yesno	0, No 1, Yes	Consent form	Whether or not the patient wishes digital distribution (i.e. e-mail) of 1) the information about the study findings and/or 2) the copy of the study
E-mail, patient	email_pat	text		Consent form	E-mail of the patient for digital distribution of 1) the information about the study findings and/or 2) the copy of the study information and consent form.
Address, patient	address_pat	text		Consent form	Address of the patient for non-digital distribution of 1) the information about the study findings and/or 2) the copy of the study information and consent form.
Date of consent	consent_dt_pat	datetime (dd-mm-yyyy hh:mm)		Consent form	Date and time where the patient signed the consent form.

Field label	Variable code	Variable type	Variable choices	Source	Description
INVESTIGATOR DATA					
Record ID	record_id				
Full Name	name	text			
Preferred default mail	investigator_mail	text			
Preferred default telephone	investigator_mobil	Text			
Site	site	categorial, one select	1, Aalborg 2, Aarhus 3, Åbenra 4, Esbjerg 5, Gødstrup 6, Herlev 7, Hjørring 8, Holbæk 9, Horsens 10, Køge 11, Kolding 12, Nordsjællands Hospital 13, Odense 14, Randers 15, Slagelse 16, Viborg		
Work position	stilling	categorial, one select	1, Overlæge 2, Afdelingslæge 3, Læge trin 2 (1. Reservelæge) 4, Læge trin 1 (Reservelæge) 5, Andet		
Other work position	stilling_other	text			
MD year	candmed	Continuous, yyyy			
Specialty	speciale	text			
Investigator data					
Years of POCUS experience	ul_aar	Continuous			
Number cardiac scans performed	ul_skanninger_hjerte	Continuous			
Number lung scans performed	ul_skanninger_lunge	Continuous			

			1, DASEM/speciallægeuddannelse - akutmedicinsk ultralyd (som tilbydes alle HU-læger) 2, SDU/OUH - tidl. lokalt kursus i akutmedicinsk ultralyd 3, CECLUS - Point-of-care Clinical Ultrasound 4, Region Midt, Ultralydskursus for akutlæger (tidl meritlæger) 5, Andet		
POCUS curses	ul_udd	categorial, many select			
Other POCUS curses	ul_udd_other				
			1, Klinisk anvendelse 2, Undervisning og supervision 3, Kursusleder 4, Eksaminator 5, Ultralydsansvalig (i din afdeling) 6, Forskning 7, Andet		
POCUS function	ul_funktion	categorial, many select			
Other POCUS function	ul_funktion_other				