



AHA - Cardiogenic Shock (CRF)

August 2026

A Patient ID:			
DEMOGRAPHICS			
Sex	☐ Male	☐ Female	☐ Unknown
Patient Gender Identity	☐ Male ☐ Female ☐ Female-to-Male (FTM)/Transgender Male/Trans Man ☐ Male-to-Female (MTF)/Transgender Female/Trans Woman ☐ Genderqueer, neither exclusively male nor female ☐ Additional gender category or other. _____ ☐ Did not disclose.		
Patient-Identified Sexual Orientation	☐ Straight or heterosexual ☐ Lesbian or gay ☐ Bisexual ☐ Queer, pansexual, and/or questioning ☐ Something else; please specify: _____ ☐ Don't know ☐ Declined to answer		
Date of Birth	____/____/____ MM DD YYYY		
Age	_____		
Patient Postal Code	_____		☐ Homeless
Payment Source	☐ Medicare ☐ Medicaid ☐ Medicare – Private/HMO/PPO/Other ☐ Medicaid – Private/HMO/PPO/Other ☐ Private/HMO/PPO/Other ☐ VA/CHAMPVA/Tricare ☐ Self-pay/No Insurance ☐ Other/Not Documented/UTD		
Race and Ethnicity			
Race and/or Ethnicity:	☐ American Indian or Alaska Native ☐ Asian ☐ Asian Indian ☐ Chinese ☐ Filipino ☐ Japanese ☐ Korean ☐ Vietnamese ☐ Other Asian ☐ Black or African American ☐ Hispanic or Latino ☐ Mexican, Mexican American, Chicano/a ☐ Puerto Rican ☐ Cuban ☐ Another Hispanic, Latino or Spanish Origin ☐ Middle Eastern or North African ☐ Native Hawaiian or Pacific Islander ☐ Native Hawaiian ☐ Guamanian or Chamorro ☐ Samoan ☐ Other Pacific Islander ☐ White ☐ UTD		
ADMISSION			
Arrival Date/Time	____/____/____ ____:____ MM/DD/YYYY HH: MM		

Point of Origin for Admission	☐ Home ☐ Transfer from a Hospital (Different Facility) ☐ Clinic ☐ Transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF) ☐ Transfer from another Health Care Facility ☐ Non-Healthcare Facility Point of Origin ☐ Transfer from Hospice and is Under a Hospice Plan of Care or Enrolled in a Hospice Program ☐ Information not available
Referring Hospital	_____
Referring hospital arrival date/time:	____/____/____ ____:____ MM/DD/YYYY HH: MM
Referring hospital discharge date/time	____/____/____ ____:____ MM/DD/YYYY HH: MM
Initial point of hospital arrival	☐ Emergency Department ☐ Direct to inpatient unit- ICU ☐ Direct to inpatient unit- Non- ICU ☐ Cath Lab/Operating Room ☐ Other

Medical History

Medical History (Select all that apply):

- | | |
|--|--|
| ☐ None
☐ Atrial fibrillation or flutter
☐ Cardiac amyloidosis
☐ Chronic pulmonary disease
☐ Diabetes Mellitus
☐ Heart Failure- Reduced EF <ul style="list-style-type: none"> ☐ Ischemic Cardiomyopathy ☐ Non-ischemic Cardiomyopathy ☐ History of heart transplantation ☐ Presence of durable left ventricular assist device (LVAD) ☐ Presence of implantable cardioverter defibrillator (ICD) ☐ Presence of biventricular pacemaker (CRT) ☐ Hypertension
☐ Isolated right ventricular failure
☐ Smoking / Vaping <ul style="list-style-type: none"> ☐ Cigarette use ☐ E-cigarette use ☐ Vaping ☐ Unknown / Unable to Determine | ☐ Atherosclerotic vascular disease <ul style="list-style-type: none"> ☐ Cerebrovascular disease (including previous TA/CVA) ☐ Coronary Artery Disease (CAD) ☐ Peripheral Arterial Disease ☐ Prior CABG ☐ Prior MI ☐ Prior PCI ☐ Chronic Kidney Disease <ul style="list-style-type: none"> ☐ Chronic hemodialysis ☐ Chronic liver disease
☐ Congenital Heart Disease
☐ Emerging Infectious Disease <ul style="list-style-type: none"> ☐ MERS ☐ SARS-COV-1 ☐ SARS-COV-2 (COVID-19) ☐ Other infectious respiratory pathogen ☐ Heart Failure – Preserved EF
☒ Heart Failure – Moderately Reduced EF
☐ Hypertrophic cardiomyopathy
☐ Pulmonary hypertension
☐ Valvular heart disease |
|--|--|

Medications at Hospital Admission

Medications Used Prior to Admission: *[Select all that apply]*

- | | |
|---|---|
| ☐ No medications prior to admission
☐ Angiotensin Receptor Blocker (ARB)
☐ Anticoagulation Therapy | ☐ ACE Inhibitor
☐ Angiotensin Receptor Neprilysin Inhibitor (ARNI) |
|---|---|

☐ Direct oral anticoagulant ☒ Factor Xla Inhibitor ☐ Warfarin ☐ Other		☐ Anti-hyperglycemic medications ☐ Insulin ☐ Oral ☐ Beta – Blocker ☐ Home IV Inotropes ☐ Mineralocorticoid Receptor Antagonist (MRA) ☐ Unknown / Unable to Determine	
☐ Antiplatelet medications ☐ Aspirin ☐ P2Y12 Inhibitors ☐ Other Antiplatelet ☐ GLP-1 agonist ☐ Loop Diuretic ☐ SGLT2 Inhibitor			
Exams/Labs at Admission			
Date/Time of vital signs		____/____/____ ____:____ MM/DD/YYYY HH:MM	☐ Unknown
Initial Vital signs	Height - Admission	____ ○ inches ○ cm	☐ Not Documented
	Weight - Admission	____ ○Lbs. ○Kgs.	☐ Not Documented
	BMI - Admission	____ (Automatically Calculated)	
	BSA - Admission	____ (Automatically Calculated)	
	Heart Rate - Admission	____ bpm	☐ Not Documented
	BP – Admission	____/____ mmHg (systolic/diastolic)	☐ Not Documented
	Temperature - Admission	____ ○ C ○ F	☐ Not Documented
Admission Labs	Lactate - Admission	____ (mmol/L)	☐ Unavailable
	Hgb - Admission	____ ○ g/dL ○ g/L	☐ Unavailable
	NT-proBNP - Admission	____ ○ pg/mL ○ ng/L	☐ Unavailable
	BNP - Admission	____ ○ pg/mL ○ pmol/L ○ ng/L	☐ Unavailable
	Serum Creatinine - Admission	____ ○ mg/dL ○ micromol/L	☐ Unavailable
	ALT (IU/L) - Admission	____	☐ Unavailable
	Platelet Count (mm ³) - Admission	____	☐ Unavailable
	Troponin - Admission	____ ○ng/L ○ng/mL ○ug/L ☐ Troponin Unavailable - Admission ☐ Troponin below limit of detection - Admission	
	Random Blood Glucose - Admission	____ (mg/dL)	☐ Unavailable
Most favorable neurological status at admission		☐ Conscious without severe disability ☐ Conscious with severe disability ☐ Comatose ☐ Unable to assess due to sedation ☐ Unknown/Not Documented	

SHOCK ONSET		
Certainty of shock etiology	☐ Cardiogenic shock was a clear contributor to the shock state ☐ Cardiogenic shock was a suspected but with some uncertainty	
Where was the onset of Cardiogenic Shock present?	☐ Shock present on participating hospital arrival ☐ Shock onset while in-hospital ☐ Shock onset at referring hospital	
Cardiac arrest prior to shock onset?	☐ Yes ☐ No	☐ Unknown/Not Documented
[IF YOU ANSWERED 'YES' TO THE QUESTION ABOVE] Most favorable neurological status after the arrest and prior to hospital discharge	☐ Conscious without severe disability ☐ Conscious with severe disability ☐ Comatose ☐ Unable to assess due to sedation ☐ Unknown/Not Documented	
Onset of shock (Date/Time):	____/____/____ ____:____ MM/DD/YYYY HH:MM	☐ Unknown
Was a multidisciplinary shock team involved in patient management?	☐ Yes ☐ No ☐ Not documented	
If multidisciplinary shock team was involved, select the timeframe	☐ Within 3hrs of shock onset ☐ >24hrs of shock onset ☐ Within 6hrs of shock onset ☐ Unknown/not documented ☐ Within 24hrs of shock onset	
SCAI Shock Stage at Onset (first 6hrs)	☐ Deceased ☐ Stage D ☐ Stage B ☐ Stage E ☐ Stage C ☐ ND/Unable to Determine	
SCAI Shock Stage Serial assessment (Assessed at 6h-12h)	☐ Deceased ☐ Stage D ☐ Stage B ☐ Stage E ☐ Stage C ☐ ND/Unable to Determine	
Signs and Symptoms of Inadequate Perfusion Present?	☐ Yes ☐ No	
Presenting Physiology	☐ Biventricular Failure ☐ Primary Other Cardiac (Arrhythmia, Valvular Stenosis, etc.) ☐ Left Ventricular Failure ☐ Not Documented ☐ Right Ventricular Failure	
Was Left Ventricular Ejection Fraction (LVEF) documented?	☐ Yes	☐ No
LVEF – Quantitative	☐ Unknown ☐ <20% ☐ 20-<30%	☐ 30-<40% ☐ 40-<50% ☐ >=50% ☐ Not documented
Cardiogenic shock category	☐ Acute, de novo HF ☐ Unable to determine ☐ Acute-on-chronic HF	
Etiologies and Contributors to Cardiogenic Shock:	☐ None of the causes below ☐ Acute Transplant Rejection ☐ ACS/AMI ☐ Arrhythmia ☐ STEMI ☐ Bradyarrhythmia ☐ NSTEMI ☐ Tachyarrhythmia ☐ COVID-19 related complication ☐ Isolated Right Heart Failure ☐ LVAD complication ☐ Acute PE ☐ Myocarditis ☐ Pulmonary HTN ☐ Post-cardiac arrest ☐ Other Isolated Right Heart Failure ☐ Takotsubo cardiomyopathy ☐ Mechanical complication of MI ☐ Valvular dysfunction ☐ Peripartum	

		☐ Unknown ☐ Post-cardiopulmonary bypass ☐ Tamponade ☐ Other (Specify) _____	
Medications at Shock Onset			
Medications administered at onset of shock (<i>Select all that apply</i>)	☐ No Medications administered at onset of shock		
	☐ Anticoagulation Therapy ☐ Direct oral anticoagulant ☐ Factor Xla Inhibitor ☐ Warfarin ☐ IV heparin ☐ Other ☐ Antiplatelet Medication: ☐ Aspirin ☐ P2Y12 Inhibitors ☐ Other Antiplatelet		
		☐ Vasoactive Medications (IV Continuous, during first 6 hours after shock onset) ☐ Dobutamine ☐ Dopamine ☐ Epinephrine ☐ Levosimendan ☐ Milrinone ☐ Nitroprusside ☐ Norepinephrine ☐ Phenylephrine ☐ Vasopressin ☐ Not Documented	
Exams/Labs at Shock Onset			
<i>Enter parameters closest to shock onset. (To be entered only if shock onset was after arrival)</i>			
Date/Time of vital signs (closest to shock onset)		____/____/____ ____:____ ☐ Not Documented	
Vital signs (closest to shock onset)	Height	____ ○ inches ○ cm ☐ Not Documented	
	Weight	____ ○ lbs ○ kg ☐ Not Documented	
	BMI	____ (Automatically Calculated)	
	BSA	____ (Automatically Calculated)	
	Heart Rate	____ bpm ☐ Not Documented	
	BP	____ / ____ mmHg (systolic/diastolic) ☐ Not Documented	
	Temperature	____ °C ○ °F ☐ Not Documented	
Labs (Closest to shock onset)	Lactate	____ (mmol/L) ☐ Unavailable	
	Hgb	____ ○ g/dL ○ m g/L ☐ Unavailable	
	NT-proBNP	____ ○ m pg/mL ○ m ng/L ☐ Unavailable	
	BNP	____ ○ pg/mL ○ pmol/L ○ ng/L ☐ Unavailable	
	SCr	____ ○ mg/dL ○ μmol/L ☐ Unavailable	
	ALT	____ ○ IU/L ☐ Unavailable	
	Platelet Count	____ (mm ³) ☐ Unavailable	
	Troponin (Peak related to shock onset)	____ ○ ng/mL ○ ug/L ○ ng/L ☐ Unavailable ☐ Below limit of detection	
	Random Blood Glucose	____ (mg/dL) ☐ Unavailable	
TRANSFER TAB			
Assessment From Transferring Facility			
Date/Time of Assessment – Transfer	____/____/____ ____:____ MM/DD/ YYYY HH:MM		☐ Unknown/Not Documented

Did a cardiac arrest occur at the referring facility prior to transfer?	☐ Yes ☐ No ☐ ND	
Presence of a Pulmonary Artery Catheter (PAC)	☐ Yes ☐ No	
Presence of Mechanical Ventilation	☐ Yes ☐ No	
Presence of renal replacement therapy	☐ Yes ☐ No	
For the measurements elements below, enter accurate parameters closest to assessment time		
BP: (Systolic/Diastolic)	_____ / _____ mm/Hg	☐ Not Documented
Heart Rate	_____ bpm	☐ Not Documented
CVP/RA	_____ mmHg	☐ Not Documented
Pa Pressure (Systolic/Diastolic)	_____ / _____ mmHg	☐ Not Documented
PCWP	_____ mmHg	☐ Not Documented
Cardiac Output	_____ L/min	☐ Not Documented
MAP (Auto-calculated)	_____ mmHg	☐ Not Documented
PAPi (Auto-calculated)	_____ w	☐ Not Documented
CPO (Auto-calculated)	_____ w	☐ Not Documented
Peak Lactate prior to transfer	_____ mmol/L	☐ Not Documented
Lowest pH prior to transfer	_____	☐ Not Documented

Peak ALT prior to transfer	_____ IU/L	☐ Not Documented
Vasoactive Medications at time of assessment	☐ None ☐ Dobutamine ☐ Dopamine ☐ Epinephrine ☐ Levosimendan ☐ Milrinone	☐ Nitroprusside ☐ Norepinephrine ☐ Phenylephrine ☐ Vasopressin ☐ Not Documented ☐ Other (Specify): _____
Presence of MCS Device(s) at assessment	☐ None ☐ Impella ☐ Impella 2.5 ☐ Impella CP ☐ Impella ECP ☐ Impella 5.0 ☐ Impella 5.5 ☐ Impella RP ☐ VA Ecmo ☐ IABP	☐ IVAC ☐ TandemHeart ☐ Left ☐ Right ☐ Temporary surgical VAD (e.g. CentriMag) ☐ Left ☐ Right ☐ Implanted surgical assist device ☐ Pulsatile-Flow Devices ☐ Continuous-Flow Devices ☐ Other (Specify): _____
Vascular Complication requiring intervention:	☐ Yes	☐ No
Date/Time of vascular complication requiring intervention	____/____/____ ____:____ MM/DD/YYYY HH:MM	☐ Not Documented
Complications of ECMO	☐ No Complications ☐ Pulmonary hemorrhage requiring intervention ☐ Refractory pulmonary edema ☐ Other (specify): _____	
IN-HOSPITAL CARE		
Cardiovascular Procedures During this Hospitalization		
☐ No Procedures ☐ Cardiac Cath/Coronary Angiography ☐ Cardiac Transplantation <i>Date/Time of transplantation: ____/____/____ ____:____</i> ☐ Coronary Artery Bypass Graft (CABG) <i>Date/Time of CABG: ____/____/____ ____:____</i> ☐ Electrophysiology (EP) procedure <i>Date/Time of EP: ____/____/____ ____:____</i> ☐ Percutaneous Cardiac Intervention (PCI) <i>Date/Time of PCI: ____/____/____ ____:____</i> ☐ Pulmonary embolectomy (surgical or transcatheter) ☐ Targeted temperature management ☐ Other Procedures/Advanced therapies (Specify): _____ ☐ Mechanical Circulatory Support Device/VAD <i>Date/Time of FIRST MCS: ____/____/____ ____:____</i> <u>Percutaneous Assist Devices</u> ☐ IABP ☐ Impella ☐ TandemHeart ☐ VA ECMO ☐ iVAC ☐ Other VAD <u>Surgical Assist Devices</u> ☐ Temporary external device (e.g. CentriMag) ☐ Implanted surgical assist device ☐ Continuous-Flow Devices ☐ Pulsatile-Flow Devices <i>Date/Time of implantation: ____/____/____ ____:____</i>		
Was a right heart catheterization or pulmonary artery catheterization performed?	☐ Yes ☐ No	☐ Unknown/Not Documented

Date/time of <u>first</u> RHC/PAC	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Unknown
Was the PA catheter used for a period of hemodynamic monitoring outside the Cath Lab/OR?	☐ Yes ☐ No ☐ Unknown/Not Documented	
Was the patient managed with invasive mechanical ventilation at any time during the hospitalization?	☐ Yes ☐ No ☐ Unknown/Not Documented	
Primary indication for advanced respiratory therapy	☐ Airway protection only (other than cardiac arrest) ☐ Cardiac arrest without respiratory failure ☐ Chronic dependence on mechanical ventilation ☐ Procedural sedation / anesthesia and recovery ☐ Respiratory insufficiency ☐ Other	
Date/Time of first intubation related to this hospitalization	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Unknown
Extubation?	☐ Yes ☐ No	
Date/Time of extubation	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Unknown
Was patient managed with renal replacement therapy at any time during the hospitalization?	☐ Yes ☐ No ☐ Unknown/Not Documented	
If Yes, Select type of renal replacement therapy used	☐ Accelerated venovenous hemofiltration (AVVH) ☐ Continuous venovenous hemofiltration (CVVH) ☐ Emergent or urgent hemodialysis ☐ Routine hemodialysis for patient with end-stage renal dialysis (ESRD) ☐ Unknown/Not Documented	
Primary Indications for advanced renal therapy (Select all that apply)	☐ Acidemia ☐ Hyperkalemia ☐ Severe uremia ☐ Volume overload causing hemodynamic or respiratory compromise ☐ Volume overload in the absence of any of the above ☐ Other (specify) _____ ☐ Unknown/Not Documented	
Data for Patient transferred to ICU from any other floor in the hospital		
Was the patient admitted to ICU at any point during this hospitalization?	☐ Yes ☐ No	
ICU Admission Date/Time	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Unknown
ICU discharge (transfer out) Date/Time	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Unknown
Number of days patient was in ICU (<i>auto-calc.</i>)	_____	
Clinical Outcomes		
Record the Time/Date of the <u>FIRST</u> event of each type		
Severe/Moderate GUSTO bleeding event:	☐ Yes ☐ No	
Date/Time GUSTO detected:	__/__/__ __:__: MM/DD/ YYYY HH:MM	☐ Not Documented
Intracranial Hemorrhage	☐ Yes ☐ No	

Date/Time Intracranial Hemorrhage detected	___/___/___ :__ MM/DD/YYYY HH:MM	☐ Not Documented
Cardiac Arrest	☐ Yes ☐ No	
Date/Time Cardiac Arrest detected	___/___/___ :__ MM/DD/YYYY HH:MM	☐ Not Documented
Stroke	☐ Yes ☐ No	
Date/Time Stroke detected	___/___/___ :__ MM/DD/YYYY HH:MM	☐ Not Documented
Complications from procedures during this admission:	☐ No complications from procedures ☐ Acute Limb ischemia ☐ Amputation ☐ Fasciotomy ☐ Arterial non-CNS thrombosis ☐ Bleeding – Vascular access site – MCS-Related	☐ Bleeding – Vascular access site – Other access site ☐ Bleeding – Other site ☐ Cardiac tamponade ☐ Vascular injury (any) ☐ Venous thromboembolism ☐ Other (Specify): _____
MECHANICAL CIRCULATORY SUPPORT FORM		
Section to be completed for each device implanted		
Implanted Device – VA ECMO	☐ ECMO (VA)	
Date/Time of Implant Procedure – VA ECMO	___/___/___ :__ (MM/DD/YYYY HH:MM)	☐ Unknown/ND
Died with implant in place – VA ECMO	☐ Yes ☐ No	
Device explant date/Time VA ECMO:	___/___/___ :__ (MM/DD/YYYY HH:MM)	
Arterial Implant Site – VA ECMO:	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Venous Implant Site – VA ECMO:	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Receiving CPR at time of Implant – VA ECMO	☐ Yes ☐ No ☐ Unknown/ND	
Reason for device implant – VA ECMO (<i>Select all that apply</i>)	☐ Critical Left Main/Severe CAD ☐ Incessant Arrhythmia ☐ Refractory Ischemia ☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO ☐ Other reason for device implant (Specify): _____	

	☐ Other reason for device implant (Specify): _____	
Vascular closure applied – IABP:	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify):_____	
Implanted Device – Impella	☐ Impella	
	☐ Impella CP ☐ Impella ECP	☐ Impella 5.5 ☐ Impella RP ☐ Impella RP Flex
Date/Time of Implant Procedure – Impella	___/___/____ __:__ (MM/DD/YYYY HH:MM)	☐ Unknown
Died with implant in place – Impella	☐ Yes ☐ No	
Device explant date/Time Impella:	___/___/____ __:__ (MM/DD/YYYY HH:MM)	
Arterial Implant Site – Impella	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Venous Implant Site – Impella RP or RP Flex:	☐ Right ☐ Right – Femoral ☐ Right- Internal Jugular ☐ Left ☐ Left – Femoral ☐ Left – Internal Jugular ☐ Other	
Receiving CPR at time of Implant – Impella	☐ Yes ☐ No	☐ Unknown/ND
Reason for device implant – Impella (<i>Select all that apply</i>)	☐ Critical Left Main/Severe CAD (<i>*will not appear for Impella RP or RP Flex</i>) ☐ Incessant Arrhythmia ☐ Refractory Ischemia ☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO (<i>*will not appear for Impella RP or RP Flex</i>) ☐ Other reason for device implant (Specify): _____	
Vascular closure applied – Impella:	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify):_____	
Implanted Device – iVAC	☐ iVAC	

Date/Time of Implant Procedure – iVAC	__/__/____ __:__ (MM/DD/YYYY HH:MM)	☐ Unknown
Died with implant in place – iVAC	☐ Yes ☐ No	
Device explant date/Time iVAC:	__/__/____ __:__ (MM/DD/YYYY HH:MM)	
Arterial Implant Site – iVAC:	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Venous Implant Site – iVAC:	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Receiving CPR at time of Implant – iVAC	☐ Yes ☐ No	☐ Unknown/ND
Reason for device implant – iVAC (Select all that apply)	☐ Critical Left Main/Severe CAD ☐ Incessant Arrhythmia ☐ Refractory Ischemia ☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO ☐ Other reason for device implant (Specify): _____	
Vascular closure applied – iVAC:	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify): _____	
Implanted Device – TandemHeart	☐ TandemHeart	
Date/Time of Implant Procedure – TandemHeart	__/__/____ __:__ (MM/DD/YYYY HH:MM)	☐ Unknown
Died with implant in place – TandemHeart	☐ Yes ☐ No	
Device explant date/Time TandemHeart:	__/__/____ __:__ (MM/DD/YYYY HH:MM)	
Arterial Implant Site – TandemHeart:	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Central	
Venous Implant Site – TandemHeart:	☐ Right ☐ Right – Axillary ☐ Right – Femoral	

	☐ Right - Jugular ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Left- Jugular ☐ Central ☐ N/A	
Receiving CPR at time of Implant – TandemHeart	☐ Yes ☐ No	☐ Unknown/ND
Reason for device implant – Tandemheart (<i>Select all that apply</i>)	☐ Critical Left Main/Severe CAD ☐ Incessant Arrhythmia ☐ Refractory Ischemia ☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO ☐ Other reason for device implant (Specify): _____	
Vascular closure applied – TandemHeart:	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify):_____	
Implanted Device – Temporary surgical VAD (e.g. CentriMag)	☐ Temporary surgical VAD ☐ Temporary Surgical VAD – Left Ventricle ☐ Temporary Surgical VAD – Right Ventricle	
Was a dual lumen venous catheter (e.g. ProtekDuo) used?"	☐ Yes ☐ No	☐ Unknown
Date/Time of Implant Procedure – Temporary surgical VAD (e.g. CentriMag)	__/__/____ __:__ (MM/DD/YYYY HH:MM)	☐ Unknown
Died with implant in place – Temporary surgical VAD (e.g. CentriMag)	☐ Yes ☐ No	
Device explant date/Time – Temporary surgical VAD (e.g. CentriMag):	__/__/____ __:__ (MM/DD/YYYY HH:MM)	
Was an oxygenator used with this temporary surgical VAD?	☐ Yes ☐ No	
Arterial Implant Site – Temporary surgical VAD (e.g. CentriMag):	☐ Right ☐ Right – Axillary ☐ Right – Femoral ☐ Right - Other ☐ Left ☐ Left – Axillary ☐ Left – Femoral ☐ Left - Other ☐ Central	
Venous Implant Site- Temporary Surgical VAD (e.g. CentriMag)	☐ Right ☐ Right – Femoral	

	☐ Right – Jugular ☐ Right – Subclavian ☐ Left ☐ Left – Femoral ☐ Left- Jugular ☐ Left – Subclavian ☐ Central	
Receiving CPR at time of Implant – Temporary surgical VAD (e.g. CentriMag)	☐ Yes ☐ No	☐ Unknown/ND
Reason for device implant – Temporary surgical VAD (e.g. CentriMag) (<i>Select all that apply</i>)	☐ Critical Left Main/Severe CAD ☐ Incessant Arrhythmia ☐ Refractory Ischemia ☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO ☐ Other reason for device implant (Specify): _____	
Vascular closure applied – Temporary surgical VAD (e.g. CentriMag):	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify):_____	
Implanted Device – Other	☐ Other Device	
Specify other device:	_____	
Date/Time of Implant Procedure – Other	____/____/____ ____:____ (MM/DD/YYYY HH:MM)	☐ Unknown
Died with implant in place – Other	☐ Yes ☐ No	
Device explant date/Time Other:	____/____/____ ____:____ (MM/DD/YYYY HH:MM)	
Arterial Implant Site - Other:	☐ Right ☐ Right – Axillary ☐ Right - Femoral ☐ Left ☐ Left – Axillary ☐ Left - Femoral ☐ Central	
Venous Implant Site - Other:	☐ Right ☐ Right – Axillary ☐ Right - Femoral ☐ Left ☐ Left – Axillary ☐ Left - Femoral ☐ Central	
Receiving CPR at time of Implant – Other	☐ Yes ☐ No	☐ Unknown/ND
Reason for device implant – Other (<i>Select all that apply</i>)	☐ Critical Left Main/Severe CAD ☐ Incessant Arrhythmia ☐ Refractory Ischemia	

	☐ Shock ☐ Severe Heart Failure without Shock ☐ Severe Valvular Dysfunction ☐ Supported PCI ☐ Ventricular Septal Defect ☐ Left-ventricular venting during VA-ECMO ☐ Other reason for device implant (Specify): _____			
Vascular closure applied – Other:	☐ Collagen-based plug with MANTA ☐ Dry-based ☐ Manuel compression (Femostop) ☐ Planned open surgical repair ☐ Suture-based (Proglide, Prostar XL) ☐ Other (Specify):_____			
ECMO TAB				
Pre-ECMO Events				
Select any current device(s) supporting patient pre-ECMO <i>[Device(s) already selected from the MCS tab will be auto-populated here]</i>	☐ None ☐ Intra-Aortic Balloon Pump (IABP) ☐ Impella (any) ☐ Tandem Heart ☐ Left ☐ Right ☐ Temporary surgical VAD (e.g. CentriMag) ☐ Left ☐ Right ☐ Other (Specify): _____			
Circumstances of ECMO Cannulation (select all that apply):	☐ Planned for patient deterioration (Prophylactic) ☐ Emergent (ECPR or Salvage) ☐ Failure to Wean from CPB ☐ Progression of Illness Despite Established VAD/ Temporary Mechanical Circulatory Support / IABP			
GCS Score (if assessed immediately pre-ECMO)	_____ ☐ GCS not assessed			
Is there an ELSO record for this patient?	☐ Yes ☐ No ☐ Unknown/Not Documented			
If yes, enter ELSO Patient Record Number (optional)	_____			
Vascular Access & Initiation of ECMO				
Date/Time ECMO started	____/____/____ ____:____ ☐ Unknown			
Cannulation anatomical site (check all that apply) <i>[repeat for each cannula placed]</i>	Cannulation anatomical Site	Cannula size (Fr)	Cannula manufacturer	Cannula Model
	☐ Right internal jugular vein			
	☐ Right Femoral Artery			
	☐ Left Femoral Artery			
	☐ Right Femoral Vein			
	☐ Left Femoral Vein			
	☐ Other (Specify):_____			
	☐ Aorta (Central)			
	☐ Right Atrium (Central)			
	☐ Left Atrium (Central)			
	☐ Pulmonary Artery (Central)			
☐ Unknown/Not Documented				

Type of cannulation	☐ Central ☐ Peripheral ☐ Unknown/Not Documented	
Purpose	☐ Central ☐ Peripheral ☐ Unknown/Not Documented	
Date/Time of insertion	__/__/______:__ MM DD YYYY HH : MM ☐ Unknown	
Was this cannula removed for a reason other than death?	☐ Yes ☐ No ☐ Not Documented	
Date/Time of removal	__/__/______:__ MM DD YYYY HH : MM ☐ Unknown	
LV Decompression		
LV Decompression Procedures (select all that apply) and date/time of procedure, if known:	☐ None/Not Performed	
	☐ Atrial Septostomy	Date/Time: __/__/______:__
	☐ LA Vent	Date/Time: __/__/______:__
	☐ LV Vent	Date/Time: __/__/______:__
	☐ PA Vent	Date/Time: __/__/______:__
	☐ Intra-Aortic Balloon Pump	Date/Time: __/__/______:__
	☐ Transaortic Valve Impella	Date/Time: __/__/______:__
	☐ L-VAD	Date/Time: __/__/______:__
	☐ R-VAD	Date/Time: __/__/______:__
	☐ Other (Specify): _____	Date/Time: __/__/______:__
Rationale for Decompression on ECLS (select one):	☐ Decreased pulse pressure on Arterial Waveform ☐ Lack of native ejection ☐ Evidence of Ischemia ☐ Progressive Pulmonary Edema on CXR ☐ Institutional routine ☐ Other (Specify): _____	
ECMO Cannulation Location (area)		
ECMO Cannulation Location:	☐ Another hospital (pre-transfer) ☐ Emergency Department (ED) ☐ Ambulatory/Outpatient Area ☐ Operating Room (OR) ☐ Adult cardiac ICU (CICU) ☐ Post-Anesthesia Recovery Unit (PACU) ☐ Adult general ICU ☐ Same-day Surgical Area ☐ Cardiac Catheterization Lab ☐ Telemetry unit or Step-down unit ☐ Cardiac Surgery ICU ☐ Other (Specify) _____ ☐ Delivery Suite ☐ Unknown/Not Documented ☐ Diagnostic/Intervention. Area (excluding Cath Lab)	
If other ECMO Cannulation Location, please specify:	_____	
Team Member(s) Performing ECMO Cannulation:	☐ Anesthesiologist ☐ Registered Nurse (RN) ☐ ER Physician ☐ Surgeon (cardiac/cardiothoracic) ☐ Intensive care physician ☐ Mobile ECMO team (from receiving hospital) ☐ Interventional Cardiologist ☐ Other (Specify) _____ ☐ Perfusionist ☐ Unknown/Not Documented	
ECMO Circuit and Components		

Pump	Manufacturer: _____		
	Pump Name: _____		
Common device used (e.g., Cardiohelp)	☐ Yes ☐ No ☐ Unknown / Not Documented		
Console/Drive unit Manufacturer / Name:	_____		
Oxygenator Manufacturer / Name	_____		
Safety features incorporated in the ECMO circuit for this event	☐ Bridge ☐ Bubble detectors ☐ O2 saturation monitor ☐ Pressure alarms		
	☐ Transonic flow meter ☐ Venous bladder and pump controller ☐ Other (Specify): _____		
Was any component exchanged or replaced?	☐ Yes ☐ No		☐ Unknown/ Not Documented
Component Exchanged	☐ Console ☐ Heat Exchanger		☐ Oxygenator ☐ Other (Specify): _____
Reason(s) for exchange	_____		
Date/time of exchange	____/____/____ :____ MM DD YYYY HH : MM		
<i>Additional exchange(s)</i>	If applicable, multiple instances of Component Exchanged/Replaced repeat group can be added to the form		
Component Exchanged #2	☐ Console ☐ Heat Exchanger		☐ Oxygenator ☐ Other (Specify): _____
Exchange #2 reason	_____		
Date/Time of exchange #2	____/____/____ :____ MM DD YYYY HH : MM		
Neurologic injury or events detected during ECMO or after ECMO (Less than 6 weeks after separation from ECMO or by Hospital Discharge, which ever one comes first). (check all that apply):			
☐ No Neurological injury or events detected during ECMO or after ECMO			
Anoxic Brain Injury	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Brain death	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Cerebral Microbleeds	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Intracranial hemorrhage	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
New clinical seizure(s)	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Spinal cord ischemia	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Stroke	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
Other (specify):	☐ Yes ☐ No	Date/Time detected: ____/____/____ :____	
If other neurologic injury, please specify:	_____		
Other Complications/Events			
Device-Related Events	☐ None ☐ Oxygenator failure ☐ Tubing rupture ☐ Air embolism ☐ Pump failure ☐ Other (Specify): _____ ☐ Circuit clots		

Other ECMO complications/events	☐ None ☐ Differential hypoxia (Harlequin syndrome) ☐ Left ventricular distention ☐ Pulmonary hemorrhage ☐ Pulmonary edema ☐ Other (Specify): _____	
Outcomes / End of Event		
Date/Time ECMO ended	___/___/___ :___ MM DD YYYY HH : MM	☐ Unknown/Not Documented
SAVE (Survival After Veno-Arterial ECMO) Score	_____	☐ Not Documented
Reason(s) ECMO ended	☐ Converted to other support ☐ ECMO complication ☐ Limited resources ☐ Patient (or family) refused treatment ☐ Patient recovered/improved ☐ Significant deterioration ☐ Transition to surgical LVAD ☐ Transplant (Heart/Lung) ☐ Patient died ☐ Other (specify): _____ ☐ Unknown	
SERIAL SHOCK ASSESSMENT		
Select if serial assessments were NOT performed	☐	
Date/Time of Assessment – Serial Assessment	___/___/___ :___ (MM/DD/YYYY HH:MM)	☐ Unknown
Hours since Shock Onset – Serial Assessment	_____	
SCAI Stage:	☐ Shock has resolved ☐ Stage D ☐ Stage B ☐ Stage E ☐ Stage C ☐ ND/Unable to Determine	
Presence of a Pulmonary Artery Catheter (PAC)	☐ Yes ☐ No	
Presence of Mechanical Ventilation	☐ Yes ☐ No	
Presence of renal replacement therapy	☐ Yes ☐ No	
For the measurement elements below, enter accurate parameters closest to assessment time		
BP: (Systolic/Diastolic)	___ / ___ mmHg	☐ Not Documented
Heart Rate	_____ bpm	☐ Not Documented
CVP/RA	_____ mmHg	☐ Not Documented
Pa Pressure (Systolic/Diastolic)	___ / ___ mm/Hg	☐ Not Documented
PCWP	_____ mmHg	☐ Not Documented
Cardiac Output	_____ L/min	☐ Not Documented
MAP (Auto-calculated)	_____ mmHg	☐ Not Documented
PAPi (Auto-calculated)	_____ w	☐ Not Documented
CPO (Auto-calculated)	_____	☐ Not Documented
Peak Lactate since the last assessment	_____ mmol/L	☐ Not Documented

Lowest pH since last assessment	_____	☐ Not Documented
Peak ALT since last assessment	_____ IU/L	☐ Not Documented
Vasoactive Medications at time of assessment	☐ None ☐ Dobutamine ☐ Dopamine ☐ Epinephrine ☐ Levosimendan ☐ Milrinone	☐ Nitroprusside ☐ Norepinephrine ☐ Phenylephrine ☐ Vasopressin ☐ Not Documented ☐ Other Vasoactive Medication (Specify): _____
Presence of MCS Device(s) at assessment	☐ None ☐ Impella ☐ Impella 2.5 ☐ Impella CP ☐ Impella ECP ☐ Impella 5.0 ☐ Impella 5.5 ☐ Impella RP ☐ VA ECMO ☐ IABP ☐ TandemHeart ☐ TandemHeart – Left ☐ TandemHeart – Right	☐ Temporary Surgical VAD (e.g. CentriMag) ☐ Temporary surgical VAD – Left ☐ Temporary surgical VAD – Right ☐ Implanted surgical assist device ☐ Pulsatile-Flow Devices ☐ Continuous- Flow Devices ☐ Other MCS
Was there a device upgrade/escalation since the prior assessment?	☐ Yes ☐ No	
Select reason(s) for device upgrade or escalation since the prior assessment	☐ None/Not Documented ☐ Device- related complication of failure ☐ Inadequate response to vasoactive medications	☐ Need for escalation to greater hemodynamic support from MCS ☐ Switch to alternative MCS access site (e.g. fem to axillary)
Was there a device de-escalation since the prior assessment?	☐ Yes ☐ No	
Select reason(s) for device upgrade or escalation since the prior assessment	☐ Change in goals of care ☐ Durable LVAD or heart transplant	☐ MCS no longer needed ☐ Transition to central cannulated device ☐ Other (specify)
If other reason for device upgrade or escalation since the prior assessment, please specify:	_____	
Vascular complication requiring intervention?	☐ Yes ☐ No	
Date/Time of vascular intervention:	____/____/____ ____:____ ☐ (MM/DD/YYYY HH:MM) ☐ Unknown	
Complications of ECMO	☐ No complications ☐ Pulmonary hemorrhage requiring intervention	☐ Refractory pulmonary edema ☐ Other (Specify):

DISCHARGE INFORMATION		
Discharge disposition	☐ Home ☐ Hospice – Home ☐ Hospice – Health Care Facility ☐ Acute Care Facility ☐ Other Health Care Facility	☐ Expired ☐ Left Against Medical Advise (AMA) ☐ Not documented or Unable to Determine (UTD)
Date/Time of Discharge from hospital:	__/__/____ __:____ (MM/DD/YYYY HH:MM)	☐ Unknown
Was the patient placed on Comfort Measures Only at any time during this admission?	☐ Yes ☐ No/ND	
Date/Time of Comfort Measure only:	__/__/____ (MM/DD/YYYY)	☐ Unknown
Most favorable neurological status at discharge	☐ Conscious without severe disability ☐ Conscious with severe disability ☐ Comatose ☐ Unable to assess due to sedation ☐ Unknown/Not Documented	
If patient died, Date/Time of death	__/__/____ __:____ (MM/DD/YYYY HH:MM)	☐ Not Documented
Primary Cause of Death	☐ Cardiovascular ☐ Non-Cardiovascular ☐ Primary Cause of Death Unknown	
If Cardiovascular, what was primary cause of death?	☐ Acute Coronary Syndrome ☐ Cardiogenic Shock/HF ☐ Stroke	☐ Sudden Cardiac Death ☐ Other Cardiovascular ☐ Unknown Cardiovascular
If Non-Cardiovascular, what was the primary cause of death?	☐ Anoxic Brain Injury ☐ Other non-cardiovascular	
Other Contributors to Cause of Death (if applicable)	☐ Acute Coronary Syndrome ☐ Cardiogenic Shock / HF ☐ Stroke ☐ Sudden Cardiac Death	☐ Anoxic Brain Injury ☐ Other Cardiovascular ☐ Other Non-Cardiovascular ☐ Unknown Cardiovascular
If Other Health Care Facility:	☐ Skilled Nursing Facility (SNF) ☐ Inpatient Rehabilitation Facility (IRF)	☐ Long Term Care Hospital (LTCH) ☐ Intermediate Care Facility (ICF) ☐ Other
Transferred to:	_____	
Reason for Transfer	☐ Administrative ☐ De-escalation of care ☐ Escalation of care	☐ Need for transplant services ☐ Patient / Family Request ☐ Other
Social Determinants of Health		
During this admission, was a standardized health related social needs form or assessment completed?	☐ Yes ☐ No/Not Documented	
If yes, identify the areas of unmet social need. (select all that apply):	☐ None of the areas of unmet social need listed ☐ Education ☐ Employment ☐ Financial Strain ☐ Food	☐ Living Situation/Housing ☐ Mental Health ☐ Personal Safety ☐ Substance Abuse ☐ Transportation Barriers ☐ Utilities
If unmet social need(s) identified, were resources provided to the patient?	☐ Yes ☐ No	

If yes, what resources were provided?	☐ Access to a Community Health Worker ☐ Access to a Social Worker ☐ Access to another Case Worker/Support Specialist ☐ Resources for a digital-based community platform (e.g., findhelp.org) ☐ Other
If other resources provided, please specify:	
Derived Variables/ Metrics (Auto-Populated)	
DanGer Like Patient:	
SHARC Category:	
Arrival at referring facility to Shock Onset at referring facility (transfer patients) (hours):	
Shock Onset at first facility to arrival at my facility (transfer patients) (hours):	
Arrival to Shock Onset at my facility (hours):	
Time from Shock Onset to First MCS Device (hours):	
Length of Stay (days):	
END OF FORM	