National Cardiogenic Shock Initiative

Case Report Form

(Version 2.0)

Please complete the entirety of the worksheet. Upon completion, please email this worksheet **[SECURE]** to: NationalCSI@hfhs.org. Please email/call if there are any questions or concerns.

Demographics

Date of Impella Insertion _____

Implanting Physician _____

Hospital: Name _____

Hospital: City, State _____

Age of Patient _____

Gender (please circle) Male Female

Race (please circle) White Black Hispanic Other

Medical History

Does the patient have a history of **Diabetes?**	Yes	No	N/A
Doe the patient have a history of **TIA/CVA?**	Yes	No	N/A
Does the patient have a history of **ESRD?**	Yes	No	N/A
Does the patient have a history of **CKD?**	Yes	No	N/A
Does the patient have a known **LVEF <50%?**	Yes	No	N/A
Has the patient had a prior **CABG?**	Yes	No	N/A
Has the patient had a prior **PCI?**	Yes	No	N/A
Has the patient had a prior **Myocardial Infarction?**	Yes	No	N/A

FOR HFH USE ONLY

NCSI #: _____

Admission Characteristics

Was the patient **transferred** from another hospital?	Yes	No	N/A
If yes, was the patient on support prior to transport?	Yes	No	N/A
What support device was used?	IABP	Other: _____	
Was cardiogenic shock present on admission to your institution?	Yes	No	N/A
Did the patient experience any of the following (*prior* to arrival in the Cath Lab):			
Anoxic Brain Injury?	Yes	No	N/A
Cardiac Arrest (In Hospital)?	Yes	No	N/A
Cardiac Arrest (Out of Hospital)?	Yes	No	N/A
Did the patient require CPR prior to Impella implant?	Yes	No	N/A
Was the patient undergoing active CPR at the time of Impella implantation?	Yes	No	N/A
Was the patient treated with medically-induced hypothermia?	Yes	No	N/A

**** Important Timings **** Please estimate if exact timings are unavailable.

Please do not leave blank.

Arrival to Hospital (date and time) Date_____Time_____

Onset of AMI (date and time) Date_____Time_____

Onset of Shock (date and time) Date_____Time_____

Time of Impella Insertion (date and time) Date _____ Time _____

Using the above timings, please calculate the following times:

Door to Support Time (minutes): _____

Door to Balloon Time (minutes): _____

Procedural Characteristics (please circle the best choice, if answer is not known please write "N/A")

Impella Placement: 1. Prior to PCI 2. Post PCI 3. Intra-procedural

RHC Placement: 1. Prior to Impella 2. Post Impella 3. No RHC obtained

Impella Used:	Impella Access:	AMI Type?
2.5 CP 5.0 RP Other:_____	☐ Femoral ☐ Axillary ☐ Other: _____	STEMI NSTEMI

PCI Attempted?	TIMI FLOW		Evidence of Thrombus	# of Diseased Vessels?	# Vessels Treated?	# of Stents?	Culprit Lesion(s) Location(s)		Other Lesion(s) Location(s)	
YES										
NO	Pre-PCI	Post-PCI	Pre-PCI?				1. LM	5. Ramus	1. LM	5. Ramus
	0	0		0	0		2.LAD	6. SVG	2.LAD	6. SVG
Successful?	1	1	YES	1	1		3. LCx	7. LIMA	3. LCx	7. LIMA
YES	2	2		2	2		4. RCA	8. RIMA	4. RCA	8. RIMA
NO	3	3	NO	3	3					

Access for PCI?	Was complete revascularization performed?	Thrombectomy used?	Atherectomy used?	PCI Complications? ☐ NO ☐ YES
1. Radial				If YES: ☐ Stent Thrombosis ☐ Evidence of Residual Thrombus ☐ OTHER:
2. Femoral	YES NO	YES NO	YES NO	_____ _____

Was patient taking antiplatelet medication at home? ☐ No ☐ Aspirin ☐ Clopidogrel ☐ Ticagrelor ☐ Prasugrel ☐ N/A ☐ OTHER: _____

Was patient loaded with antiplatelet prior to PCI: ☐ No ☐ Aspirin ☐ Clopidogrel ☐ Ticagrelor ☐ Prasugrel ☐ Cangrelor ☐ Abciximab ☐ Eftifibatide ☐ Tirofiban ☐ N/A ☐ OTHER: _____

If oral antiplatelets were given, what route were they given? ☐ By Mouth ☐ NG/OG Tube ☐ Rectal ☐ N/A ☐ Other: _____

Was the oral antiplatelet crushed? ☐ Yes ☐ No ☐ N/A

When was antiplatelet administered? ☐ EMS ☐ ER ☐ Pre-PCI ☐ Post-PCI ☐ N/A ☐ Other: _____

Anticoagulation used during PCI: ☐ Heparin ☐ Bivalirudin ☐ Other: _____

Please give a brief description of the patient admission:_____

_____

_____

_____

_____

_____

_____

_____

_____

HEMODYNAMIC & LABORATORY VALUES (Pre-procedure & Prior to starting Vasoactive Medications) These values should represent the "worst hemodynamics" that demonstrate level of shock			
HR	SBP	DBP	MAP

HEMODYNAMIC & LABORATORY VALUES: (Pre-Impella) These values represent the hemodynamics prior to Impella Insertion, at the beginning of the PCI procedure								
HR	**SBP**	**DBP**	**MAP**	**Troponin**	**Cr**	**AST**	**Hgb**	**Lactate**
RA/CVP	RV	PA	PCWP	CO ☐ Fick ☐ TD ☐ CCO	CI	CPO	PAPI	**LVEDP**
PA Sat.	**Admission Glucose**	***VASOACTIVE AGENTS:*** ***(DOSE):***	Norepinephrine	Dopamine	Epinephrine	Vasopressin	Dobutamine	Milrinone

HEMODYNAMIC & LABORATORY VALUES: Post-PCI, in the Cath Lab (with Impella running) These values represent the Cath Lab hemodynamics post PCI, at the end of the procedure								
HR	**SBP**	**DBP**	**MAP**					
RA/CVP	**RV**	**PA**	**PCWP**	**CO** ☐ Fick ☐ TD ☐ CCO	**CI**	**CPO**	**PAPI**	**LVEDP**
PA Sat.	***VASOACTIVE AGENTS:*** ***(DOSE):***	Norepinephrine	Dopamine	Epinephrine	Vasopressin	Dobutamine	Milrinone	Other:

HEMODYNAMIC & LABORATORY VALUES: 12 hours Post-Impella Implant (ONLY if Impella is running)								
HR	**SBP**	**DBP**	**MAP**	**Troponin**	**Cr**	**AST**	**Hgb**	**Lactate**
RA/CVP	RV	**PA**	PCWP	**CO** ☐ **Fick** ☐ **TD** ☐ **CCO**	**CI**	**CPO**	**PAPI**	LVEDP
PA Sat.	***VASOACTIVE AGENTS:*** ***(DOSE):***	Norepinephrine	Dopamine	Epinephrine	Vasopressin	Dobutamine	Milrinone	Other:

HEMODYNAMIC & LABORATORY VALUES: 24 hours Post-Impella Implant (ONLY if Impella is running)								
HR	**SBP**	**DBP**	**MAP**	**Troponin**	**Cr**	**AST**	**Hgb**	**Lactate**
RA/CVP	RV	**PA**	PCWP	**CO** ☐ **Fick** ☐ **TD** ☐ **CCO**	**CI**	**CPO**	**PAPI**	LVEDP
PA Sat.	***VASOACTIVE AGENTS:*** ***(DOSE):***	Norepinephrine	Dopamine	Epinephrine	Vasopressin	Dobutamine	Milrinone	Other:

POST PROCEDURAL FOLLOW UP

Time & Date of Impella Explant: Time:_____Date:_____

WEANING OF HEMODYNAMIC SUPPORT:
Support was weaned according to: ☐ PA Sat ☐ Echo ☐ RHC Hemodynamics
☐ Other: _____

Total hospital duration (Days): _____

Left Ventricle Ejection Fraction (Pre-Impella): _____ (Prior to discharge): _____

DID THE PATIENT SURVIVE THE INDEX PROCEDURE? Yes No N/A

Was the patient transferred to VAD/Transplant Center Yes No N/A

If "Yes", DID THE PATIENT SURVIVE TO TRANSFER? Yes No N/A

Did the patient have any additional support devices implanted post-index procedure? Yes No N/A

If "Yes", which device was used: _____

DID THE PATIENT SURVIVE TO DISCHARGE? Yes No N/A

Was the patient discharged to hospice? Yes No N/A

Did the patient experience any significant Impella-related complications?

☐ NO ☐ Vascular Complications ☐ Hemolysis

☐ OTHER – Please explain: _____

_____

Did the patient require any blood transfusions? ☐ No ☐ Yes – # of transfusions: _____

Was any external form of vascular bypass performed to provide lower extremity perfusion during Impella (i.e. antegrade access, "up and over" perfusion catheter, etc.)?

☐ No ☐ Yes – Please Explain: _____

_____

_____

Please provide a brief description of the patient's hospital course (including significant complications and discharge circumstances):

Please Explain: _____

_____

_____

_____

_____

If the patient did not survive, please indicate the major cause of death (fatal bleeding, anoxic brain injury, worsening cardiogenic shock, patient/family wishes?)

Please Explain: _____

_____

_____

Cardiac Medications on Discharge (name only): _____

_____

- END OF FORM -