A. DEMOGRAPHICS

Last Name[2000]: | **First Name**[2010]: | **Middle Name**[2020]:

SSN[2030]: - - ☐ SSN N/A[2031] | **Patient ID**[2040]: *(auto)* | **Other ID**[2045]:

Birth Date[2050]: mm / dd / yyyy | **Sex**[2060]: O Male O Female | **Patient Zip Code**[2065]: ☐ Zip Code N/A[2066]

Race: (Select all that apply)
☐ White[2070] ☐ Black/African American[2071] ☐ American Indian/Alaskan Native[2073]
☐ Asian[2072] ☐ Native Hawaiian/Pacific Islander[2074] ☐ Middle Eastern/North African[2075]

Hispanic or Latino Ethnicity[2076]: O No O Yes

B. EPISODE OF CARE (ADMISSION)

Arrival Date/Time[3001]: mm/dd/yyyy / hh:mm

Admitting Provider's Name, NPI[3050,3051,3052,3053]: _____

Attending Provider's Name, NPI[3055,3056,3057,3058]: _____,_____

Health Insurance[3005]: O No O Yes

→ **If** Yes, **Payment Source**[3010]: (Select all that apply)
☐ Private Health Insurance ☐ Medicare (Part A or B) ☐ Medicare Advantage (Part C) ☐ Medicaid
☐ Military Health Care ☐ State-Specific Plan (non-Medicaid) ☐ Indian Health Service ☐ Non-US Insurance

→ **If any** Medicare**, Medical Beneficiary Identifier**[12846]: _____

Research Study[3020]: O No O Yes → **If** Yes, **Study Name**[3025], **Patient ID**[3030]: _____, _____

C. HISTORY AND RISK FACTORS

Hypertension[4615]: O No O Yes
Dyslipidemia[4620]: O No O Yes
Prior MI[4291]: O No O Yes
→ **If** Yes, **Most Recent MI Date**[4296]: mm / dd / yyyy
Prior PCI[4495]: O No O Yes
→ **If** Yes, **Most Recent PCI Date**[4503]: mm / dd / yyyy
→ **If** Yes, **Left Main PCI**[4501]: O No O Yes ☐ Unknown[4502]

Height[6000]: _____ cm | **Weight**[6005]: _____ kg
Family Hx. of Premature CAD[4287]: O No O Yes
Cerebrovascular Disease[4551]: O No O Yes
Peripheral Arterial Disease[4610]: O No O Yes
Chronic Lung Disease[4576]: O No O Yes
Prior CABG[4515]: O No O Yes
→ **If** Yes, **Most Recent CABG Date**[4521]: mm / dd / yyyy

Tobacco Use[4625]: O Never O Former O Current - Every Day O Current - Some Days O Smoker, Current Status Unknown O Unknown if ever Smoked

→ **If** any Current **, Tobacco Type**[4626] (Select all that apply) ☐ Cigarettes ☐ Cigars ☐ Pipe ☐ Smokeless

→ **If** Current - Every Day and Cigarettes**, Amount**[4627]: O Light tobacco use (<10/day) O Heavy tobacco use (>=10/day)

Cardiac Arrest Out of Healthcare Facility[4630]: O No O Yes
→ **If** Yes, **Arrest Witnessed**[4631]: O No O Yes
→ **If** Yes, **Arrest after Arrival of EMS**[4632]: O No O Yes
→ **If** Yes, **First Cardiac Arrest Rhythm**[4633]: O Shockable O Not Shockable ☐ Unknown[4634]

Cardiac Arrest at Transferring Healthcare Facility[4635]: O No O Yes

(KNOWN OR DIAGNOSED PRIOR TO FIRST **CATH LAB** VISIT)

Diabetes Mellitus[4555]: O No O Yes
Currently on Dialysis[4560]: O No O Yes

CSHA Clinical Frailty Scale[1] [4561]:
O 1: Very Fit
O 2: Well
O 3: Managing Well
O 4: Vulnerable
O 5: Mildly Frail
O 6: Moderately Frail
O 7: Severely Frail
O 8: Very Severely Frail
O 9: Terminally Ill

[1]Canadian Study Of Health And Aging Clinical Frailty Scale Is Used With Permission For The American College Of Cardiology Foundation By Dr. Kenneth Rockwood (© Kenneth Rockwood, MD)

D. PRE-PROCEDURE INFORMATION (COMPLETE FOR EACH CATH LAB VISIT)

Heart Failure[4001]: O No O Yes → **If Yes, NYHA Class**[4011]: O Class I O Class II O Class III O Class IV

→ **If Yes, Newly Diagnosed**[4012]: O No O Yes

→ **If Yes, HF Type**[4013]: O Diastolic O Systolic ☐ Unknown[4014]

(DIAGNOSTIC TEST)

Electrocardiac Assessment Method[5037]: O ECG O Telemetry Monitor O Holter Monitor O Other O None

→ **If any methods, Results**[5032]: O Normal O Abnormal O Uninterpretable

→ **If Abnormal, New Antiarrhythmic Therapy Initiated Prior to Cath Lab**[5033]: O No O Yes

→ **If Abnormal, Electrocardiac Abnormality Type**[5034]: (Select all that apply)

☐ Ventricular Fibrillation (VF) ☐ New Left Bundle Branch Block ☐ 2nd Degree AV Heart Block Type 1
☐ Sustained VT ☐ New Onset Atrial Fib ☐ 2nd Degree AV Heart Block Type 2
☐ Non Sustained VT ☐ New Onset Atrial Flutter ☐ 3rd Degree AV Heart Block
☐ Exercise Induced VT ☐ PVC – Frequent ☐ Symptomatic Bradyarrhythmia
☐ T wave inversions ☐ PVC – Infrequent ☐ Other Electrocardiac Abnormality
☐ ST deviation >= 0.5 mm

→ **If New Onset Atrial Fib, Heart Rate**[6011]: _____ bpm

→ **If Non Sustained VT, Type**[5036]: (Select all that apply) ☐ Symptomatic ☐ Newly Diagnosed ☐ Other

Stress Test Performed[5200]: O No O Yes → **If Yes, Specify Test Performed:**

Test Type Performed[5201]	Most Recent Date[5204]	Test Results[5202]	→ If Positive, Risk/Extent of Ischemia[5203]
O Stress Echocardiogram	mm / dd / yyyy	O Negative	O Low
O Exercise Stress Test (w/o imaging)		O Positive	O Intermediate
O Stress Nuclear		O Indeterminate	O High
O Stress Imaging w/CMR		O Unavailable	O Unavailable

Cardiac CTA Performed[5220]: O No O Yes → **If Yes, Most Recent Cardiac CTA Date**[5226]: mm / dd / yyyy

→ **If Yes, Results**[5227]: (Select all that apply) ☐ Obstructive CAD ☐ Unclear Severity ☐ Structural Disease
☐ Non-Obstructive CAD ☐ No CAD ☐ Unknown[5228]

Agatston Coronary Calcium Score Assessed[5256]: O No O Yes

→ **If Yes, Agatston Coronary Calcium Score**[5255]: _____ → **If any value, Most Recent Calcium Score Date**[5257]: mm / dd / yyyy

LVEF Assessed[5111]: O No O Yes → **If Yes, Most Recent LVEF**[5116]: _____ %

Prior Dx Coronary Angiography Procedure[5263]: (without intervention) O No O Yes

→ **If Yes, Most Recent Procedure Date**[5264]: mm / dd / yyyy

→ **If Yes, Results**[5265]: (Select all that apply) ☐ Obstructive CAD ☐ Unclear Severity ☐ Structural Disease
☐ Non-Obstructive CAD ☐ No CAD ☐ Unknown[5266]

PRE-PROCEDURE MEDICATIONS

MEDICATION[6986]	ADMINISTERED[6991]	MEDICATION[6986]	ADMINISTERED[6991]
Aspirin	O No O Yes O Contraindicated	Statin (Any)	O No O Yes O Contraindicated
Beta Blockers (Any)	O No O Yes O Contraindicated	Non-Statin (Any)	O No O Yes O Contraindicated
Ca Channel Blockers (Any)	O No O Yes O Contraindicated	PCSK9 Inhibitors	O No O Yes O Contraindicated
Antiarrhythmic Agent Other	O No O Yes O Contraindicated	ACE (Any)	O No O Yes O Contraindicated
Long Acting Nitrates (Any)	O No O Yes O Contraindicated	ARB (Any)	O No O Yes O Contraindicated
Ranolazine	O No O Yes O Contraindicated	Sacubitril and Valsartan	O No O Yes O Contraindicated

D. PRE-PROCEDURE INFORMATION (CONT.)

OPTIONAL SECTION: SEATTLE ANGINA QUESTIONNAIRE (SAQ)[2] – FOR PARTICIPANTS CAPTURING LONG TERM CARE

*OVER THE **PAST 4 WEEKS**, AS A RESULT OF YOUR ANGINA, HOW MUCH DIFFICULTY HAVE YOU HAD IN:*

	EXTREMELY LIMITED	QUITE A BIT LIMITED	MODERATELY LIMITED	SLIGHTLY LIMITED	NOT AT ALL LIMITED	LIMITED FOR OTHER REASONS OR DID NOT DO THESE ACTIVITIES
(1a) **Walking indoors on level ground**[5301]	O	O	O	O	O	O
(1b) **Gardening, vacuuming, or carrying groceries**[5302]	O	O	O	O	O	O
(1c) **Lifting or moving heavy objects (e.g. furniture, children)**[5303]	O	O	O	O	O	O

*OVER THE **PAST 4 WEEKS**, ON AVERAGE, HOW MANY TIMES HAVE YOU...*

	4 OR MORE TIMES PER DAY	1 – 3 TIMES PER DAY	3 OR MORE TIMES PER WEEK BUT NOT EVERY DAY	1 – 2 TIMES PER WEEK	LESS THAN ONCE A WEEK	NONE OVER THE PAST 4 WEEKS
(2) *… HAD CHEST PAIN, CHEST TIGHTNESS, OR ANGINA?*[5305]	O	O	O	O	O	O
(3) *…HAD TO TAKE NITROGLYCERIN (TABLETS OR SPRAY) FOR YOUR CHEST PAIN, CHEST TIGHTNESS OR ANGINA?*[5310]	O	O	O	O	O	O

*OVER THE **PAST 4 WEEKS**, HOW MUCH HAS YOUR...:*

	IT HAS EXTREMELY LIMITED MY ENJOYMENT OF LIFE	IT HAS LIMITED MY ENJOYMENT OF LIFE QUITE A BIT	IT HAS MODERATELY LIMITED MY ENJOYMENT OF LIFE	IT HAS SLIGHTLY LIMITED MY ENJOYMENT OF LIFE	IT HAS NOT LIMITED MY ENJOYMENT OF LIFE AT ALL
(4) *…CHEST PAIN, CHEST TIGHTNESS OR ANGINA LIMITED YOUR ENJOYMENT OF LIFE?*[5315]	O	O	O	O	O

IF YOU HAD TO SPEND THE REST OF YOUR LIFE WITH YOUR CHEST PAIN, CHEST TIGHTNESS OR ANGINA THE WAY IT IS RIGHT NOW...

	NOT SATISFIED AT ALL	MOSTLY DISSATISFIED	SOMEWHAT SATISFIED	MOSTLY SATISFIED	COMPLETELY SATISFIED
(5) *…HOW WOULD YOU FEEL ABOUT THIS?*[5320]	O	O	O	O	O

OPTIONAL SECTION: ROSE DYSPNEA SCALE – FOR PARTICIPANTS CAPTURING LONG TERM CARE

*PLEASE THINK ABOUT HOW YOU HAVE BEEN FEELING IN THE **PAST 4 WEEKS**, AS YOU ANSWER THESE FOUR QUESTIONS: DO YOU GET SHORT OF BREATH WHEN...*

(1) …hurrying on level ground or walking up a slight hill?[5330]	O No	O Yes
(2) …walking with other people your own age on level ground?[5335]	O No	O Yes
(3) **...**walking at your own pace on level ground?[5340]	O No	O Yes
(4) **...**when washing or dressing?[5345]	O No	O Yes

[2] SEATTLE ANGINA QUESTIONNAIRE (© COPYRIGHT JOHN SPERTUS, MD, MPH) IS USED WITH PERMISSION FOR NCDR BY WWW.CVOUTCOMES.ORG

E. PROCEDURE INFORMATION

Procedure Start Date/Time[7000]: mm/dd/yyyy / hh:mm | **Procedure End Date/Time**[7005]: mm/dd/yyyy / hh:mm

Diagnostic Coronary Angiography Procedure[7045]: O No O Yes

→ **If** Yes, **Diagnostic Cath Operator's Name, NPI**[7046,7047,7048,7049]: _____

Percutaneous Coronary Intervention (PCI)[7050]: O No O Yes

→ **If** Yes, **PCI Operator's Name, NPI**[7051,7052,7053,7054]: _____

→ **If** Yes, **Fellow Operator Name, NPI, Fellowship Training Program**[15431,15433,15434,15435,15436]: ____(Optional)_____

Diagnostic Left Heart Cath[7060]: O No O Yes → **If** Yes, **LVEF**[7061]: _____ %

Concomitant Procedures Performed[7065]: O No O Yes

→ **If** Yes, **Procedure Type(s)**[7066]: (Select the best option(s)) _____ , _____ , _____

Arterial Access Site[7320]: O Femoral O Brachial O Radial O Other

Arterial Cross Over[7325]: O No O Yes

Closure Method(s)[7330,7331,7333]:	1		Reserved for future use	☐ Method Not Documented[7332]
	2		Reserved for future use	
	3		Reserved for future use	

Venous Access[7335]: (concomitant entry for Cath procedure) O No O Yes

Systolic BP[6016]: _____ mmHg

Cardiac Arrest at this facility[7340]: O No O Yes

RADIATION EXPOSURE AND CONTRAST

CODE **ALL** AVAILABLE MEASUREMENTS: →

Fluoro Time[7214]: _____ minutes **Contrast Volume**[7215]: _____ mL

Cumulative Air Kerma[7210]: _____ O mGy O Gy

Dose Area Product[14278]: _____ O Gy·cm^2 O dGy·cm^2 O cGy·cm^2 O mGy·cm^2 O µGy·M^2

F. LABS

PRE-PROCEDURE (VALUES CLOSEST TO THE PROCEDURE)			POST-PROCEDURE			
Troponin I[6090]:	_____ng/mL	☐ Not Drawn[6091]	**Troponin I**[8515]:		_____ng/mL	☐ Not Drawn[8516]
Troponin T[6095]:	_____ng/mL	☐ Not Drawn[6096]	**Troponin T**[8520]:		_____ng/mL	☐ Not Drawn[8521]
Creatinine[6050]:	_____mg/dL	☐ Not Drawn[6051]	**Creatinine**[8510]:	(peak)	_____mg/dL	☐ Not Drawn[8511]
Hemoglobin[6030]:	_____g/dL	☐ Not Drawn[6031]	**Hemoglobin**[8505]:	(Lowest w/in 72 hours)	_____g/dL	☐ Not Drawn[8506]
Total Cholesterol[6100]:	_____mg/dL	☐ Not Drawn[6101]				
HDL[6105]:	_____mg/dL	☐ Not Drawn[6106]				

G. Cath Lab Visit (Complete for each Cath Lab visit)

Cath Lab Visit Indication(s)[7400]: (Select all that apply)

- ☐ ACS <= 24 hrs
- ☐ ACS > 24 hrs
- ☐ New Onset Angina <= 2 months
- ☐ Worsening Angina
- ☐ Resuscitated Cardiac Arrest
- ☐ Stable Known CAD
- ☐ Suspected CAD
- ☐ Valvular Disease
- ☐ Pericardial Disease
- ☐ Cardiac Arrhythmia
- ☐ Cardiomyopathy
- ☐ LV Dysfunction
- ☐ Syncope
- ☐ Post Cardiac Transplant
- ☐ Pre-operative evaluation
- ☐ Evaluation for Exercise Clearance
- ☐ Other

Chest Pain Symptom Assessment[7405]: O Typical Angina O Atypical Angina O Non-anginal Chest Pain O Asymptomatic

Cardiovascular Instability[7410]: O No O Yes

→ **If** Yes, **Cardiovascular Instability Type[7415]:** (Select all that apply)

- ☐ Persistent Ischemic Symptoms (chest pain, STE)
- ☐ Hemodynamic Instability (not cardiogenic shock)
- ☐ Ventricular Arrhythmias
- ☐ Cardiogenic Shock
- ☐ Acute Heart Failure Symptoms
- ☐ Refractory Cardiogenic Shock

Ventricular Support[7420]: O No O Yes

→ **If** Yes, **Pharmacologic Vasopressor Support[7421]:** O No O Yes

→ **If** Yes, **Mechanical Support[7422]:** O No O Yes

→ **If** Yes, **Device[7423]:** _____

→ **If** Yes, **Timing[7424]:** O In place at start of procedure O Inserted during procedure and prior to intervention O Inserted after intervention has begun

→ Cath Lab Visit Indication(s) [7400] = 'Valvular Disease' (Complete for each type)

Valvular Disease Stenosis Type[7450]		Stenosis Severity[7451]
1	O Aortic Stenosis O Pulmonic Stenosis O Mitral Stenosis O Tricuspid Stenosis	O Mild O Moderate O Severe
2	O Aortic Stenosis O Pulmonic Stenosis O Mitral Stenosis O Tricuspid Stenosis	O Mild O Moderate O Severe

Valvular Disease Regurgitation Type[7455]		Regurgitation Severity[7456]
1	O Aortic Regurgitation O Pulmonic Regurgitation O Mitral Regurgitation O Tricuspid Regurgitation	O Mild (1+) O Moderate (2+) O Moderately Severe (3+) O Severe (4+)
2	O Aortic Regurgitation O Pulmonic Regurgitation O Mitral Regurgitation O Tricuspid Regurgitation	O Mild (1+) O Moderate (2+) O Moderately Severe (3+) O Severe (4+)

→ Cath Lab Visit Indication(s) [7400] = 'Pre-Operative Evaluation'

Evaluation for Surgery Type[7465]: O Cardiac Surgery O Non-Cardiac Surgery

Functional Capacity[7466]: O < 4 METS O >= 4 METS without symptoms O >= 4 METS with symptoms ☐ Unknown[7467]

Surgical Risk[7468]: O Low O Intermediate O High Risk: Vascular O High Risk: Non-Vascular

Solid Organ Transplant Surgery[7469]: O No O Yes

→ **If** Yes, **Donor[7470]:** O No O Yes

→ **If** Yes, **Organ[7471]:** (Select all that apply) ☐ Heart ☐ Kidney ☐ Liver ☐ Lung ☐ Pancreas ☐ Other Organ

H. CORONARY ANATOMY

Dominance[7500]: O Left O Right O Co-dominant

Native Vessel with Stenosis >= 50%[7505]: O No O Yes → **If** Yes, **Specify Segment(s):**

SEGMENT NUMBER[7507]	MEASUREMENT (FOR EACH SELECTED)
_____	**Native Stenosis**[7508]: _____ % **Adjunctive Measurements Obtained**[7511]: O No O Yes → **If** Yes, FFR Ratio[7512]: _____ → **If** Yes, iFR Ratio[7513]: _____ → **If** Yes, IVUS MLA[7514]: _____mm² → **If** Yes, OCT MLA[7515]: _____mm²
_____	**Native Stenosis**[7508]: _____ % **Adjunctive Measurements Obtained**[7511]: O No O Yes → **If** Yes, FFR Ratio[7512]: _____ → **If** Yes, iFR Ratio[7513]: _____ → **If** Yes, IVUS MLA[7514]: _____mm² → **If** Yes, OCT MLA[7515]: _____mm²

Graft Vessel with Stenosis >= 50%[7525]: (Note 1) O No O Yes → **If** Yes, **Specify Segment(s):**

SEGMENT NUMBER[7527]	MEASUREMENT (FOR EACH SELECTED)
_____	**Graft Stenosis**[7528]: _____ % **Graft Vessel**[7529]: O LIMA O RIMA O SVG O Radial ☐ Unknown[7530] **Adjunctive Measurements Obtained**[7531]: O No O Yes → **If** Yes, FFR Ratio[7532]: _____ → **If** Yes, iFR Ratio[7533]: _____ → **If** Yes, IVUS MLA[7534]: _____mm² → **If** Yes, OCT MLA[7535]: _____mm²
_____	**Graft Stenosis**[7528]: _____ % **Graft Vessel**[7529]: O LIMA O RIMA O SVG O Radial ☐ Unknown[7530] **Adjunctive Measurements Obtained**[7531]: O No O Yes → **If** Yes, FFR Ratio[7532]: _____ → **If** Yes, iFR Ratio[7533]: _____ → **If** Yes, IVUS MLA[7534]: _____mm² → **If** Yes, OCT MLA[7535]: _____mm²

NOTE 1: CABG DATE/TIME[10011] MUST BE LESS THAN PROCEDURE START DATE/TIME[7000] OR PRIOR CABG[4515] = 'YES' TO COMPLETE THESE ELEMENTS.

I. PCI PROCEDURE (COMPLETE FOR EACH CATH LAB VISIT IN WHICH A PCI WAS ATTEMPTED OR PERFORMED)

PCI Status[7800]: O Elective O Urgent O Emergency O Salvage

CARDIAC ARREST OUT OF HEALTHCARE FACILITY[4630] = 'YES' ***OR***
CARDIAC ARREST AT TRANSFERRING HEALTHCARE FACILITY[4635] = 'YES' ***OR***
CARDIAC ARREST AT THIS FACILITY[7340] = 'YES'

Hypothermia Induced[7806]: O No O Yes

→ **If** Yes, **Timing of Hypothermia**[7807]: O Initiated Pre-PCI, <= 6 hrs post cardiac arrest O Post PCI
O Initiated Pre-PCI, > 6 hrs post cardiac arrest

Level of Consciousness[7810]: (at start of PCI s/p cardiac arrest)
O (A) Alert O (P) Pain O Unable to assess
O (V) Verbal O (U) Unresponsive

Decision for PCI with Surgical Consult[7815]: O No O Yes

→ **If** Yes, **CV Treatment Decision**[7816]:
O Surgery Not Recommended
O Surgery Recommended, Patient/Family Declined
O Surgery Recommended, Patient/Family Accepted

PCI for Multi-vessel Disease[7820]: O No O Yes

→ **If** Yes, **Multi-vessel Procedure Type**[7821]: (in this lab visit) O Initial PCI O Staged PCI

PCI Indication[7825]:
O STEMI – Immediate PCI for Acute STEMI
O STEMI – Rescue (after unsuccessful lytics)
O STEMI – Stable (<= 12 hrs from Sx)
O New Onset Angina <= 2 months
O STEMI – Stable (> 12 hrs from Sx)
O NSTE – ACS
O STEMI – Unstable (> 12 hrs from Sx)
O Stable Angina
O STEMI (after successful lytics)
O CAD (without Ischemic Sx)
O Other

→ **If select** STEMI, **Symptom Date/Time**[7826,7827]: mm/dd/yyyy / hh:mm ☐ Time Unknown[7828]

→ **If any** STEMI (lytics), **Thrombolytics**[7829]: O No O Yes → **If** Yes, **Start Date/Time**[7830]: mm/dd/yyyy / hh:mm

→ **If Not** STEMI or NSTE-ACS, **Syntax Score**[7831]: O Low O Intermediate O High ☐ Unknown[7832]

I. PCI PROCEDURE (COMPLETE FOR EACH CATH LAB VISIT IN WHICH A PCI WAS ATTEMPTED OR PERFORMED) (CONT.)

→ IF PCI INDICATION[7825] = 'STEMI – IMMEDIATE PCI FOR ACUTE STEMI'	**STEMI or STEMI Equivalent First Noted**[7835]: O First ECG O Subsequent ECG → **If** Subsequent ECG, **ECG with STEMI/ STEMI Equivalent Date & Time**[7836]: mm/dd/yyyy / hh:mm → **If** Subsequent ECG, **ECG obtained in Emergency Department**[7840]: O No O Yes **Transferred In For Immediate PCI for STEMI**[7841]: O No O Yes → **If** Yes, **Date & Time ED Presentation at Referring Facility**[7842]: mm/dd/yyyy / hh:mm **First Device Activation Date & Time**[7845]: mm/dd/yyyy / hh:mm **Patient Centered Reason for Delay in PCI**[7850]: O No O Yes → **If** Yes, **Reason**[7851]: O Difficult Vascular Access O Patient delays in providing consent for PCI O Difficulty crossing the culprit lesion O Emergent placement of LV support device before PCI O Cardiac arrest and/or need for intubation before PCI O Other

PCI PROCEDURE MEDICATIONS (ADMINISTERED WITHIN 24 HOURS PRIOR TO AND DURING THE PCI PROCEDURE)

MEDICATION[7990]		ADMINISTERED[7995]	MEDICATION[7990]		ADMINISTERED[7995]
ANTICOAGULANT	Argatroban	O No O Yes	GLYCOPROTEIN (GP) IIB/IIIA INHIBITORS	GP IIb/IIIa Inhibitors (Any)	O No O Yes
	Bivalirudin	O No O Yes			
	Fondaparinux	O No O Yes	NON-VITAMIN K DEPENDENT ORAL ANTICOAGULANT	Apixaban	O No O Yes
	Low Molecular Wt Heparin	O No O Yes		Dabigatran	O No O Yes
	Unfractionated Heparin	O No O Yes		Edoxaban	O No O Yes
	Warfarin	O No O Yes		Rivaroxaban	O No O Yes
ANTIPLATELET	Vorapaxar	O No O Yes	P2Y12 INHIBITORS	Cangrelor	O No O Yes
				Clopidogrel	O No O Yes
				Prasugrel	O No O Yes
				Ticagrelor	O No O Yes

J. LESIONS AND DEVICES (COMPLETE FOR EACH PCI ATTEMPTED OR PERFORMED)

	1	2
Lesion Counter[8000]:		
Segment Number(s)[8001]:	_____ , _____, _____, _____, _____	_____ , _____, _____, _____, _____
If PCI Indication[7825] is STEMI or NSTE-ACS, **Culprit Stenosis**[8002]:	O No O Yes ☐ Unknown[8003]	O No O Yes ☐ Unknown[8003]
Stenosis Immediately Prior to Rx[8004]:	_____%	_____%
→ **If** 100%, **Chronic Total Occlusion**[8005]:	O No O Yes ☐ Unknown[8006]	O No O Yes ☐ Unknown[8006]
TIMI Flow (Pre-Intervention)[8007]:	O TIMI-0 O TIMI-1 O TIMI-2 O TIMI-3	O TIMI-0 O TIMI-1 O TIMI-2 O TIMI-3
Previously Treated Lesion[8008]:	O No O Yes	O No O Yes
→ **If** Yes, **Date**[8009]:	mm / dd / yyyy	mm / dd / yyyy
→ **If** Yes, **Treated with Stent**[8010]:	O No O Yes	O No O Yes
→ **If** Yes, **In-Stent Restenosis**[8011]:	O No O Yes	O No O Yes
→ **If** Yes, **In-Stent Thrombosis**[8012]:	O No O Yes	O No O Yes
→ **If** Yes, **Stent Type**[8013]:	O DES O BMS ☐ Unknown[8014] O Bioabsorbable	O DES O BMS ☐ Unknown[8014] O Bioabsorbable
Lesion in Graft[8015]:	O No O Yes	O No O Yes
→ **If** Yes, **Type of CABG Graft**[8016]:	O LIMA O Vein O Other Artery	O LIMA O Vein O Other Artery
→ **If** Yes, **Location in Graft**[8017]:	O Aortic O Body O Distal	O Aortic O Body O Distal
Navigate through Graft to Native Lesion[8018]:	O No O Yes	O No O Yes
Lesion Complexity[8019]:	O Non-High/Non-C O High/C	O Non-High/Non-C O High/C
Lesion Length[8020]:	_____mm	_____mm
Severe Calcification[8021]:	O No O Yes	O No O Yes
Thrombus Present[12088]:	O No O Yes	O No O Yes
Bifurcation Lesion[8022]:	O No O Yes	O No O Yes
Guidewire Across Lesion[8023]:	O No O Yes	O No O Yes
→ **If** Yes, **Device(s) Deployed**[8024]:	O No O Yes	O No O Yes
→ **If** Yes, **Stenosis (Post-Intervention)**[8025]:	_____%	_____%
→ **If** Yes, **TIMI Flow (Post-Intervention)**[8026]:	O TIMI-0 O TIMI-1 O TIMI-2 O TIMI-3	O TIMI-0 O TIMI-1 O TIMI-2 O TIMI-3

	Intracoronary Device(s) Used[8027,8028]	**Unique Device Identifier (UDI)**[8029]	**Associated Lesion(s)**[8030]	**Diameter**[8031]	**Length**[8032]
1		Reserved for future use	_____ , _____ , _____	____ mm	____ mm
2		Reserved for future use	_____ , _____ , _____	____ mm	____ mm

K. INTRA AND POST-PROCEDURE EVENTS (COMPLETE FOR EACH CATH LAB VISIT)

INTRA PCI ONLY	**PERCUTANEOUS CORONARY INTERVENTION (PCI)**[7050] = 'YES'	**Coronary Artery Perforation**[9145]:	O No O Yes
		Significant Coronary Artery Dissection[9146]:	O No O Yes

INTRA AND POST-PROCEDURE EVENTS (**NOTE 1**: RECORD EACH EVENT SEPARATELY INDICATING THE DATE AND TIME)

EVENT(S)[9001]	EVENT(S) OCCURRED[9002]	→ IF YES, EVENT DATE/TIME(S)[9003]
Bleeding – Access Site	O No O Yes	mm/dd/yyyy / hh:mm
Bleeding – Gastrointestinal		mm/dd/yyyy / hh:mm
Bleeding – Genitourinary		mm/dd/yyyy / hh:mm
Bleeding – Hematoma at Access Site		mm/dd/yyyy / hh:mm
Bleeding – Other		mm/dd/yyyy / hh:mm
Bleeding – Retroperitoneal		mm/dd/yyyy / hh:mm
Cardiac Arrest		mm/dd/yyyy / hh:mm
Cardiac Tamponade		mm/dd/yyyy / hh:mm
Cardiogenic Shock		mm/dd/yyyy / hh:mm
Heart Failure		mm/dd/yyyy / hh:mm
Myocardial Infarction		mm/dd/yyyy / hh:mm
New Requirement for Dialysis		mm/dd/yyyy / hh:mm
Other Vascular Complications Req Tx		mm/dd/yyyy / hh:mm
Stroke – Hemorrhagic		mm/dd/yyyy / hh:mm
Stroke – Ischemic		mm/dd/yyyy / hh:mm
Stroke – Undetermined		mm/dd/yyyy / hh:mm

RBC Transfusion[9275]: O No O Yes

→ **If** Yes, **Number of Units Transfused**[9276]: _____

→ **If** Yes, **Transfusion PCI**[9277]: (within 72 hours) O No O Yes

→ **If** Yes, **Transfusion Surgical**[9278]: (within 72 hours) O No O Yes

INTRA PROCEDURE EVENTS DURING IVL DEVICE UTILIZATION

INTRAVASCULAR LITHOTRIPSY (IVL) DATA COLLECTION

Intravascular Lithotripsy (IVL) Device Utilization[16505]: O No O Yes

*If **IVL Device Utilization** = "Yes", complete the following:*

Data collection in this section is optional and specific to the Shockwave C2 AERO Fly Coronary IVL Catheter device

Balloon Loss of Pressure/Rupture During IVL[16501]: O No O Yes

→ If Yes, **Serious Coronary Dissection** *(Grade D, E, or F)*[14820]: O No O Yes

→ If Yes, **Coronary Perforation**[16498]: O No O Yes

Reduction in Systolic BP *(Treated W/ Vasopressors or MCS)*[16504]: O No O Yes

Sustained Ventricular Arrhythmia[16500]: O No O Yes

→ If Yes, **Cardiac Arrest**[14819]: O No O Yes

Cardiac Implantable Electronic Device (CIED)[16497]: O None O Defibrillator (ICD) O Pacemaker O Other CIED

→ *If ICD or PPM*, **Inappropriate Inhibition of Pacing**[16503]: O No O Yes

→ *If ICD*, **Inappropriate ICD Shocks Delivered**[16502]: O No O Yes

INTRA AND POST PROCEDURE EVENTS (FOR PATIENTS WITH CIED[16497] = DEFIBRILLATOR (ICD), PACEMAKER, OR OTHER CIED)

CIED Reprogramming Required *(Due to IVL)*[16499]: O No O Yes

L. DISCHARGE

Intervention(s) this Hospitalization[10030]: (not during same lab visit as Cath or PCI) O No O Yes

→ **If** Yes, **Type**[10031]: (Select all that apply) ☐ CABG ☐ Cardiac Surgery (non CABG) ☐ Surgery (non Cardiac) ☐ Valvular Intervention ☐ Structural Heart Intervention (non-valvular) ☐ EP Study ☐ Other

→ **IF** CABG = 'YES'

CABG Status[10035]: O Elective O Urgent O Emergency O Salvage

CABG Indication[10036]: O PCI/CABG Hybrid Procedure O Recommendation from Dx Cath (instead of PCI) O PCI Failure O PCI Complication

CABG Date/Time[10011]: mm/dd/yyyy / hh:mm

Creatinine[10060]: (at D/C) _____mg/dL ☐ Not Drawn[10061]

Hemoglobin[10065]: (at D/C) _____g/dL ☐ Not Drawn[10066]

Discharge Date/Time[10101]: mm/dd/yyyy / hh:mm

Discharge Provider's Name, NPI[10070,10071,10072,10073]: _____

Comfort Measures Only[10075]: O No O Yes

Discharge Status[10105]: O Alive O Deceased

→ **If** Alive, **Discharge Location**[10110]: O Home O Extended care/TCU/rehab O Other acute care hospital O Skilled Nursing facility O Other O Left against medical advice (AMA)

→ **If** Other acute care hospital, **Transferred for CABG**[10111]: O No O Yes

→ **If Not** Left against medical advice (AMA) ***OR*** Other acute care hospital, **CABG Planned after Discharge**[10112]: O No O Yes

→ **If** Alive, **Hospice Care**[10115]: O No O Yes

→ **If** Alive, **Cardiac Rehabilitation Referral**[10116]: O No – Reason Not Documented O No – Health Care System Reason Documented O No – Medical Reason Documented O Yes

→ **If** Deceased **AND** any (**CARDIAC ARREST OUT OF HEALTHCARE FACILITY**[4630] = 'YES' ***OR*** **CARDIAC ARREST AT TRANSFERRING HEALTHCARE FACILITY**[4635] = 'YES' ***OR*** **CARDIAC ARREST AT THIS FACILITY**[7340] = 'YES'), **Level of Consciousness**[10117]: (highest s/p cardiac arrest)

O (A) Alert O (V) Verbal O (P) Pain O (U) Unresponsive O Unable to assess

→ **If** Deceased, **Death During the Procedure**[10120]: O No O Yes

→ **If** Deceased, **Cause of Death**[10125]:

O Acute myocardial infarction
O Sudden cardiac death
O Heart failure
O Stroke
O Cardiovascular procedure
O Cardiovascular hemorrhage
O Other cardiovascular reason
O Pulmonary
O Renal
O Gastrointestinal
O Hepatobiliary
O Pancreatic
O Infection
O Inflammatory/Immunologic
O Hemorrhage
O Non-cardiovascular procedure or surgery
O Trauma
O Suicide
O Neurological
O Malignancy
O Other non-cardiovascular reason

DISCHARGE MEDICATIONS (PRESCRIBED AT DISCHARGE - COMPLETE FOR EACH EPISODE OF CARE IN WHICH A PCI WAS ATTEMPTED OR PERFORMED)

Medications prescribed at discharge are not required for patients who expired, discharged to "Other acute care Hospital", "AMA", or are receiving Hospice Care.

MEDICATION[10200]		PRESCRIBED[10205]				→ IF YES, DOSE[10207]			→ IF NO - PT. REASON, PATIENT RATIONALE[10206] (Select all that apply)
		YES	NO - NO REASON	NO - MEDICAL REASON	NO - PT. REASON	LOW	MODERATE	HIGH	
ACE INHIBITORS (ANGIOTENSIN CONVERTING ENZYME)	ACE Inhibitors (Any)	O	O	O	O				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
ANTICOAGULANT	Warfarin	O	O	O	O				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
ANTIPLATELET	Aspirin	O	O	O	O				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Vorapaxar	O	O	O	O				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect

L. Discharge (cont.)

Discharge Medications (Prescribed at Discharge - Complete for each Episode of Care In which a PCI was attempted or Performed)

Medications prescribed at discharge are not required for patients who expired, discharged to "Other acute care Hospital", "AMA", or are receiving Hospice Care.

Medication[10200]		Prescribed[10205]				→ If Yes, Dose[10207]			→ If No - Pt. Reason, Patient Rationale[10206] (Select all that apply)
		Yes	No - No Reason	No - Medical Reason	No - Pt. Reason	Low	Moderate	High	
ARB (Angiotensin Receptors Blockers)	ARB (Any)	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
Beta Blockers	Beta Blocker	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
Non-vitamin K dependent oral anticoagulant	Apixaban	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Dabigatran	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Edoxaban	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Rivaroxaban	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
P2Y12 Inhibitors	Clopidogrel	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Prasugrel	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Ticagrelor	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Ticlopidine	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
Statin	Statin	o	o	o	o	O	O	O	☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
Non-Statin	Non-Statin (Any)	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
PCSK9 Inhibitors	Alirocumab	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect
	Evolocumab	o	o	o	o				☐ Cost ☐ Alternative Therapy Preferred ☐ Negative Side Effect

→ **If** Low or Moderate 'Statin (Any)', **Patient or Medical Reason for Not Prescribing High-Dose Statin**[15546]**:** O No O Yes

M. Follow-up: 30 Day (23 to 75 days post Index PCI procedure): 1 Year (305 to 425 days post Index PCI procedure)

Assessment Date[11000]: mm / dd / yyyy

Reference Episode Arrival Date/Time[11002]: mm/dd/yyyy / hh:mm

Reference Procedure Start Date/Time[11001]: mm/dd/yyyy / hh:mm

Reference Episode Discharge Date/Time[11015]: mm/dd/yyyy / hh:mm

Method(s) to Determine Status[11003]: (Select all that apply)
☐ Office Visit ☐ Medical Records ☐ Letter from Medical Provider
☐ Phone Call ☐ Social Security Death Master File ☐ Hospitalized ☐ Other

Follow-Up Status[11004]: O Alive O Deceased O Lost to Follow-up

→ **If** Alive, **Chest Pain Symptom Assessment**[11005]: O Typical Angina O Atypical Angina O Non-anginal Chest Pain O Asymptomatic

→ **If** Deceased, **Date of Death**[11006]: mm / dd / yyyy

→ **If** Deceased, **Primary Cause of Death**[11007]:

O Acute myocardial infarction	O Pulmonary	O Hemorrhage
O Sudden cardiac death	O Renal	O Non-cardiovascular procedure or surgery
O Heart failure	O Gastrointestinal	O Trauma
O Stroke	O Hepatobiliary	O Suicide
O Cardiovascular procedure	O Pancreatic	O Neurological
O Cardiovascular hemorrhage	O Infection	O Malignancy
O Other cardiovascular reason	O Inflammatory/Immunologic	O Other non-cardiovascular reason

Research Study[11008]: O No O Yes → **If** Yes, **Study Name**[11009], **Patient ID**[11010]: _____, _____

Events, Interventions and/or Surgical Procedures (Any occurrence between discharge (or previous follow-up) and the current follow-up assessment) (**Note 1**: Record each event separately indicating the date)

Event(s)[11011]	Event(s) Occurred[11012]	→ If Yes, Device(s) Event Occurred In[11013]	→ If Yes, Event Date(s)[11014]
Bleeding Event	O No O Yes		mm / dd / yyyy
CABG: Bypass of stented lesion	O No O Yes	_____, _____	mm / dd / yyyy
CABG: Bypass of non-stented lesion	O No O Yes		mm / dd / yyyy
Myocardial Infarction: NSTEMI	O No O Yes		mm / dd / yyyy
Myocardial Infarction: Q-wave	O No O Yes		mm / dd / yyyy
Myocardial Infarction: STEMI	O No O Yes		mm / dd / yyyy
Myocardial Infarction: Type Unknown	O No O Yes		mm / dd / yyyy
PCI of non-stented lesion	O No O Yes		mm / dd / yyyy
PCI of stented lesion	O No O Yes	_____, _____	mm / dd / yyyy
Readmission: Non-PCI Related	O No O Yes		mm / dd / yyyy
Stroke – Hemorrhagic	O No O Yes		mm / dd / yyyy
Stroke – Ischemic	O No O Yes		mm / dd / yyyy
Stroke – Undetermined	O No O Yes		mm / dd / yyyy
Thrombosis in stented lesion	O No O Yes	_____, _____	mm / dd / yyyy
Thrombosis in non-stented lesion	O No O Yes		mm / dd / yyyy

M. Follow-up (cont.)

Follow-up Medications

Medication[11990]		Prescribed[11995]				→ If Yes, Dose[11996]		
		Yes	No - No Reason	No - Medical Reason	No - Pt. Reason	Low	Moderate	High
ACE Inhibitors (Angiotensin Converting Enzyme)	ACE Inhibitors (Any)	O	O	O	O			
Anticoagulant	Warfarin	O	O	O	O			
Antiplatelet	Aspirin	O	O	O	O			
	Vorapaxar	O	O	O	O			
ARB (Angiotensin Receptors Blockers)	ARB (Any)	O	O	O	O			
Non-vitamin K dependent oral anticoagulant	Apixaban	O	O	O	O			
	Dabigatran	O	O	O	O			
	Edoxaban	O	O	O	O			
	Rivaroxaban	O	O	O	O			
P2Y12 Inhibitors	Clopidogrel	O	O	O	O			
	Prasugrel	O	O	O	O			
	Ticagrelor	O	O	O	O			
	Ticlopidine	O	O	O	O			
Statin	Statin (Any)	O	O	O	O	O	O	O
Non-Statin	Non-Statin (Any)	O	O	O	O			
PCSK9 Inhibitors	Alirocumab	O	O	O	O			
	Evolocumab	O	O	O	O			

M. Follow-up (cont.)

Optional Section: Seattle Angina Questionnaire (SAQ)[2] – for participants capturing long term care

*Over the **PAST 4 WEEKS**, as a result of your angina, how much difficulty have you had in:*

	Extremely limited	Quite a bit limited	Moderately limited	Slightly Limited	Not at all limited	Limited for other reasons or did not do these activities
(1a) **Walking indoors on level ground**[11301]	O	O	O	O	O	O
(1b) **Gardening, vacuuming, or carrying groceries**[11302]	O	O	O	O	O	O
(1c) **Lifting or moving heavy objects (e.g. furniture, children)**[11303]	O	O	O	O	O	O

*Over the **PAST 4 WEEKS**, on average, how many times have you...*

	4 or more times per day	1 – 3 Times Per Day	3 or more times per week but not every day	1 – 2 Times Per Week	Less than once a week	None over the past 4 weeks
(2) *... Had chest pain, chest tightness, or angina?*[11305]	O	O	O	O	O	O
(3) *...had to take nitroglycerin (tablets or spray) for your chest pain, chest tightness or Angina?*[11310]	O	O	O	O	O	O

*Over the **PAST 4 WEEKS**, how much has your...:*

	It has Extremely limited my Enjoyment of Life	It has Limited my Enjoyment of Life quite a bit	It has Moderately limited my Enjoyment of Life	It has Slightly Limited my Enjoyment of Life	It has Not limited my Enjoyment of Life at all
(4) *...chest pain, chest tightness or angina limited your enjoyment of life?*[11315]	O	O	O	O	O

If you had to spend the rest of your life with your chest pain, chest tightness or angina the way it is right now...

	Not Satisfied At All	Mostly Dissatisfied	Somewhat Satisfied	Mostly Satisfied	Completely Satisfied
(5) *...how would you feel about this?*[11320]	O	O	O	O	O

Optional Section: Rose Dyspnea Scale – for participants capturing long term care

*Please think about how you have been feeling in the **PAST 4 WEEKS**, as You answer these four questions: Do you get short of breath when...*

(1) ...hurrying on level ground or walking up a slight hill?[11330]	O No	O Yes
(2) ...walking with other people your own age on level ground?[11335]	O No	O Yes
(3) **...**walking at your own pace on level ground?[11340]	O No	O Yes
(4) **...**when washing or dressing?[11345]	O No	O Yes

[2] Seattle Angina Questionnaire (© Copyright John Spertus, MD, MPH) is used with permission for NCDR by www.cvoutcomes.org