



A. DEMOGRAPHICS

Form section A containing demographic fields: Last Name, First Name, Middle Name, SSN, Patient ID, Other ID, Birth Date, Sex, Patient Zip Code, Race, and Hispanic or Latino Ethnicity.

B. EPISODE OF CARE (ADMISSION)

Form section B containing admission details: Arrival Date/Time, Admitting Provider's Name, Attending Provider's Name, Health Insurance, Payment Source, HIC #, and Research Study.

C. HISTORY AND RISK FACTORS

Form section C containing medical history and risk factors: Hypertension, Dyslipidemia, Prior MI, Prior PCI, Tobacco Use, Cardiac Arrest, and Diabetes Mellitus.

(KNOWN OR DIAGNOSED PRIOR TO FIRST CATH LAB VISIT)

Form section D containing additional clinical data: Diabetes Mellitus, Currently on Dialysis, and CSHA Clinical Frailty Scale.

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**<sup>4001</sup>:  No  Yes → **If Yes, NYHA Class**<sup>4011</sup>:  Class I  Class II  Class III  Class IV

→ **If Yes, Newly Diagnosed**<sup>4012</sup>:  No  Yes

→ **If Yes, HF Type**<sup>4013</sup>:  Diastolic  Systolic  Unknown<sup>4014</sup>

(DIAGNOSTIC TEST)

**Electrocardiac Assessment Method**<sup>5037</sup>:  ECG  Telemetry Monitor  Holter Monitor  Other  None

→ **If any methods, Results**<sup>5032</sup>:  Normal  Abnormal  Uninterpretable

→ **If Abnormal, New Antiarrhythmic Therapy Initiated Prior to Cath Lab**<sup>5033</sup>:  No  Yes

→ **If Abnormal, Electrocardiac Abnormality Type**<sup>5034</sup>: (Select all that apply)

Ventricular Fibrillation (VF)  New Left Bundle Branch Block  2<sup>nd</sup> Degree AV Heart Block Type 1

Sustained VT  New Onset Atrial Fib  2<sup>nd</sup> Degree AV Heart Block Type 2

Non Sustained VT  New Onset Atrial Flutter  3<sup>rd</sup> Degree AV Heart Block

Exercise Induced VT  PVC – Frequent  Symptomatic Bradycardia

T wave inversions  PVC – Infrequent  Other Electrocardiac Abnormality

ST deviation >= 0.5 mm

→ **If New Onset Atrial Fib, Heart Rate**<sup>6011</sup>: \_\_\_\_\_ bpm

→ **If Non Sustained VT, Type**<sup>5036</sup>: (Select all that apply)  Symptomatic  Newly Diagnosed  Other

**Stress Test Performed**<sup>5200</sup>:  No  Yes → **If Yes, Specify Test Performed:**

Test Type Performed <sup>5201</sup>	Most Recent Date <sup>5204</sup>	Test Results <sup>5202</sup>	→ If Positive, Risk/Extent of Ischemia <sup>5203</sup>
<input type="radio"/> Stress Echocardiogram	mm / dd / yyyy	<input type="radio"/> Negative	<input type="radio"/> Low
<input type="radio"/> Exercise Stress Test (w/o imaging)		<input type="radio"/> Positive	<input type="radio"/> Intermediate
<input type="radio"/> Stress Nuclear		<input type="radio"/> Indeterminate	<input type="radio"/> High
<input type="radio"/> Stress Imaging w/CMR		<input type="radio"/> Unavailable	<input type="radio"/> Unavailable

**Cardiac CTA Performed**<sup>5220</sup>:  No  Yes → **If Yes, Most Recent Cardiac CTA Date**<sup>5226</sup>: mm / dd / yyyy

→ **If Yes, Results**<sup>5227</sup>: (Select all that apply)  Obstructive CAD  Unclear Severity  Structural Disease

Non-Obstructive CAD  No CAD  Unknown<sup>5228</sup>

**Agatston Coronary Calcium Score Assessed**<sup>5256</sup>:  No  Yes

→ **If Yes, Agatston Coronary Calcium Score**<sup>5255</sup>: \_\_\_\_\_ → **If any value, Most Recent Calcium Score Date**<sup>5257</sup>: mm / dd / yyyy

**LVEF Assessed**<sup>5111</sup>:  No  Yes → **If Yes, Most Recent LVEF**<sup>5116</sup>: \_\_\_\_\_ %

**Prior Dx Coronary Angiography Procedure**<sup>5263</sup>: (without intervention)  No  Yes

→ **If Yes, Most Recent Procedure Date**<sup>5264</sup>: mm / dd / yyyy

→ **If Yes, Results**<sup>5265</sup>: (Select all that apply)  Obstructive CAD  Unclear Severity  Structural Disease

Non-Obstructive CAD  No CAD  Unknown<sup>5266</sup>

PRE-PROCEDURE MEDICATIONS

MEDICATION <sup>6986</sup>	ADMINISTERED <sup>6991</sup>	MEDICATION <sup>6986</sup>	ADMINISTERED <sup>6991</sup>
Aspirin	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	Statin (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated
Beta Blockers (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	Non-Statin (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated
Ca Channel Blockers (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	PCSK9 Inhibitors	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated
Antiarrhythmic Agent Other	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	ACE (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated
Long Acting Nitrates (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	ARB (Any)	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated
Ranolazine	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated	Sacubitril and Valsartan	<input type="radio"/> No <input type="radio"/> Yes <input type="radio"/> Contraindicated



D. PRE-PROCEDURE INFORMATION (CONT.)

OPTIONAL SECTION: SEATTLE ANGINA QUESTIONNAIRE (SAQ)<sup>2</sup> – FOR PARTICIPANTS CAPTURING LONG TERM CARE

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

Table with 7 columns: Activity, Extremely Limited, Quite a bit limited, Moderately limited, Slightly limited, Not at all limited, Limited for other reasons or did not do these activities. Rows include walking indoors, gardening, and lifting heavy objects.

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

Table with 7 columns: Frequency (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). Rows include chest pain and nitroglycerin use.

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

Table with 6 columns: Level of enjoyment limitation (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). Row includes chest pain limiting enjoyment of life.

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

Table with 6 columns: Satisfaction level (Not satisfied at all, Mostly dissatisfied, Somewhat satisfied, Mostly satisfied, Completely satisfied). Row includes how you would feel about this.

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...

- Four questions about shortness of breath during activities: hurrying on level ground, walking with others, walking at own pace, and washing/dressing.

<sup>2</sup>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**<sup>7000</sup>: mm/dd/yyyy / hh:mm      **Procedure End Date/Time**<sup>7005</sup>: mm/dd/yyyy / hh:mm

**Diagnostic Coronary Angiography Procedure**<sup>7045</sup>:     No     Yes  
 → If Yes, **Diagnostic Cath Operator's Name, NPI**<sup>7046, 7047, 7048, 7049</sup>: \_\_\_\_\_

**Percutaneous Coronary Intervention (PCI)**<sup>7050</sup>:     No     Yes  
 → If Yes, **PCI Operator's Name, NPI**<sup>7051, 7052, 7053, 7054</sup>: \_\_\_\_\_

**Diagnostic Left Heart Cath**<sup>7060</sup>:  No     Yes    → If Yes, **LVEF**<sup>7061</sup>: \_\_\_\_\_ %

**Concomitant Procedures Performed**<sup>7065</sup>:     No     Yes  
 → If Yes, **Procedure Type(s)**<sup>7066</sup>: (Select the best option(s)) \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Arterial Access Site**<sup>7320</sup>:     Femoral     Brachial     Radial     Other

**Arterial Cross Over**<sup>7325</sup>:     No     Yes

<b>Closure Method(s)</b> <sup>7330, 7331, 7333</sup> :	1	Reserved for future use	<input type="checkbox"/> <b>Method Not Documented</b> <sup>7332</sup>
	2	Reserved for future use	
	3	Reserved for future use	

**Venous Access**<sup>7335</sup>: (concomitant entry for Cath procedure)     No     Yes

**Systolic BP**<sup>6016</sup>: \_\_\_\_\_ mmHg

**Cardiac Arrest at this facility**<sup>7340</sup>:     No     Yes

RADIATION EXPOSURE AND CONTRAST

**CODE ALL AVAILABLE MEASUREMENTS** → **Fuoro Time**<sup>7214</sup>: \_\_\_\_\_ minutes      **Contrast Volume**<sup>7215</sup>: \_\_\_\_\_ mL

**Cumulative Air Kerma**<sup>7210</sup>: \_\_\_\_\_  mGy     Gy

**Dose Area Product**<sup>7220</sup>: \_\_\_\_\_  Gy/cm<sup>2</sup>     dGy/cm<sup>2</sup>     cGy/cm<sup>2</sup>     mGy/cm<sup>2</sup>     μGy/M<sup>2</sup>

F. LABS

PRE-PROCEDURE (VALUES CLOSEST TO THE PROCEDURE)		POST-PROCEDURE	
<b>Troponin I</b> <sup>6090</sup> : _____ ng/mL <input type="checkbox"/> Not Drawn <sup>6091</sup>		<b>Troponin I</b> <sup>8515</sup> : _____ ng/mL <input type="checkbox"/> Not Drawn <sup>8516</sup>	
<b>Troponin T</b> <sup>6095</sup> : _____ ng/mL <input type="checkbox"/> Not Drawn <sup>6096</sup>		<b>Troponin T</b> <sup>8520</sup> : _____ ng/mL <input type="checkbox"/> Not Drawn <sup>8521</sup>	
<b>Creatinine</b> <sup>6050</sup> : _____ mg/dL <input type="checkbox"/> Not Drawn <sup>6051</sup>		<b>Creatinine</b> <sup>8510</sup> : (peak) _____ mg/dL <input type="checkbox"/> Not Drawn <sup>8511</sup>	
<b>Hemoglobin</b> <sup>6030</sup> : _____ g/dL <input type="checkbox"/> Not Drawn <sup>6031</sup>		<b>Hemoglobin</b> <sup>8505</sup> : (Lowest w/in 72 hours) _____ g/dL <input type="checkbox"/> Not Drawn <sup>8506</sup>	
<b>Total Cholesterol</b> <sup>6100</sup> : _____ mg/dL <input type="checkbox"/> Not Drawn <sup>6101</sup>			
<b>HDL</b> <sup>6105</sup> : _____ mg/dL <input type="checkbox"/> Not Drawn <sup>6106</sup>			



G. CATH LAB VISIT (COMPLETE FOR EACH CATH LAB VISIT)

Indication(s) for Cath Lab Visit<sup>7400</sup>: (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<sup>7405</sup>: O Typical Angina O Atypical Angina O Non-anginal Chest Pain O Asymptomatic

Cardiovascular Instability<sup>7410</sup>: O No O Yes

-> If Yes, Cardiovascular Instability Type<sup>7415</sup>: (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<sup>7420</sup>: O No O Yes

-> If Yes, Pharmacologic Vasopressor Support<sup>7421</sup>: O No O Yes

-> If Yes, Mechanical Support<sup>7422</sup>: O No O Yes

-> If Yes, Device<sup>7423</sup>: \_\_\_\_\_

-> If Yes, Timing<sup>7424</sup>: O In place at start of procedure O Inserted during procedure and prior to intervention O Inserted after intervention has begun

-> IF INDICATION(S) FOR CATH LAB VISIT<sup>7400</sup> = 'VALVULAR DISEASE' (COMPLETE FOR EACH TYPE)

Table with 2 main sections: VALVULAR DISEASE STENOSIS TYPE and VALVULAR DISEASE REGURGITATION TYPE. Each section has columns for stenosis/regurgitation type and severity levels.

-> IF INDICATION(S) FOR CATH LAB VISIT<sup>7400</sup> = 'PRE-OPERATIVE EVALUATION'

Evaluation for Surgery Type<sup>7465</sup>: O Cardiac Surgery O Non-Cardiac Surgery

Functional Capacity<sup>7466</sup>: O < 4 METS O >= 4 METS without symptoms O >= 4 METS with symptoms O Unknown<sup>7467</sup>

Surgical Risk<sup>7468</sup>: O Low O Intermediate O High Risk: Vascular O High Risk: Non-Vascular

Solid Organ Transplant Surgery<sup>7469</sup>: O No O Yes

-> If Yes, Donor<sup>7470</sup>: O No O Yes

-> If Yes, Organ<sup>7471</sup>: (Select all that apply) O Heart O Kidney O Liver O Lung O Pancreas O Other Organ



H. CORONARY ANATOMY

Dominance<sup>7500</sup>:  Left  Right  Co-dominant

Native Vessel with Stenosis >= 50%<sup>7505</sup>:  No  Yes → If Yes, Specify Segment(s):

Table with 2 columns: SEGMENT NUMBER<sup>7507</sup> and MEASUREMENT (FOR EACH SELECTED). Rows include Native Stenosis<sup>7508</sup> and Adjunctive Measurements Obtained<sup>7511</sup> with sub-questions for FFR Ratio<sup>7512</sup>, iFR Ratio<sup>7513</sup>, IVUS MLA<sup>7514</sup>, and OCT MLA<sup>7515</sup>.

Graft Vessel with Stenosis >= 50%<sup>7525</sup>: (Note 1)  No  Yes → If Yes, Specify Segment(s):

Table with 2 columns: SEGMENT NUMBER<sup>7527</sup> and MEASUREMENT (FOR EACH SELECTED). Rows include Graft Stenosis<sup>7528</sup>, Graft Vessel<sup>7529</sup> (LIMA, RIMA, SVG, Radial, Unknown<sup>7530</sup>), and Adjunctive Measurements Obtained<sup>7531</sup> with sub-questions for FFR Ratio<sup>7532</sup>, iFR Ratio<sup>7533</sup>, IVUS MLA<sup>7534</sup>, and OCT MLA<sup>7535</sup>.

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

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

PCI Status<sup>7800</sup>:  Elective  Urgent  Emergency  Salvage

CARDIAC ARREST OUT OF HEALTHCARE FACILITY<sup>4630</sup> = 'YES' OR CARDIAC ARREST AT TRANSFERRING HEALTHCARE FACILITY<sup>4635</sup> = 'YES' OR CARDIAC ARREST AT THIS FACILITY<sup>7340</sup> = 'YES'. Hypothermia Induced<sup>7806</sup>:  No  Yes. Level of Consciousness<sup>7810</sup>: (at start of PCI s/p cardiac arrest) with options (A) Alert, (P) Pain, (U) Unresponsive, (V) Verbal, (U) Unable to assess.

Decision for PCI with Surgical Consult<sup>7815</sup>:  No  Yes. → If Yes, CV Treatment Decision<sup>7816</sup>:  Surgery Not Recommended,  Surgery Recommended, Patient/Family Declined,  Surgery Recommended, Patient/Family Accepted (Hybrid procedure)

PCI for Multi-vessel Disease<sup>7820</sup>:  No  Yes. → If Yes, Multi-vessel Procedure Type<sup>7821</sup>: (in this lab visit)  Initial PCI  Staged PCI

PCI Indication<sup>7825</sup>:  STEMI - Immediate PCI for Acute STEMI,  STEMI - Stable (<= 12 hrs from Sx),  STEMI - Stable (> 12 hrs from Sx),  STEMI - Unstable (> 12 hrs from Sx),  STEMI (after successful lytics),  STEMI - Rescue (after unsuccessful lytics),  New Onset Angina <= 2 months,  NSTEMI - ACS,  Stable Angina,  CAD (without Ischemic Sx),  Other. → If select STEMI, Symptom Date/Time<sup>7826, 7827</sup>: mm/dd/yyyy / hh:mm. → If any STEMI (lytics), Thrombolytics<sup>7829</sup>:  No  Yes. → If Not STEMI or NSTEMI-ACS, Syntax Score<sup>7831</sup>:  Low  Intermediate  High.



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

→ IF PCI INDICATION<sup>7825</sup> = 'STEMI – IMMEDIATE PCI FOR ACUTE STEMI'

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

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

MEDICATION <sup>7990</sup>		ADMINISTERED <sup>7995</sup>	MEDICATION <sup>7990</sup>		ADMINISTERED <sup>7995</sup>
ANTICOAGULANT	Argatroban	<input type="radio"/> No <input type="radio"/> Yes	GLYCOPROTEIN (GP) IIb/IIIa INHIBITORS	GP IIb/IIIa Inhibitors (Any)	<input type="radio"/> No <input type="radio"/> Yes
	Bivalirudin	<input type="radio"/> No <input type="radio"/> Yes			
	Fondaparinux	<input type="radio"/> No <input type="radio"/> Yes	NON-VITAMIN K DEPENDENT ORAL ANTICOAGULANT	Apixaban	<input type="radio"/> No <input type="radio"/> Yes
	Heparin Derivative	<input type="radio"/> No <input type="radio"/> Yes		Dabigatran	<input type="radio"/> No <input type="radio"/> Yes
	Low Molecular Wt Heparin	<input type="radio"/> No <input type="radio"/> Yes		Edoxaban	<input type="radio"/> No <input type="radio"/> Yes
	Unfractionated Heparin	<input type="radio"/> No <input type="radio"/> Yes		Rivaroxaban	<input type="radio"/> No <input type="radio"/> Yes
	Warfarin	<input type="radio"/> No <input type="radio"/> Yes		Cangrelor	<input type="radio"/> No <input type="radio"/> Yes
ANTIPLATELET	Vorapaxar	<input type="radio"/> No <input type="radio"/> Yes	P2Y12 INHIBITORS	Clopidogrel	<input type="radio"/> No <input type="radio"/> Yes
				Prasugrel	<input type="radio"/> No <input type="radio"/> Yes
				Ticagrelor	<input type="radio"/> No <input type="radio"/> Yes



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

Lesion Counter <sup>8000</sup> :		1	2	
Segment Number(s) <sup>8001</sup> :		_____, _____, _____, _____, _____	_____, _____, _____, _____, _____	
If PCI Indication <sup>7825</sup> is STEMI or NSTEMI-ACS, Culprit Stenosis <sup>8002</sup> :		<input type="radio"/> No <input type="radio"/> Yes <input type="checkbox"/> Unknown <sup>8003</sup>	<input type="radio"/> No <input type="radio"/> Yes <input type="checkbox"/> Unknown <sup>8003</sup>	
Stenosis Immediately Prior to Rx <sup>8004</sup> :		_____ %	_____ %	
→ If 100%, Chronic Total Occlusion <sup>8005</sup> :		<input type="radio"/> No <input type="radio"/> Yes <input type="checkbox"/> Unknown <sup>8006</sup>	<input type="radio"/> No <input type="radio"/> Yes <input type="checkbox"/> Unknown <sup>8006</sup>	
TIMI Flow (Pre-Intervention) <sup>8007</sup> :		<input type="radio"/> TIMI-0 <input type="radio"/> TIMI-1 <input type="radio"/> TIMI-2 <input type="radio"/> TIMI-3	<input type="radio"/> TIMI-0 <input type="radio"/> TIMI-1 <input type="radio"/> TIMI-2 <input type="radio"/> TIMI-3	
Previously Treated Lesion <sup>8008</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, Date <sup>8009</sup> :		mm / dd / yyyy	mm / dd / yyyy	
→ If Yes, Treated with Stent <sup>8010</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, In-Stent Restenosis <sup>8011</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, In-Stent Thrombosis <sup>8012</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, Stent Type <sup>8013</sup> :		<input type="radio"/> DES <input type="radio"/> BMS <input type="checkbox"/> Unknown <sup>8014</sup> <input type="radio"/> Bioabsorbable	<input type="radio"/> DES <input type="radio"/> BMS <input type="checkbox"/> Unknown <sup>8014</sup> <input type="radio"/> Bioabsorbable	
Lesion in Graft <sup>8015</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, Type of CABG Graft <sup>8016</sup> :		<input type="radio"/> LIMA <input type="radio"/> Vein <input type="radio"/> Other Artery	<input type="radio"/> LIMA <input type="radio"/> Vein <input type="radio"/> Other Artery	
→ If Yes, Location in Graft <sup>8017</sup> :		<input type="radio"/> Aortic <input type="radio"/> Body <input type="radio"/> Distal	<input type="radio"/> Aortic <input type="radio"/> Body <input type="radio"/> Distal	
Navigate through Graft to Native Lesion <sup>8018</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
Lesion Complexity <sup>8019</sup> :		<input type="radio"/> Non-High/Non-C <input type="radio"/> High/C	<input type="radio"/> Non-High/Non-C <input type="radio"/> High/C	
Lesion Length <sup>8020</sup> :		_____ mm	_____ mm	
Severe Calcification <sup>8021</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
Bifurcation Lesion <sup>8022</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
Guidewire Across Lesion <sup>8023</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, Device(s) Deployed <sup>8024</sup> :		<input type="radio"/> No <input type="radio"/> Yes	<input type="radio"/> No <input type="radio"/> Yes	
→ If Yes, Stenosis (Post-Intervention) <sup>8025</sup> :		_____ %	_____ %	
→ If Yes, TIMI Flow (Post-Intervention) <sup>8026</sup> :		<input type="radio"/> TIMI-0 <input type="radio"/> TIMI-1 <input type="radio"/> TIMI-2 <input type="radio"/> TIMI-3	<input type="radio"/> TIMI-0 <input type="radio"/> TIMI-1 <input type="radio"/> TIMI-2 <input type="radio"/> TIMI-3	
Intracoronary Device(s) Used <sup>8027,8028</sup>	Unique Device Identifier (UDI) <sup>8029</sup>	Associated Lesion(s) <sup>8030</sup>	Diameter <sup>8031</sup>	Length <sup>8032</sup>
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) <sup>7050</sup> = 'YES'	Coronary Artery Perforation <sup>9145</sup> :	<input type="radio"/> No	<input type="radio"/> Yes
		Significant Coronary Artery Dissection <sup>9146</sup> :	<input type="radio"/> No	<input type="radio"/> Yes

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

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

RBC Transfusion<sup>9275</sup>:  No  Yes

→ If Yes, Number of Units Transfused<sup>9276</sup>: \_\_\_\_\_

→ If Yes, Transfusion PCI<sup>9277</sup>: (within 72 hours)  No  Yes

→ If Yes, Transfusion Surgical<sup>9278</sup>: (within 72 hours)  No  Yes



L. DISCHARGE

Intervention(s) this Hospitalization<sup>10030</sup>: (not during same lab visit as Cath or PCI) O No O Yes

→ If Yes, Type<sup>10031</sup>: (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<sup>10035</sup>: O Elective O Urgent O Emergency O Salvage CABG Indication<sup>10036</sup>: O PCI/CABG Hybrid Procedure O Recommendation from Dx Cath (instead of PCI) O PCI Failure O PCI Complication CABG Date/Time<sup>10011</sup>: mm/dd/yyyy / hh:mm

Creatinine<sup>10060</sup>: (at D/C) \_\_\_\_\_ mg/dL  Not Drawn<sup>10061</sup> Hemoglobin<sup>10065</sup>: (at D/C) \_\_\_\_\_ g/dL  Not Drawn<sup>10066</sup>

Discharge Date/Time<sup>10101</sup>: mm/dd/yyyy / hh:mm Discharge Provider's Name, NPI<sup>10070,10071,10072,10073</sup>: \_\_\_\_\_

Comfort Measures Only<sup>10075</sup>: O No O Yes

Discharge Status<sup>10105</sup>: O Alive O Deceased → If Alive, Discharge Location<sup>10110</sup>: O Home O Skilled Nursing facility O Extended care/TCU/rehab O Other O Other acute care hospital O Left against medical advice (AMA)

→ If Other acute care hospital, Transferred for CABG<sup>10111</sup>: O No O Yes

→ If Not Left against medical advice (AMA) OR Other acute care hospital, CABG Planned after Discharge<sup>10112</sup>: O No O Yes

→ If Alive, Hospice Care<sup>10115</sup>: O No O Yes

→ If Alive, Cardiac Rehabilitation Referral<sup>10116</sup>: 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<sup>4630</sup> = 'YES' OR CARDIAC ARREST AT TRANSFERRING HEALTHCARE FACILITY<sup>4635</sup> = 'YES' OR CARDIAC ARREST AT THIS FACILITY<sup>7340</sup> = 'YES'), Level of Consciousness<sup>10117</sup>: (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<sup>10120</sup>: O No O Yes

→ If Deceased, Cause of Death<sup>10125</sup>: 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

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.

Table with columns: MEDICATION, PRESCRIBED (YES, NO - NO REASON, NO - MEDICAL REASON, NO - PT. REASON), → IF YES, DOSE (LOW, MODERATE, HIGH), → IF NO - PT. ROWS: ACE INHIBITORS, ANTICOAGULANT, ANTIPLATELET



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.

Table with columns: MEDICATION, PRESCRIBED (YES, NO - NO REASON, NO - MEDICAL REASON, NO - PT. REASON), IF YES, DOSE (LOW, MODERATE, HIGH), and IF NO - PT. REASON, PATIENT RATIONALE. Rows include ARB, BETA BLOCKERS, NON-VITAMIN K ANTICOAGULANT, P2Y12 INHIBITORS, STATIN, NON-STATIN, and PCSK9 INHIBITORS.

Discharge Medication Reconciliation Completed: O No O Yes

If Yes, Reconciled Medications: (Select all that apply)

- Prescriptions: Cardiac, Over the Counter (OTC) Medications, Vitamins/Minerals, Prescriptions: Non-Cardiac, Herbal Supplements



M. FOLLOW-UP (30 DAYS POST INDEX PCI PROCEDURE: - 7+14 DAYS AND 1 YEAR POST INDEX PCI PROCEDURE: +/- 60 DAYS)

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 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

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)

Table with 4 columns: EVENT(S) 11011, EVENT(S) OCCURRED 11012, → IF YES, DEVICE(S) EVENT OCCURRED IN 11013, → IF YES, EVENT DATE(S) 11014. Rows include Bleeding Event, CABG: Bypass of stented lesion, CABG: Bypass of non-stented lesion, Myocardial Infarction: NSTEMI, Myocardial Infarction: Q-wave, Myocardial Infarction: STEMI, Myocardial Infarction: Type Unknown, PCI of non-stented lesion, PCI of stented lesion, Readmission: Non-PCI Related, Stroke - Hemorrhagic, Stroke - Ischemic, Stroke - Undetermined, Thrombosis in stented lesion, Thrombosis in non-stented lesion.



M. FOLLOW-UP (CONT.)

FOLLOW-UP MEDICATIONS		PRESCRIBED <sup>11995</sup>				→ IF YES, DOSE <sup>11996</sup>		
MEDICATION <sup>11990</sup>		YES	NO - NO REASON	NO - MEDICAL REASON	NO - PT. REASON	LOW	MODERATE	HIGH
		<b>ACE INHIBITORS (ANGIOTENSIN CONVERTING ENZYME)</b>	ACE Inhibitors (Any)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>ANTICOAGULANT</b>	Warfarin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>ANTIPLATELET</b>	Aspirin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Vorapaxar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>ARB (ANGIOTENSIN RECEPTORS BLOCKERS)</b>	ARB (Any)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>NON-VITAMIN K DEPENDENT ORAL ANTICOAGULANT</b>	Apixaban	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Dabigatran	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Edoxaban	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Rivaroxaban	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>P2Y12 INHIBITORS</b>	Clopidogrel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Prasugrel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Ticagrelor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Ticlopidine	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>STATIN</b>	Statin (Any)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
<b>NON-STATIN</b>	Non-Statins (Any)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
<b>PCSK9 INHIBITORS</b>	Alirocumab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			
	Evolocumab	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>			



M. FOLLOW-UP (CONT.)

OPTIONAL SECTION: SEATTLE ANGINA QUESTIONNAIRE (SAQ)<sup>2</sup> – FOR PARTICIPANTS CAPTURING LONG TERM CARE

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

Table with 7 columns: Activity, Extremely Limited, Quite a bit limited, Moderately limited, Slightly limited, Not at all limited, Limited for other reasons or did not do these activities. Rows include walking indoors, gardening, and lifting heavy objects.

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

Table with 7 columns: Frequency (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). Rows include chest pain and nitroglycerin use.

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

Table with 6 columns: 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. Row includes chest pain limiting enjoyment of life.

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

Table with 6 columns: Not satisfied at all, Mostly dissatisfied, Somewhat satisfied, Mostly satisfied, Completely satisfied. Row includes how you would feel about this.

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...

Table with 4 rows of questions and two columns for 'No' and 'Yes' answers. Questions include hurrying on level ground, walking with others, walking at own pace, and washing/dressing.

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