

**NEW YORK STATE DEPARTMENT OF HEALTH
OFFICE OF QUALITY AND PATIENT SAFETY
CARDIAC SERVICES PROGRAM**

**Percutaneous Coronary Interventions
Report**

Form DOH-3331

**Instructions and Data Element Definitions
2024 Data Collection
12/1/2023 – 11/30/2024 Discharges**

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Attachments

- Attachment A: Asian Pacific Islander Group Codes
- Attachment B: Language Response Codes
- Attachment C: PFI Numbers for Cardiac Diagnostic and Surgical Centers
- Attachment D: PCI Lesion Location Codes
- Attachment E: PCI Device/Stent Codes

Revision Highlights and Coding Clarification

Complete data element definitions and coding instructions can be found in the main body of this document. The following changes take effect December 1, 2023.

PCIRS Data Reporting Policies

PCIRS Reportable Cases

A PCIRS form should be created for any performed or attempted PCI. A PCI is considered attempted when the guidewire leaves the catheter.

The following circumstances do not require creation of a PCIRS form despite the fact that the guidewire has left the catheter:

- IVUS/OCT and/or FFR/ iFR with no intent or attempt to perform PCI.
- Administration of intra-coronary nitroglycerin when no other device is used or attempted is not a reportable PCI. If used in the same procedure as a reportable device, intra-coronary nitroglycerin is not a reportable device.
- Coil embolization when no other device is used or attempted is not a reportable PCI. If used in the same procedure as a reportable device, report with code '99'.
- PCI performed in the same setting as a transcatheter valve replacement is only reportable if it was part of a planned procedure for pre-existing coronary artery disease. PCI required in the same setting as transcatheter valve because of a complication of the valve procedure is not a reportable PCI. Passing a wire (with or without stent) as a prophylactic measure during a transcatheter valve replacement procedure is not a reportable PCI. These procedures must be represented on the CSRS form with a procedure code 711.
- Alcohol Ablation with no intent or attempt to perform the PCI.

End of PCI, Generation of a New Form

A PCI is considered finished when the patient leaves the cath lab. This is defined in its most narrow interpretation – the actual room in which the procedure was performed. If a patient leaves the actual procedure room, but remains in a holding room, staging area or even an adjacent hallway and returns to a procedure room for another PCI, a new form should be generated.

Physician Assignment

When multiple records exist for the same patient during a hospital admission, and two or more physicians were reported for those procedures, the case will be assigned for analysis to the physician performing the first PCI. However, the hospital may submit a letter from the CEO or Medical Director requesting that the case be assigned to the physician performing a later PCI.

Hospice Policy

Beginning with patients discharged on or after January 1, 2003, any patient that is discharged from the hospital after cardiac surgery or PCI to hospice care (inpatient or home with hospice care) and is still alive 30 days after the discharge from the hospital will be analyzed as a live discharge.

All patients discharged to a hospice or home with hospice care should continue to be reported with Discharge Status – 12: Hospice. If a patient is still alive 30 days after discharge, whether in hospice or not, appropriate supporting documentation should be sent to Cardiac Services Program. Examples of appropriate documentation include: a dated progress note from the hospice service, evidence of a follow-up doctor's visit 30 days after discharge, evidence of subsequent hospital admission 30 days after initial discharge, evidence of death 30 days or

more after initial discharge. It will be the responsibility of the hospital (physician) to send documentation to the Department of Health's Cardiac Services Program to support this change. Upon receipt, review, and verification of the documentation, Cardiac Services Program staff will change the discharge status from dead to alive for purposes of analysis. All documentation must be received before the final volume and mortality for a given year of data is confirmed by the hospital.

Refractory Shock Cases

Effective January 1, 2015, cases with the risk factor "Refractory Cardiogenic Shock" will be excluded from provider specific publicly released reports and analyses. Cases with the new risk factor "Cardiogenic Shock" will remain in analysis.

This continues the shock exclusion policy which was initiated in 2006 and reflects revised definitions and variable names. All excluded cases must meet the NYS Cardiac Services Program definition of Refractory Cardiogenic Shock and will be subject to medical record documentation review.

All cases will continue to be reported electronically and will be subject to data verification and quality monitoring activities. To ensure that the appropriate cases are identified as "Refractory Cardiogenic Shock" cases, submission of medical record documentation for any case reported with this risk factor will be required. If appropriate documentation is not provided by your center, the risk factor will be removed from the data and the case will be included in analysis. Medical record documentation will also be required for any case reported with the risk factor "Cardiogenic Shock."

It is strongly suggested that all appropriate staff closely review the definitions and documentation requirements for these two risk factors.

Anoxic Brain Injury Exclusion

As announced in August 2017 and first applied to cases from the 2016 reporting year, **cases meeting the Anoxic Brain Injury Pre-PCI Criteria** will be excluded from Department of Health analysis and public reporting. Patients meeting these criteria will all have documented pre-procedural acute MI, cardiac arrest, and a coma-like condition prior to the procedure. Full details of documentation requirements can be found in in the main body of this document under "Anoxic Brain Injury Criteria".

This is an expansion of the exclusion criteria first adopted in 2010 which required in addition to the pre-PCI criteria that the patient expired under specific conditions and with evidence of severe, persistent anoxic encephalopathy. This policy is the result of ongoing discussions with NYS providers, careful deliberations among the New York State Cardiac Advisory Committee (CAC) members, and feedback provided through the 2007 and 2008 annual cause of death surveys.

All PCI patients will continue to be reported to the PCIRS database. During the validation process, hospitals will be expected to provide medical record documentation to confirm the accuracy of reporting for this element.

COVID-19 Exclusion

Effective for discharges on or after December 1, 2021, cases will be excluded from PCIRS analysis and public reporting if the patient had COVID-19 with Acute Respiratory Distress Syndrome (ARDS), with or without intubation required, during the same episode of care as PCI.

Deaths after discharge but within 30-days of the procedure for patients with COVID-19 with ARDS post-discharge will also be excluded. All cases must still be reported to PCIRS.

Reporting Schedule

PCIRS data is reported quarterly by discharge date. It is due to the Cardiac Services Program one month after the end of the quarter. The 2024 reporting schedule is as follows:

Quarter 1: Discharges 12/01/23 – 02/29/24 Due: 04/01/24
Quarter 2: Discharges 03/01/24 – 05/31/24 Due: 07/01/24
Quarter 3: Discharges 06/01/24 – 08/31/24 Due: 10/01/24
Quarter 4: Discharges 09/01/24 – 11/30/24 Due: 01/06/25

Limited extensions to the above deadlines will be granted on a case-by-case basis when warranted by extenuating circumstances. They must be requested in writing prior to the required submission date.

Technical Data Specifications

This document is supplemented by the 2024 Data Specification document which is available by request (CardiacServicesProgram@health.ny.gov).

Item-By-Item Instructions

I. Patient Information

Descriptive Name: PFI Number

Variable Name: PFI

Format: XXXX

Definition: The PFI Number is a Permanent Facility Identifier assigned by the Department of Health. Enter your facility's PFI Number as shown in Attachment C.

Descriptive Name: Sequence Number

Variable Name: SEQUENCE

Format: XXXX; up to four characters; for hospital use; not a required field.

Definition: If your facility assigns a sequence number to each case on a chronological flow sheet or similar log, enter the sequence number here. The sequence number is not required for the Percutaneous Coronary Interventions Reporting System but has been included on the form to assist facilities in identifying and tracking cases.

Descriptive Name: Patient Last Name

Variable Name: LASTNAME

Format: Free Text

Definition: Enter the patient's last name.

Descriptive Name: Patient First Name

Variable Name: FIRSTNAME

Format: Free Text

Definition: Enter the patient's first name.

Descriptive Name: Medical Record Number

Variable Name: MEDRECNO

Format: 0-9 and A-Z; no punctuation or other characters.

Definition: Enter the patient's medical record number.

Descriptive Name: Social Security Number

Variable Name: SSNO

Format: XXX-XX-XXXX

Definition: Enter the patient's social security number as shown in the medical record. If the medical record does not contain the patient's social security number, leave this item blank.

Descriptive Name: Date of Birth

Variable Name: DOB

Format: MM/DD/YYYY

Definition: Enter the patient's exact date of birth.

Descriptive Name: Sex

Variable Name: SEX

Format: 1 or 2

Definition: Check the appropriate box for the patient's sex at birth.

1 – Male

2 – Female

Note:

In the absence of any other information, it is reasonable to assume that the sex at birth is the same as at the time of admission.

Descriptive Name: Ethnicity

Variable Name: ETHNIC

Format: 1 or 2

Definition: Check the appropriate box.

1 – Hispanic

2 – Non-Hispanic

Note:

The term "Hispanic" refers to persons who trace their origin or descent to Mexico, Puerto Rico, Cuba, Central and South America or other Spanish cultures.

Descriptive Name: Race

Variable Name: RACE

Format: 1-4 or 8

Definition: Select the appropriate code.

- 1 – White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- 2 – Black or African American. A person having origins in any of the black racial groups of Africa.
- 3 – Native American / American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- 4 – Asian or Pacific Islander. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam or in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.
- 8 – Other. Report for those responses that are not covered by an above category.

Note:

Race should be based on the patient’s racial/ethnic origins, which is not necessarily the same as their country or place of origin.

Multi-racial can be indicated by checking “8-Other” and providing details in the “specify” field.

For White Hispanics, check “White.” For Black Hispanics, check “Black.”

Descriptive Name: Race Specify

Variable Name: RACESPEC

Format: Free text

Definition: If Race was reported as 8- Other, provide the specific race.

Descriptive Name: Detailed AAPI Code

Variable Name: AAPI_CODE

Format: 01-25

Definition: Report the appropriate code from the list in Attachment A.

Report the detailed Asian or Pacific Islander group information for any case where Race is reported as 4 – Asian or Pacific Islander.

Descriptive Name: AAPI Other Specify

Variable Name: AAPI_OTH

Format: Free text

Definition: Specify the other Asian or Pacific Islander group identification.

For any case where the detailed Asian/Pacific Islander Code was “21 – Other Asian” or “25 – Other Pacific Island group,” specify the Asian or Pacific Island group in the space provided.

Descriptive Name: ZIP Code

Variable Name: ZIPCODE

Format: XXXXX

Definition: For patients residing in NYS, enter the ZIP Code of the primary residence. If the patient lives outside NYS, enter 99999.

If the patient is from a foreign country but is staying in the US during the peri-PCI time period, enter 99999. Do not enter the ZIP code of where the patient is staying in the US.

Descriptive Name: State or Country of Residence

Variable Name: STATE

Format: Free text

Definition: For patients living outside NYS, enter the name of the state or country where the patient resides.

Directions:

If a valid NYS ZIP Code has been entered, then the “State or Country” field should be left blank.

Descriptive Name: Admission Date

Variable Name: ADMIDATE

Format: MM/DD/YYYY

Definition: Enter the date that the current hospital stay began.

Note:

Report the date that the patient arrived to the hospital, even if it is not equal to the technical “admission date” (i.e., this date may be prior to official inpatient status).

Descriptive Name: Primary Payer

Variable Name: PRIMEPAY

Format: 01-07, 11, 19

Definition: Enter the primary source of payment for this hospital stay as noted below.

- 01 – Medicare—Fee For Service
- 02 – Medicare—Managed Care
- 03 – Medicaid—Fee For Service
- 04 – Medicaid—Managed Care
- 05 – Blue Cross
- 06 – HMO/Managed Care
- 07 – Other Private Insurance Company
- 11 – Self Pay
- 19 – Other

Directions:

For “Medicaid Pending” code Primary Payer as “11 – Self-Pay” and check the box for Medicaid.

Report a PPO (Preferred Provider Organization) as Code 06 – HMO/Managed Care.

For patients in prison, code Primary Payer as “19 – Other.”

Explanation:

Please note the difference between “07 – Other Private Insurance Company” and “19 – Other.” Code 07 refers to a Private Insurance Company (also referred to as “Commercial” insurance) that is not listed elsewhere.

Code 19 is any other type of insurance that is not given a code of its own (e.g. Workers Compensation, Corrections).

Descriptive Name: Medicaid

Variable Name: MEDICAID

Format: 1 = Yes, 0 or blank = No

Definition: Check this box if the patient has Medicaid that will provide payment for any portion of this hospital admission. If the patient’s primary payer is Medicaid, check this box in addition to entering “03” or “04” under Primary Payer.

Descriptive Name: Preferred Language

Variable Name: PREF_LANG

Format: From Attachment B

Definition: Indicate the patient’s preferred language using the responses listed in Attachment B.

Descriptive Name: PFI of Transferring Hospital

Variable Name: TRANS_PFI

Format: XXXX

Definition: If the patient was transferred from another Acute Care Facility, enter the PFI of the transferring hospital. This element should only be completed for transfer patients.

- A listing of PFI for cardiac diagnostic centers in NYS is provided in Attachment C.
- If transferred from a Veterans Administration hospital in NYS, enter 8888.
- If transferred from outside NYS, enter 9999.
- For patients transferred from another hospital in NYS, please see health.ny.gov/statistics/sparcs/reports/compliance/pfi_facilities.htm for a complete listing of NYS hospitals, including PFI.

Note:

PFI on the above website is listed as 6 digits. For purposes of cardiac reporting, PFI should always be four (4) numeric characters. Do not report the first two digits as provided on the linked website.

II. Procedural Information

Descriptive Name: Hospital That Performed Diagnostic Cath

Variable Name: CATH_PFI

Format: XXXX

Definition: If the angioplasty was preceded by a diagnostic catheterization, enter the name and PFI number of the hospital in the space provided.

Directions:

- If the catheterization was at a cardiac diagnostic center in NYS, enter its PFI Number from Attachment C.
- If done at a Veterans Administration hospital in NYS, enter 8888.
- If done outside NYS, enter 9999.
- If there was no diagnostic catheterization, leave this item blank.

Do not use this field to report any diagnostic procedure (e.g. CTA) other than catheterization.

File Structure Note:

Diagnostic Catheterization Hospital name is included on the paper form for abstractor convenience. It is not part of the PCIRS file structure.

Descriptive Name: Primary Physician Performing PCI

Variable Name: PHYSNUM

Format: XXXXXXXXXXX

Definition: Enter the name and National Provider ID (NPI) number of the primary physician who performed the PCI.

File Structure Note:

Physician name is included on the paper version of the data collection form for abstractor convenience. It is not part of the required PCIRS data structure.

Descriptive Name: Date of PCI

Variable Name: PCI_DATE

Format: MM/DD/YYYY

Definition: Enter the date on which the PCI was performed.

Explanation:

The date reported should be the date on which the first interventional device was deployed.

Descriptive Name: Time of First Interventional Device

Variable Name: PCI_HR; PCI_MIN

Format: PCI_HR=HH; PCI_MIN=MM

Definition: Report the earliest time of any of the following: balloon inflation, stent deployment, treatment of lesion (e.g. thrombectomy/aspiration device, atherectomy, etc.).

Time should be reported using the 24-hour clock (e.g. 1:00 am is 01:00, and 1:00 pm is 13:00).

Explanation:

In the case of an attempted PCI when no interventional device can be deployed, report the time that the guidewire leaves the catheter.

Descriptive Name: Diagnostic Cath During Same Lab Visit

Variable Name: CATHSAME

Format: 1, 2

Definition: If a full diagnostic catheterization was performed during the same cath lab visit as the PCI, then check "Yes." Otherwise check "No."

1 – Yes

2 – No

Explanation:

This does NOT include the case where there was a "quick look" done on the vessel to have the intervention. The diagnostic cath does not have to be every vessel but should be a complete diagnostic of the area of interest.

Descriptive Name: Previous PCI This Admission

Variable Name: PCI_SAME

Format: 1, 2

Definition: Check the appropriate box to indicate whether the patient had a previous PCI during this admission.

1 – Yes

2 – No

Descriptive Name: Date of Previous PCI This Admission

Variable Name: SAMEDATE

Format: MM/DD/YYYY

Definition: If the patient had a prior PCI this admission (PCI_SAME = 1), enter the date of the most recent previous PCI.

Explanation:

The date of the most recent PCI must be entered. This is very important because it aids in combining multiple procedures on the same date in the proper order.

Descriptive Name: Follow-up PCI – Staged Procedure

Variable Name: PART2

Format: 0, 1, 2, 3

Definition: Use the following codes to indicate if the current procedure is in follow-up to a previous PCI, CABG or valve procedure as part of a staged treatment strategy.

- 0 – No, not a staged follow-up to a previous procedure
- 1 – Yes, staged follow-up to a previous PCI
- 2 – Yes, staged follow-up to a previous CABG
- 3 – Yes, staged follow-up to a previous Valve procedure

The follow-up PCI in a staged procedure would be a non-emergency PCI occurring after completion, but within 60 days, of an initial PCI, CABG or Valve procedure.

In a follow-up to PCI or CABG the intervention is at a different lesion location than the previous procedure. Typically, the intervention is on a different vessel than was treated in the first procedure.

Explanation:

“Valve procedure” in this context includes surgical and transcatheter valve procedures.

The following scenario would NOT be considered a staged procedure:

The first PCI was unsuccessful, and the patient returns to the lab at a later point for another attempt.

Descriptive Name: Access Site -Arm

Variable Name: ACCESS_ARM

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the access site was in the arm (radial or brachial).

Directions:

Report the site through which access to the ascending aorta was successfully achieved.

- If access through one site was attempted but failed, do not report.
 - If access to the coronaries was achieved through both sites, report “Yes” for both.
-

Descriptive Name: Access Site -Leg

Variable Name: ACCESS_LEG

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the access site was in the leg (femoral artery).

Directions:

See Access Site -Arm.

Descriptive Name: Access Site Crossover

Variable Name: CROSSOVER

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the final procedure access site was different than the first attempted access site.

Clarification:

Report "Yes" only when there is access site crossover between arm and leg.

If there is a change between planned procedure access and final procedure access at any point during the cath lab visit, report this as a crossover.

Descriptive Name: Dose Area Product (DAP)

Variable Name: DAP

Format: 0-999

Definition: Provide the Dose Area Product (DAP) recorded for this procedure in Gy*cm².

Directions:

If the DAP is >999 Gy*cm², report as "999." This represents an unusual value and may be subject to additional validation review. The unit of measurement should be checked carefully for any values documented as > 999.

Descriptive Name: COVID-19

Variable Name: COVID19

Format: 1-5, 0 or Blank

Definition: Indicate COVID status.

- 1 – No History of Prior COVID-19
 - 2 – History of COVID-19 but not positive during this episode of care
 - 3 – COVID+ during this episode of care but no ARDS
 - 4 – COVID+ during this episode of care with ARDS
 - 5 – COVID+ during this episode of care requiring mechanical ventilation (or declined due to DNR/DNI)
-

III. Vessels Diseased and Lesion Specific Information

Vessels Diseased

For each diseased vessel, check the appropriate box to indicate the percent diameter stenosis. Include all vessels diseased, even branches.

Explanation: Applies to various/multiple elements in the Vessels Diseased section.

If the diseased segment of the native vessel is bypassed by an open artery or vein graft, do not code as diseased. This vessel is revascularized.

For patients with bypass grafts, report un-revascularized major branches that are potentially in jeopardy in the vessels diseased section. For example, a patient with native disease in the proximal and mid-LAD with an open graft's distal anastomosis beyond the mid-LAD lesion will have a Diagonal territory that is not revascularized. Even though there is no lesion in the Diagonal branch, you would report disease for the Mid-Distal LAD / Major Diag in the Vessels Diseased section of the form.

Typically, the percent stenosis (as a numeric value) should be well-documented in the medical record for any significant vessel ($\geq 2\text{mm}$). In the absence of this documentation when only a narrative description is provided, the ranges listed below may be used.

MILD	< 50%
MODERATE	50-69%
SEVERE	$\geq 70\%$

- If a vessel or branch is described as having “Mild” stenosis then the vessel would NOT be coded as diseased, since that is interpreted as < 50% stenosis.
- If the medical record reports the range “40-50%” stenosis, then DO NOT CODE as diseased.
- If the medical record reports the range “60-70%” stenosis, then code 50-69%.

The term “severe diffuse disease” should not be interpreted to mean that the vessel has a stenosis of $\geq 70\%$.

Always take the highest stenosis reported for a vessel. For example, if the medical record reports the Proximal RCA with a 70% lesion and the Distal RCA with a 50% you should code the RCA as 70-100%, since the Proximal RCA has a 70% lesion.

If the medical record only has documentation that states the LAD was stenosed (and does not specify location within the LAD) then code the Mid LAD and not the Proximal LAD.

Disease of the Major Diagonal should be reported with Mid/Distal LAD. The Ramus Intermediate should be coded as the Diagonal or Marginal, depending on the origin of the vessel.

FFR findings of ≤ 0.80 or iFR/RFR/dFR of ≤ 0.89 may be used to report disease of $\geq 70\%$.

Descriptive Name: LMT Disease

Variable Name: LMT

Format: Blank, 0, 1, 2, 3

Definition: Report the percent diameter stenosis of the Left Main using the codes below.

1 – 50-69%

2 – 70-89%

3 – 90–100%

Descriptive Name: Proximal LAD Disease

Variable Name: PROX_LAD

Format: Blank, 0, 4, 5

Definition: Indicate the percent diameter stenosis of the Proximal Left Anterior Descending using the codes below.

4- 50-69%

5- 70-100%

Descriptive Name: Mid/Distal LAD or Major Diagonal Disease

Variable Name: MID_LAD

Format: Blank, 0, 6 or 7

Definition: Indicate the percent diameter stenosis or the Mid/Distal Left Anterior Descending and its major branches using the code below.

6 – 50-69%

7 – 70-100%

Descriptive Name: RCA or PDA

Variable Name: RCA

Format: Blank, 0, 8 or 9

Definition: Indicate the percent diameter stenosis of the Right Coronary Artery and its major branches using the codes below.

8 – 50-69%

9 – 70-100%

Descriptive Name: LCX or Large Marginal

Variable Name: LCX

Format: Blank, 0, 10 or 11

Definition: Indicate the percent diameter stenosis of the Left Circumflex and its major branches.

10 – 50-69%

11 – 70-100%

Descriptive Name: Previous LIMA Use

Variable Name: LIMA_USE

Format: 1, 2, 3 or 4

Definition: Indicate prior use of LIMA using the following codes:

1 – LIMA used as a graft and remains patent to native coronary artery

2 – LIMA used as a graft but is no longer functional

3 – Never used – includes no previous CABG

4 – Unknown – the existence or condition of the LIMA graft is unknown

Explanation:

The graft would be considered “no longer functional” if there is angiographic stenosis of 70% or more or there is evidence of significant flow restriction documented by FFR or by stress test (with echo or nuclear to localize the ischemia).

Descriptive Name: Coronary Dominance

Variable Name: COR_DOM

Format: 1, 2 or 3

Definition: Indicate the coronary artery dominance using the following codes:

1 – Left

2 – Right

3 – Co-Dominant

Descriptive Name: MLA Measurement Type

Variable Name: MLA_TYPE

Format: 1 or 2, blank or 0

Definition: If minimal luminal area (MLA) is reported in the lesion specific grid, indicate if the measurements were obtained from IVUS or OCT evaluation.

1 – IVUS

2 – OCT

Descriptive Name: Flow Measurement Type

Variable Name: FLW_TYPE

Format: 1 or 2 , blank or 0

Definition: If fractional flow reserve ratio (FFR) or instantaneous wave-free ratio (iFR) is reported in the lesion specific grid, indicate if the measurements were obtained from FFR or iFR evaluation.

1 – FFR

2 – iFR

Directions:

- If no FFR/iFR is reported, leave this field blank or enter 0.
 - If both FFR and iFR were used, indicate FFR and report the values from FFR.
 - Results from DFR or RFR may be reported as iFR.
-

Lesion Specific Information

Directions: Applies to various/multiple elements in the Lesion Specific Subsection.

- Complete one line for every lesion for which **PCI was attempted** (even if pre-stenosis is < 50%)
- Complete one line for each non-attempted lesion with diameter stenosis $\geq 50\%$ or proven significant by IVUS/FFR/iFR if angiographic stenosis is < 50%
- If there are more than seven lesions, report the seven most significant
- When two lesions are treated with a single stent, it should be reported as one lesion on a single row in the lesion specific grid

In the event of a failed PCI attempt, when the guidewire is advanced, but no device is used, report the Device Code “98 – Attempted PCI, No Device Used.”

If a Balloon and a Stent are both used, it is at the discretion of the physician if the Balloon is coded as the Device 1 or not coded at all. For purposes of analysis/ interpretation, the stent will be considered the primary or most important intervention

Intra-coronary nitroglycerin is not a reportable device. A case consisting of only intra-coronary nitroglycerin, with no reportable devices used or attempted, is not reportable.

The most common example of “12-Mechanical Thrombus Extraction” is “Angiojet.” Use “13-Aspiration Thrombectomy” for devices that extract the thrombus without first breaking them up, such as Pronto, Export, Fetch, Penumbra.

See also “PCIRS Reportable Cases” under “PCIRS Data Reporting Policies” at the beginning of this document for additional guidance on when to report a PCI.

Descriptive Name: Lesion Location

Variable Names: LES_LOC1, LES_LOC2, LES_LOC3, LES_LOC4, LES_LOC5, LES_LOC6, LES_LOC7

Format: XX

Definition: Enter the code indicating the location of the lesion, as shown in Attachment D.

Explanation:

For lesions in a “sequential” graft going to two of the major coronary systems, complete a separate line for each coronary artery jeopardized (LAD, LCX, RCA).

In the event of a long lesion that spans across two locations as defined in Attachment D, report this lesion as the more proximal location.

For the ramus use '15' for an LAD derived ramus and '20' for an LCX derived ramus.

Descriptive Name: Bypassed

Variable Names: BYPASS_1, BYPASS_2, BYPASS_3, BYPASS_4, BYPASS_5, BYPASS_6, BYPASS_7

Format: A or V

Definition: Indicate if the lesion has been bypassed by an artery or vein graft.

A – Artery

V – Vein

Directions:

If the lesion was not bypassed leave blank.

Descriptive Name: Bypass Stenosis

Variable Names: BPSTEN1, BPSTEN2, BPSTEN3, BPSTEN4, BPSTEN5, BPSTEN6, BPSTEN7

Format: 1, 2, or 3

Definition: If the lesion has a vein or artery graft bypass, use the following code to report the level of stenosis found in the graft:

1 – ≥ 70%

2 – < 70%

3 – Unknown

Descriptive Name: Pre-Op Stenosis

Variable Names: PRESTEN1, PRESTEN2, PRESTEN3, PRESTEN4, PRESTEN5, PRESTEN6, PRESTEN7

Format: 1-100

Definition: Enter the pre-PCI percent diameter reduction.

Directions:

If the Pre-Stenosis for the lesion is given as a range, report the mid-point of the range.

Report here only the angiographic findings. Findings by IVUS or FFR should be reported using those separate data elements.

If the % Pre-Stenosis was 0%, and the lesion is intervened upon and therefore reported, record it as 1% to indicate that there was no stenosis noted before the intervention.

Descriptive Name: Minimal Luminal Area

Variable Names: MLA1, MLA2, MLA3, MLA4, MLA5, MLA6, MLA7

Format: X.X

Definition: Report the minimal luminal area (MLA) in mm² for this lesion if determined by IVUS or OCT.

Descriptive Name: Fractional Flow Reserve

Variable Names: FFR1, FFR2, FFR3, FFR4, FFR5, FFR6, FFR7

Format: X.XX

Definition: Indicate the fractional flow reserve ratio (FFR) or the instantaneous wave-free ratio (iFR) determined prior to intervention, if available.

Directions:

- If both iFR and FFR were performed, report the FFR value.
 - If FFR and iFR were not done, leave blank.
 - Results from DFR or RFR may be reported as iFR.
-

Descriptive Name: Device

Variable Name: DEVICE_1, DEVICE_2, DEVICE_3, DEVICE_4, DEVICE_5, DEVICE_6, DEVICE_7

Format: XX

Definition: From the PCI Devices list in Attachment E, indicate the device used.

Directions:

- If the device used is not found in Attachment E, use Device Code “99 – Other” and specify the device used.
 - Report “drug eluting balloon” with device code 99- Other and specify “DEB.”
 - Report Coil Embolization with code “99- Other” when done in the same setting as PCI. If no other device is used, then it is not a PCIRS reportable case.
-

Descriptive Name: Other Devices – specify

Variable Name: DEVSPEC1, DEVSPEC2, DEVSPEC3, DEVSPEC4, DEVSPEC5, DEVSPEC6, DEVSPEC7

Format: Free text

Definition: For any device reported as 99 – Other, enter specific details of the device used.

Directions:

See Device.

Descriptive Name: Additional Device

Variable Name: SECOND_1, SECOND_2, SECOND_3, SECOND_4, SECOND_5, SECOND_6, SECOND_7

Format: XX

Definition: If two different types of devices were used on the same lesion indicate the other device using the PCI Devices list in Attachment E.

Directions:

See Device.

Descriptive Name: Stents (first type)

Variable Name: STENT1, STENT2, STENT3, STENT4, STENT5, STENT6, STENT7

Format: XX

Definition: From the Stent Code list in Attachment E, indicate the type of stent used.

Directions:

If the stent used is not found in Attachment E, use Stent Code “99 – Other” and specify the type of stent used.

Explanation:

If two different types of stents were used on the same lesion, then report the second type of stent in STENTB for that row.

If multiple stents of the same type were used in the lesion, then only report once for each lesion.

Descriptive Name: Stents (second type)

Variable Name: STENTB_1, STENTB_2, STENTB_3, STENTB_4, STENTB_5, STENTB_6, STENTB_7

Format: XX

Definition: From the Stent Code list in Attachment E, indicate the type of stent used.

Directions:

If the stent used is not found in Attachment E, use Stent Code “99 – Other” and specify the type of stent used.

Explanation:

See Stents (first type).

Descriptive Name: Other Stent – specify

Variable Name: STNTSPEC1, STNTSPEC2, STNTSPEC3, STNTSPEC4, STNTSPEC5, STNTSPEC6, STNTSPEC7

Format: Free text

Definition: If the stent used is not found in Attachment E, use Stent Code “99 – Other” and specify the type of stent used.

Descriptive Name: Lesion Description

Variable Names:

LESDESA1, LESDESA2, LESDESA3, LESDESA4, LESDESA5, LESDESA6, LESDESA7, LESDESB1, LESDESB2, LESDESB3, LESDESB4, LESDESB5, LESDESB6, LESDESB7, LESDESC1, LESDESC2, LESDESC3, LESDESC4, LESDESC5, LESDESC6, LESDESC7

Format: 1-8, 10 or 99

Definition: Report all that apply (up to 3) for attempted and non-attempted lesions.

- 1 – Small vessel (<2.5 mm diameter)
- 2 – Long lesions (stenting ≥ 33 mm)
- 3 – Bifurcation stenting
- 4 – Heavily calcified and/or unyielding lesion
- 5 – Tortuous and/or angled vessel obstructing stent delivery
- 6 – Complex lesion – details not documented
- 7 – Chronic Total Occlusion (CTO)
- 8 – Dissection without prior significant disease
- 10 – Thrombus presence
- 99 – None of the above apply

Explanation:

- 2 – Long lesion should only be reported when the actual length of the lesion is documented to be > 33 mm. A note of “long lesion” should not be used as evidence for reporting this element.
 - 3 – Bifurcation stenting refers to bifurcation lesions where both portions are stented. This should not be reported when there is a bifurcation lesion that is not stented in both portions.
 - 4 – Heavily calcified and/or unyielding lesion may be reported when lithotripsy or a rotational, orbital, or laser atherectomy device is used, even if there is no specific notation of calcification.
 - 6 – Complex lesion, details not documented – should only be reported when there is a note of “complex lesion” and the documentation does not support coding any of the other lesion description codes.
 - 7 – Chronic Total Occlusion (CTO) is defined as: a vessel with 100% pre-procedure stenosis presumed to be 100% occluded for at least three months previous to this procedure. Note: This description should be reported if a lesion is described as a CTO even if there is no specific documentation with regard to timeframe of three months.
 - 8 – Dissection without prior significant disease refers to intra-PCI dissections caused by the procedure which necessitate treatment. The pre-PCI stenosis for these lesions should be reported as the stenosis prior to the dissection occurring.
-

Descriptive Name: Lesion Specific Information – Post-op Stenosis

Variable Name: POSTSTEN1, POSTSTEN2, POSTSTEN3, POSTSTEN4, POSTSTEN5, POSTSTEN6, POSTSTEN7

Format: 1-100

Definition: If a PCI was attempted on this lesion, enter the percent diameter of the stenosis immediately following the PCI.

Directions:

If PCI was not attempted, leave post-op stenosis blank.

If the medical record says post-stenosis was 0%, record it as 1% to indicate that it was actually a successful PCI and not left blank by mistake.

IV. Cardiac Presentation

Complete this section for **all** patients.

Descriptive Name: Cardiac Presentation

Variable Name: CAD_PRSENT

Format: 1-6

Definition: Indicate the type of angina present prior to this procedure.

1 – No Symptoms, No Angina

2 – Symptoms Unlikely to be Ischemia

Pain, pressure or discomfort in the chest, neck or arms not clearly exertional or not otherwise consistent with pain or discomfort of myocardial ischemic origin. This includes patients with non-cardiac pain (e.g., pulmonary embolism, musculoskeletal, or esophageal discomfort), or cardiac pain not caused by myocardial ischemia (e.g. acute pericarditis).

3 – Stable Angina

Angina without a change in frequency or pattern for the six weeks prior to this surgical intervention. Angina is controlled by rest and/or oral or transcutaneous medications.

4 – Unstable Angina

There are three principal presentations of unstable angina:

- a. Rest angina (occurring at rest and prolonged usually >20 minutes);
- b. New-onset angina (within the past 2 months, of at least CCS Class III severity); or
- c. Increasing angina (previously diagnosed angina that has become distinctly more frequent, longer in duration, or increased by 1 or more CCS Society class to at least CCS III severity).

5 – Non-ST Elevation MI (Non-STEMI)

Non-ST elevation myocardial infarction as documented in the medical record.

Non-STEMIs are characterized by the presence of both criteria:

- a. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters with a clinical presentation which is consistent or suggestive of ischemia. ECG changes and/or ischemic symptoms may or may not be present.
- b. Absence of ECG changes diagnostic of a STEMI (see STEMI).

6 – ST-Elevation MI (STEMI) or equivalent.

The patient presented with a ST elevation myocardial infarction (STEMI) or its equivalent as documented in the medical record. STEMIs are characterized by the presence of **both** criteria:

- a. ECG evidence of STEMI: New or presumed new ST-segment elevation or new left bundle branch block not documented to be resolved within 20 minutes. ST-segment elevation is defined by new or presumed new sustained ST-segment elevation at the J-point in two contiguous ECG leads with the cut-off points: ≥ 0.2 mV in men or ≥ 0.15 mV in women in leads V2-V3 and/or ≥ 0.1 mV in other leads and lasting greater than or equal to 20 minutes. If no exact ST-elevation measurement is recorded in the medical chart, physician's written documentation of ST-elevation or Q waves is acceptable. If only one ECG is performed, then the assumption that the ST elevation persisted at least the required 20 minutes is acceptable. Left bundle branch block (LBBB) refers to new or presumed new LBBB on the initial ECG.

- b. Cardiac biomarkers (creatinine kinase-myocardial band, Troponin T or I) exceed the upper limit of normal according to the individual hospital's laboratory parameters and a clinical presentation which is consistent or suggestive of ischemia.

Note:

For purposes of the Registry, ST elevation in the posterior chest leads (V7 through V9), or ST depression that is maximal in V1-3, without ST-segment elevation in other leads, demonstrating posterobasal myocardial infarction, is considered a STEMI equivalent.

Clarification:

Report Cardiac Presentation based on the worst status present within 7 days prior to this PCI or since the most recent PCI, whichever time period is shorter.

Atypical symptoms (e.g. shortness of breath, upper abdominal pain, left arm pain) may be considered in identifying the Cardiac Presentation when they are documented as an anginal equivalent or evidence of myocardial ischemia. If these symptoms are not documented as an anginal equivalent, then report response category 2 – Symptoms Unlikely to be Ischemia.

Descriptive Name: Anginal Classification Within 2 Weeks

Variable Name: CCS_CLAS

Format: 1-4 or 8

Definition: Indicate the patient's anginal classification or symptom status within the past 2 weeks. The anginal classification or symptom status is classified as the highest grade of angina or chest pain by the Canadian Cardiovascular Angina Classification System (CCA).

- 1 – CCA I Ordinary physical activity does not cause angina; for example, walking or climbing stairs, angina occurs with strenuous or rapid or prolonged exertion at work or recreation.
- 2 – CCA II Slight limitation of ordinary activity; for example, angina occurs walking or stair climbing after meals, in cold, in wind, under emotional stress or only during the few hours after awakening, walking more than two blocks on the level or climbing more than one flight of ordinary stairs at a normal pace and in normal conditions.
- 3 – CCA III Marked limitation of ordinary activity; for example, angina occurs walking one or two blocks on the level or climbing one flight of stairs in normal conditions and at a normal pace.
- 4 – CCA IV Inability to carry on any physical activity without discomfort – angina syndrome may be present at rest.
- 8 – No Symptoms, No Angina – The patient has no symptoms, no angina.

Clarification:

Report this data element reflective of the patient's CCS Class within two weeks or since the most recent PCI, whichever time period is shorter.

Atypical symptoms (e.g. shortness of breath, upper abdominal pain, left arm pain) may be considered in identifying the CCS class when they are documented as an anginal equivalent or evidence of myocardial ischemia. If these symptoms are not documented as an anginal equivalent, then report response category 8 – No Symptoms, No Angina.

Descriptive Name: Mode of Arrival to First Facility

Variable Name: MODE_TRANS

Format: 1-3

Definition: Report the transport method by which the patient arrived at the first acute care facility, using the following codes:

- 1 – Self/Family
- 2 – Emergency Medical Services (EMS)
- 3 – Other

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).

Explanation:

EMS includes any ambulance or helicopter transport.

For patients transferred to your hospital, report how they arrived at the referring institution.

Descriptive Name: Thrombolytics

Variable Name: LYTICS

Format: 1-3, Blank or 0

Definition: Check the appropriate box to indicate if, and at what time interval, thrombolytics were administered. The time interval represents the number of hours between initial thrombolytic administration and start of PCI.

- 1 – < 3 hours
- 2 – 3 – 24 hours
- 3 – > 24 hours – 7 days

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
- Report only use of thrombolytics to treat an MI.
- “Half-dose” lytics as part of a pharmaco-invasive strategy should be reported for this data element.

Explanation:

Response 3 - >24 – 7 days would be appropriate in the event that the patient had an MI treated with thrombolytics in that timeframe and has another MI within 24 hours of the current PCI.

Descriptive Name: Onset of Ischemic Symptoms**Variable Name:** CHESTPDATE**Format:** MM/DD/YYYY HH:MM**Definition:** Report the date and time of the onset of chest pain or surrogate ischemic symptoms. This may be reported by the patient as pain, pressure, burning, heaviness or discomfort in the upper abdomen, shoulder, arm, jaw or upper back. This may also be accompanied by nausea and/or diaphoresis.**Directions:**

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
- Enter 00:01 in the time portion to represent midnight (be careful to use correct corresponding date to 00:01).

Explanation:

The time reported here should be the time of the onset of symptoms that brought the patient to the hospital or caused the patient to seek care. If the symptoms have stopped before the start of the procedure, you can still report the date and time that they began.

If the exact symptom onset time is not specified in the medical record, it may be estimated as 0700 for morning, 1200 for lunchtime, 1500 for afternoon, 1800 for dinnertime, 2200 for evening and 0300 if awakened from sleep in the nighttime.

Descriptive Name: First Medical Contact**Variable Name:** MED_CONTACT**Format:** MM/DD/YYYY HH:MM**Definition:** Indicate the date and time when the patient was first evaluated by either emergency medical services (EMS) or another healthcare professional prior to arrival at your facility.**Directions:**

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
- Do not report if Mode of Arrival to the First Facility was Self/Family.
- Do not estimate the time. Enter time as 00:00 if unknown.
- For transfer patients, this is the time of first medical contact prior to arrival at the first facility.

Explanation:

This time should be well documented in the medical record and represents an objective point in the patient's timeline of care. Therefore it is not appropriate to estimate based on arrival to hospital.

Descriptive Name: Arrival at Transferring Hospital

Variable Name: TRANARRDATE

Format: MM/DD/YYYY HH:MM

Definition: For patients transferred from another Acute Care Facility, enter the date and time of arrival at the transferring institution.

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
 - If an MI occurs after arrival at the transferring hospital, report the date and time documented by the nurses' notes of the start of chest pain or an equivalent cardiac symptom (jaw pain, shortness of breath, etc.) as the arrival date/time.
-

Descriptive Name: Arrival at PCI Hospital

Variable Name: PCIARRDATE

Format: MM/DD/YYYY HH:MM

Definition: Enter the date and time the patient arrives in the PCI hospital.

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
 - If an MI occurs after arrival at the PCI hospital, report the date and time documented by the nurses' notes of the start of chest pain or an equivalent cardiac symptom (jaw pain, shortness of breath, etc.) as the arrival date/time.
-

Descriptive Name: Onset Time, Estimated

Variable Name: EST_ONSET

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the symptom onset time was estimated.

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
-

Descriptive Name: TIMI \leq II

Variable Name: TIMILTII

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if there is evidence of TIMI flow \leq II with either total vessel occlusion or a high-grade lesion.

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
-

Descriptive Name: Ongoing Ischemia at Time of Procedure

Variable Name: ONGOINGISCH

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient is experiencing chest pain and acute ST or T-Wave changes at the start of the PCI.

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
-

Descriptive Name: Killip Class 2 or 3

Variable Name: KILLIP23

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate severe heart failure in the acute MI patient as evidenced by any of the following:

- Documentation of Killip Class 2 or 3
- NYHA functional classification IV- symptoms at rest
- Symptoms are dyspnea and there may be note of orthopnea and paroxysmal nocturnal dyspnea (PND).

NOTE: If the patient requires oxygen to control dyspnea and then the chart notes “no longer short of breath or no longer dyspneic,” this should still be considered evidence of dyspnea.

- Physical examination/ clinical evidence of fluid overload, and documentation of rales, crackles or pulmonary edema.

NOTE: A description of the rales as “mild, minimal or bibasilar” or rales which “clear with deep breathing” is not sufficient. Notation of jugular venous distension (JVD), hepatic congestion, ascites and/or peripheral edema, chart notes of “grossly edematous or fluid overloaded” are not sufficient in the absence of clear statement about the pulmonary findings. In this case, it is reasonable to look elsewhere in the chart for evidence of pulmonary fluid overload (e.g. the anesthesiologist notes on intubation that there is “pink, frothy sputum” or notation of “not moving any air” or even an x-ray finding).

Directions:

- Report only if there is an MI < 24 hours prior to PCI (Risk factor 4, 5, or 6).
-

V. Pre-Intervention Risk Factors

Descriptive Name: PCI Status

Variable Name: PCI_STAT

Format: 1-7

Definition: Check the most appropriate box for the reason the PCI is being performed.

- 1 – STEMI, Immediate – Check if patient is being treated for STEMI (or STEMI equivalent) within 12 hours of symptom onset.
- 2 – STEMI, >12 hrs, Symptomatic – Check if patient is being treated for STEMI (or STEMI equivalent) more than 12 hours from symptom onset and at the time of the procedure has symptoms of severe heart failure, persistent ischemic symptoms, or hemodynamic or electrical instability.
- 3 – STEMI, >12 hrs, Asymptomatic – Check if patient is being treated for STEMI (or STEMI equivalent) more than 12 hours from symptom onset and is asymptomatic; without hemodynamic instability, electrical instability, persistent or recurrent ischemia, and symptoms of heart failure.
- 4 – STEMI, Successful Lytics – Check if patient is stable after presumed successful treatment with full-dose thrombolytics.
- 5 – STEMI, Failed Lytics – Check if patient is being treated after failed thrombolytic therapy.
- 6 – NSTEMI, high risk or Unstable Angina, high risk – Check for patients with unstable angina or NSTEMI who have high risk features for short-term risk of death or nonfatal MI. High risk features include at least one of the following:
 - History – Accelerating tempo of ischemic symptoms in preceding 48 hrs
 - Character of Pain – ongoing prolonged (longer than 20 minutes) rest pain
 - Clinical Findings:
 - Pulmonary edema, most likely due to ischemia;
 - New or worsening mitral regurgitation murmur;
 - S₃ or new/worsening rales;
 - Hypotension, bradycardia, tachycardia;
 - Age > 75 years
 - ECG:
 - Angina at rest with transient ST-segment changes greater than 0.5 mm;
 - Bundle-branch block, new or presumed new;
 - Sustained ventricular tachycardia
 - Cardiac markers – elevated cardiac troponin T, troponin I, or creatinine kinase-MB (e.g., troponin T or I greater than 0.1 ng per mL)
- 7 – None of the Above – Check here if the patient fits none of the above categories (i.e. no STEMI, no high risk NSTEMI, no high risk Unstable Angina).

Explanation:

Report PCI Status based on the reason for performing the PCI that is being reported on the current form. That is, “why is *this PCI* being performed?”

If this PCI is the second part of a staged procedure report 7 – none of the above. Staged cases will be identified using the two PCIRS questions on staging.

Atypical symptoms (e.g. shortness of breath, upper abdominal pain, left arm pain) may be considered in identifying the PCI Status when they are documented as an anginal equivalent or evidence of myocardial ischemia.

Descriptive Name: Height

Variable Name: HEIGHT

Format: 1-999

Definition: Enter the patient's height in centimeters (cm).

Directions:

For patients who have had lower extremity amputations, code the patient's original height.

Descriptive Name: Weight

Variable Name: WEIGHT

Format: 1-999

Definition: Enter the weight of the patient, in kilograms (kg), closest to but before the procedure.

Descriptive Name: Stress Test Findings

Variable Name: STRS_RES

Format: 1-6 or 9

Definition: Use the codes below to indicate the stress test results if a stress test was performed in the last 12 months.

1 – Low Risk – (<1% annual risk of death or MI)

Select if any of the following stress test findings are documented:

- Low risk treadmill score (score ≥ 5) or no new ST segment changes or exercise induced chest pain symptoms; when achieving maximal levels of exercise.
- Normal or small myocardial perfusion defect at rest or with stress encumbering <5% of the myocardium
- Normal stress or no change of limited resting wall motion abnormalities during stress.

2 – Intermediate Risk (1% to 3% annual death or MI)

Select if any of the following stress test findings are documented:

- Mild/moderate resting LV dysfunction (LVEF 35% to 49%) not readily explained by noncoronary cause
- Resting perfusion abnormalities in 5% to 9.9% of the myocardium in patients without a history or prior evidence of M
- ≥ 1 mm of ST-segment depression occurring with exertional symptoms.
- Stress-induced perfusion abnormalities encumbering 5% to 9.9% of the myocardium or stress segmental scores (in multiple segments) indicating 1 vascular territory with abnormalities but without LV dilation
- Small wall motion abnormality involving 1 – 2 segments and only 1 coronary bed

3 – High Risk (>3% annual death or MI)

Select if any of the following stress test findings are documented:

- Severe resting LV dysfunction (LVEF <35%) not readily explained by noncoronary cause
- Resting perfusion abnormalities $\geq 10\%$ of the myocardium in patients without prior history or evidence of MI

- Stress ECG findings including ≥ 2 mm of ST-segment depression at low workload or persisting into recovery, exercise-induced ST-segment elevation, or exercise induced VT/VF
 - Severe stress induced LV dysfunction (peak exercise induced LVEF $< 45\%$ or drop in LVEF with stress $\geq 10\%$)
 - Stress induced perfusion abnormalities encumbering $\geq 10\%$ myocardium or stress segmental scores indicating multiple vascular territories with abnormalities
 - Stress induced LV dilation
 - Inducible wall motion abnormality (involving > 2 segments or 2 coronary beds)
 - Wall motion abnormality developing at low dose of dobutamine (≤ 10 mg/kg/ min) or at a low heart rate (< 120 beats / min).
- 4 – Positive, Risk Unavailable
- The study was “positive” but the risk or extent of ischemia was not documented.
- 5 – Indeterminate
- The results of the study were uninterpretable. They cannot be considered positive or negative.
- 6 – Unavailable
- A study was performed but the results of the study are not available
- 9 – Not Done/ Unknown
- No stress test/imaging study was performed within the past 12 months or it is not known if a stress test/imaging study was performed in the past 12 months.

Explanation:

“Normal” or “Negative” stress test should be reported under 1 – Low risk.

If findings were in more than one risk level, select the highest level of risk indicated.

Note:

Inclusion of stress test reports in the medical record is encouraged to allow for accurate and complete reporting of these data elements.

Descriptive Name: Coronary CTA Results

Variable Name: CT_RES

Format: 1-6 or 9

Definition: Use the codes below to indicate the results of a Coronary Computed Tomography Angiography (CTA) exam if one was performed.

- 1 – Low Risk – No coronary stenosis $> 50\%$
- 2 – Intermediate Risk – One vessel CAD with ≥ 70 stenosis or moderate CAD stenosis (50-69%) in ≥ 2 coronary arteries
- 3 – High Risk – Multi-vessel obstructive CAD (≥ 70 stenosis) or left main stenosis
- 4 – Positive, Risk Unavailable – CT exam is described as positive but detailed results to allow for categorization of risk are not provided.
- 5 – Indeterminate – The results of the study were uninterpretable. They cannot be considered positive or negative.
- 6 – Unavailable – A study was performed but the results of the study are not available.
- 9 – Not Done/ Unknown – No CTA Exam was performed or it is unknown if a CTA was performed.

Explanation:

“Normal” or “Negative” CTA exam should be reported under 1 – Low risk.

Descriptive Name: Agatston Coronary Calcium Score

Variable Name: CA_SCORE

Format: 0-999 or blank

Definition: Report the Agatston Coronary Calcium Score if available from the 6 months prior to PCI.

Directions:

For values greater than 999, report 999.

Descriptive Name: Beta Blocker, Anti-Anginal Med Therapy

Variable Names: MED_BB

Format: 1, 2, 0 or blank

Definition: Use the appropriate code to describe the patient's use of Beta Blockers in the past two weeks.

0 – No Use, Intolerance or Strong Contraindication Documented

1 – Used

2 – Not Used – Strong Contraindication / Patient Intolerance

Directions:

Report 1-Used if:

- The patient was started on an oral form of the medication after admission but prior to this procedure
- The medication was prescribed for this patient, but you are unsure it has been prescribed specifically to treat anginal symptoms.

Do not report 1-Used if:

- The patient was only given sublingual, IV, or short acting formula of the medications.
- The patient has been prescribed the medication but is known to be not taking it.

Report 2- Not Used, Strong Contraindication / Patient Intolerance if:

- The patient has previously been prescribed this medication but is no longer taking it due to documented inability to tolerate the drug or if there is documentation in the medical record that the patient is not on the medication due to a medical contraindication.

Do not report 2- Not Used, Strong Contraindication / Patient Intolerance if:

- The drug is not used due to patient preference.
-

Descriptive Name: Calcium Channel Blockers, Anti-Anginal Med Therapy

Variable Names: MED_CA

Format: 1, 2, 0 or blank

Definition: Use the appropriate code to describe the patient's use of Calcium Channel Blockers in the past two weeks.

0 – No Use, Intolerance or Strong Contraindication Documented

1 – Used

2 – Not Used – Strong Contraindication / Patient Intolerance

Directions:

See Beta Blocker, Anti-Anginal Med Therapy.

Descriptive Name: Long Acting Nitrates, Anti-Anginal Med Therapy

Variable Names: MED_NIT

Format: 1, 2, 0 or blank

Definition: Use the appropriate code to describe the patient's use of Long Acting Nitrates in the past two weeks.

0 – No Use, Intolerance or Strong Contraindication Documented

1 – Used

2 – Not Used – Strong Contraindication / Patient Intolerance

Directions:

See Beta Blocker, Anti-Anginal Med Therapy.

Descriptive Name: Ranolazine, Anti-Anginal Med Therapy

Variable Names: MED_RAN

Format: 1, 2, 0 or blank

Definition: Use the appropriate code to describe the patient's use of Ranolazine in the past two weeks.

0 – No Use, Intolerance or Strong Contraindication Documented

1 – Used

2 – Not Used – Strong Contraindication / Patient Intolerance

Directions:

See Beta Blocker, Anti-Anginal Med Therapy.

Descriptive Name: Other, Anti-Anginal Med Therapy

Variable Names: MED_OTH

Format: 1, 2, 0 or blank

Definition: Use the appropriate code to describe the patient's use of Other Anti-Anginal Medical Therapy in the past two weeks.

0 – No Use, Intolerance or Strong Contraindication Documented

1 – Used

2 – Not Used – Strong Contraindication / Patient Intolerance

Directions:

See Beta Blocker, Anti-Anginal Med Therapy.

Explanation:

This is an unusual response and will be subject to review during validation.

Descriptive Name: Ejection Fraction

Variable Name: EJEC_FRA

Format: 0-99

Definition: Record the ejection fraction taken closest to (but before) the intervention. If a pre-intervention ejection fraction is not available, it is acceptable to report the ejection fraction as measured after intervention but within 1 day.

Directions:

- If an ejection fraction is unavailable, enter “0” and enter “9 – Unknown” for the measure.
- An ejection fraction that is described in the medical record as “Normal” should be considered 55%.
- If EF is given as a range, enter the midpoint of the range.

An EF measured up to one year prior to the PCI may be used if there is not a more recent value and if there was no change in clinical condition that would indicate the value was likely to change in that time period.

Explanation:

Intraoperative direct observation of the heart is NOT an adequate basis for a visual estimate of the ejection fraction.

Descriptive Name: Ejection Fraction Measure

Variable Name: MEASURE

Format: 1-4, 8 or 9

Definition: Indicate how the Ejection Fraction was measured using one of the following:

- 1 – LV Angiogram
- 2 – Echocardiogram
- 3 – Radionuclide Studies
- 4 – TEE, including intra-operative
- 8 – Other
- 9 – Unknown

Directions:

If an ejection fraction is unavailable, enter 9 – Unknown for the measure.

Descriptive Name: Creatinine

Variable Name: CREATININE

Format: XX.X

Definition: Enter the patient's creatinine level (mg/dL) closest to, but prior to the intervention. If no pre-PCI creatinine value is available, enter 00.0.

Explanation:

A creatinine value from up to one month prior to arrival may be reported here.

Descriptive Name: Aortic Valve Area

Variable Name: AVAREA

Format: X.X

Definition: Enter the Aortic Valve Area (AVA) in cm² if known.

Explanation:

Report the most recent pre-PCI AVA available. This may be taken from any point in time prior to PCI but should be more recent than any valve intervention.

A post-PCI echo may be used to report AVA if no pre-PCI result is available. Any post-PCI value that is after a Post-PCI valve intervention should not be reported.

If the documentation indicates "normal AVA," with no value documented, it is acceptable to report 3.0 cm².

If the documentation includes only a narrative description (e.g. mild, moderate, severe stenosis), there is no corresponding AVA value that can be assumed to correspond to these findings. In the presence of aortic valve stenosis, there is an expectation that a numeric value for the AVA should be present in the medical record.

If an echo report has more than one value reported for AVA (e.g. AO Max A and AO EFF A, Vmax method and VTI method, LV SV method and LVOT SV method and LVOT SR method) it is appropriate to report the smallest aortic valve area documented.

This data may not be available for all patients.

Descriptive Name: 0. None

Variable Name: NORISK

Format: 1 = Yes, 0 or Blank = No

Definition: None of the pre-intervention risk factors listed below are present.

Descriptive Name: 1-3. Previous PCIs

Variable Name: PREV_PR1, PREV_PR2, PREV_PR3

Format: 1 = Yes, 0 or Blank = No

Definition: If the patient had one or more previous PCI, check the appropriate box to indicate the number of previous PCIs.

Include any interventions that occurred prior to this one during the current admission. If there was a previous procedure this admission, please be sure that the date of the most recent PCI is indicated for "Previous PCI This Admission" on the form.

Descriptive Name: 4. Previous MI <6 hours

Variable Name: PREMILT6

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the symptom onset of the patient's most recent MI was less than 6 hours before the first interventional device.

Explanation:

The timing should be from the onset of symptoms that prompted the patient to seek medical care to the time of first interventional device.

The diagnosis of Acute Coronary Syndrome (ACS) in the medical record is not sufficient to code risk factors 4 – 7. There must be documentation of a diagnosed myocardial infarction.

Descriptive Name: 5. Previous MI ≥ 6 - <12 hours

Variable Name: PREMI611

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the symptom onset of the patient's most recent MI was 6 to 12 hours before the first interventional device.

Explanation:

See Previous MI < 6 hours.

Descriptive Name: 6. Previous MI (most recent) ≥12-<24 hours

Variable Name: PRMI1223

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the symptom onset of the patient's most recent MI was 12 to 24 hours before the first interventional device

Explanation:

See Previous MI < 6 hours.

Descriptive Name: 7. Previous MI (most recent) Days

Variable Name: PREMIDAY

Format: 1 – 21, blank or 0

Definition: If the patient's most recent MI was more than 24 hours before PCI, enter the number of days since symptom onset. If the MI was 21 days or more prior to PCI, enter 21.

Explanation:

See Previous MI < 6 hours.

Descriptive Name: 39. Neurological Event

Variable Name: CVD_EVENT

Format: 1, 2, blank or 0

Definition: Enter the appropriate code if the patient has a history of a neurological event:

1 – Stroke

2 – TIA, without history of stroke.

Stroke is an acute episode of focal or global neurological dysfunction caused by brain, spinal cord, or retinal vascular injury as a result of hemorrhage or infarction, where the neurological dysfunction lasts for greater than 24 hours.

TIA is defined as a transient episode of focal neurological dysfunction caused by brain, spinal cord, or retinal ischemia, without acute infarction, where the neurological dysfunction resolves within 24 hours.

Descriptive Name: 40. Arterial Imaging Test

Variable Name: CVD_IMG

Format: 1, 2, blank or 0

Definition: Enter the appropriate code to indicate if there was noninvasive or invasive arterial imaging test demonstrating $\geq 50\%$ stenosis of any of the major extracranial or intracranial vessels to the brain.

1 – 50-79% occlusion

2 – $>79\%$ occlusion

Descriptive Name: 41. Cervical or Cerebrovascular Procedure

Variable Name: CVD_PROC

Format: 1 = Yes, 0 or Blank = No

Definition: Check the box to indicate that the patient had previous cervical or cerebral artery surgery or percutaneous intervention.

Explanation:

It is acceptable to report cerebrovascular aneurysm clipping or coiling for this risk factor.

The procedure should be related to cerebrovascular disease, not trauma.

Descriptive Name: 44. Cardiac Arrest

Variable Name: ARREST

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient had an episode of cardiac arrest within 24 hours prior to the start of the PCI.

Explanation:

Cardiac arrest includes pulseless clinical scenarios that can be bradycardic arrests or tachycardic arrests requiring cardiopulmonary resuscitation (requiring two or more chest compressions, or open chest massage) and/or requiring emergency defibrillation.

Reportable events require a clinically significant loss of consciousness and blood pressure such that there was a life-threatening condition and immediate therapy was required.

Descriptive Name: 38. Anoxic Brain Injury Criteria

Variable Name: NEUROST

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient met all of the following criteria prior to PCI:

- AMI – PCI is done for Acute Myocardial Infarction;
- CARDIAC ARREST – Documented cardiac arrest has occurred as part of initial presentation for the AMI and before the patient is brought to the cardiac catheterization laboratory (typically out-of-hospital cardiac arrest);
- COMA – The patient had normal consciousness before the cardiac arrest, but becomes comatose, broadly defined as the failure to exhibit adequate responsiveness to external stimuli with the understanding that early after cardiac arrest this can be due to multiple factors and not just prolonged hypoxia. There is no need to “prove” anoxic/hypoxic encephalopathy at this time and indeed it cannot be “proved.”

Additional documentation may be requested for all cases reported with this pre-PCI condition.

Descriptive Name: 42. Cardiogenic Shock

Variable Name: SHK_COND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if, at the start of the procedure, the patient was in cardiogenic shock as defined below.

Cardiogenic Shock is defined as an episode of systolic blood pressure <90 mmHg and/or Cardiac Index <2.2 L/min/m² determined to be secondary to cardiac dysfunction and the requirement for parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP) to maintain blood pressure and cardiac index above those specified levels.

Explanation:

See Refractory Cardiogenic Shock.

Descriptive Name: 43. Refractory Cardiogenic Shock

Variable Name: SHK_REFR

Format: 1 = Yes, 0 or Blank = No

Definition: Refractory Shock is defined as an episode of systolic blood pressure <80 mm Hg and/or Cardiac Index <2.0 L/min/m² determined to be secondary to cardiac dysfunction despite the use of parenteral inotropic or vasopressor agents or mechanical support (e.g., IABP).

Cases with Refractory Cardiogenic Shock will be excluded from analysis.

Explanation (Applies to Cardiogenic Shock and Refractory Cardiogenic Shock);

Transient episodes of hypotension reversed with IV fluids or atropine do not constitute Cardiogenic Shock or Refractory Cardiogenic Shock.

When coding Cardiogenic Shock or Refractory Cardiogenic Shock, be careful of timing. It needs to be just prior to the start of the PCI. All elements of the definition must be clearly documented to have occurred prior to the guide-wire leaving the catheter.

Ongoing CPR warrants the coding of Refractory Cardiogenic Shock.

Cardiogenic Shock cannot be coded with Refractory Shock.

If the patient is Ventricular Assist Device (VAD) dependent then Refractory Shock should be coded. For these purposes ECMO is treated like a VAD. Use of Impella is treated like a VAD when there is evidence prior to insertion that the hemodynamic criteria above are met.

If the patient has an IABP, the augmented or non-augmented systolic blood pressure can be used as supporting documentation to code Shock or Refractory Shock.

Descriptive Name: 10. Peripheral Arterial Disease**Variable Name:** PERIPH**Format:** 1 = Yes, 0 or Blank = No**Definition:** Angiographic demonstration of at least 50% narrowing in a major aortoiliac or femoral/popliteal vessel, previous surgery for such disease, absent femoral or pedal pulses, or the inability to insert a catheter or intra-aortic balloon due to iliac aneurysm or obstruction of the aortoiliac or femoral arteries. Ankle-Brachial Index < 0.9 is also acceptable documentation.**Examples:**

Peripheral Arterial Disease	Code	Do Not Code
1. Tortuosity of the vessel alone		X
2. Tortuosity of the vessel with an inability to insert a Catheter	X	
3. Abdominal aortic aneurysm (AAA)	X	
4. Aneurysm in the ascending or descending aorta	X	
5. Absence of femoral pulse on either the right or the left	X	
6. Diminished femoral pulse on either right or left or both		X
7. Claudication		X
8. A negative popliteal pulse alone (1+1- or 1-1+)		X
9. Palpable dorsalis pedis and posterior tibial pulses		X
10. If pulses are non-palpable, but are dopplerable	X	
11. Inability to insert a catheter or IABP in femoral Arteries	X	
12. Amputated toes, necrotic toes, gangrene of the foot in the absence of other acceptable criteria		X
13. Renal artery with significant stenosis	X	
14. Subclavian artery with significant stenosis	X	
15. Iliac artery aneurysm	X	
16. Infrarenal aortic dissection	X	
17. "Moderate" subclavian artery stenosis with no % documented		X
18. Documentation of Subclavian Steal Syndrome	X	

Descriptive Name: 18. Heart Failure, Current

Variable Name: CHF_CURRENT

Format: 1 = Yes, 0 or Blank = No

Definition: Within 2 weeks prior to the procedure, the patient has a clinical diagnosis of heart failure and symptoms requiring treatment for heart failure.

Physician diagnosis of heart failure may be based on one of the following:

- Paroxysmal nocturnal dyspnea (PND)
- Dyspnea on exertion (DOE) due to heart failure
- Chest X-Ray showing pulmonary congestion

Documentation must include the presence of a diagnosis of heart failure, evidence of symptoms, and treatment for heart failure.

Explanation:

The diagnosis may be documented with a variety of terms such as: congestive heart failure (CHF), heart failure (HF), systolic heart failure, diastolic heart failure, heart failure with reduced EF (HFrEF), heart failure with preserved EF (HFpEF).

Renal dialysis is acceptable for the treatment component of this definition, *if* there is documentation that the patient is receiving dialysis as a treatment for heart failure. CRT-D device may be considered treatment for heart failure.

Calcium Channel blocker does not qualify as treatment for heart failure

Documentation of NYHA Class III or IV may fulfill both the diagnosis and symptoms components of this definition. Documentation of a lower NYHA class may fulfill the symptoms component, but there must also be documentation of a heart failure diagnosis.

Descriptive Name: 19. Heart Failure, Past

Variable Name: CHF_PAST

Format: 1 = Yes, 0 or Blank = No

Definition: Between 2 weeks and 6 months prior to the procedure, the patient has a clinical diagnosis/ past medical history of heart failure and ongoing treatment for heart failure.

Note:

Physician diagnosis of heart failure may be based on one of the following:

- Paroxysmal nocturnal dyspnea (PND)
- Dyspnea on exertion (DOE) due to heart failure
- Chest X-Ray showing pulmonary congestion

Documentation must include a diagnosis of heart failure and evidence of treatment for heart failure. Patient's clinical status may be compensated.

Explanation:

See Heart Failure, Current.

Descriptive Name: 20. Malignant Ventricular Arrhythmia

Variable Name: MAL_VENT

Format: 1 = Yes, 0 or Blank = No

Definition: Recent (within the past 14 days) sustained ventricular tachycardia requiring electrical defibrillation or conversion with intravenous antiarrhythmic agents or ventricular fibrillation requiring electrical defibrillation. Excludes V-Tach or V-Fib occurring within 6 hours of the onset of a diagnosed myocardial infarction and responding well to treatment.

Explanation:

Sustained arrhythmia is that which continues until something is done to stop it; it does not resolve on its own.

For patients within 6 hours of the onset of diagnosed MI who are experiencing V-Tach or V-Fib that otherwise meets the above criteria, you may still code this risk factor if the arrhythmia is not responding well to treatment. In this context, “not responding well to treatment” means there is a recurrent episode of Vtach or VFib that requires additional therapies (multiple shocks or additional pharmacological intervention) or the initial episode required multiple shocks at maximal energy.

If the patient has an AICD that is documented to have performed cardioversion, defibrillation, or anti-tachycardia pacing, then CODE, unless the patient is within 6 hours of the onset of a diagnosed MI.

Regular oral medication for a ventricular arrhythmia is NOT sufficient reason to code the risk factor.

Descriptive Name: 21. Chronic Lung Disease**Variable Name:** COPD**Format:** 1-4, 0 or Blank**Definition:** Indicate whether the patient has chronic lung disease, and the severity level according to the following classification:

- 1 – None
- 2 – Mild – Report for patients with a diagnosis of chronic lung disease and one or more of the following:
 - FEV₁ 60% to 75% of predicted,
 - DLCO or the DLCO/VA >60% of predicted and < lower limit of normal,
 - Chronic inhaled or oral bronchodilator therapy or chronic inhaled steroid therapy
- 3 – Moderate – Report for patient with a diagnosis of chronic lung disease and one or more of the following:
 - FEV₁ 50% to 59% of predicted,
 - DLCO or the DLCO/VA 40-60% of predicted,
 - Chronic oral steroid therapy aimed at lung disease.
- 4 – Severe – Report for patients with a diagnosis of chronic lung disease and one or more of the following:
 - FEV₁ <50% predicted,
 - DLCO or the DLCO/VA <40% of predicted,
 - pO₂ < 60 or pCO₂ > 50.

Explanation:

A history of chronic inhalation reactive disease (asbestosis, mesothelioma, black lung disease or pneumoconiosis) may qualify as chronic lung disease. Radiation induced pneumonitis or radiation fibrosis also qualifies as chronic lung disease (if above criteria are met). A history of atelectasis is a transient condition and does not qualify.

Chronic lung disease can include patients with chronic obstructive pulmonary disease, chronic bronchitis, or emphysema. Patients with asthma or seasonal allergies are not considered to have chronic lung disease.

COVID-19, when resulting in reduced lung function and/or need for chronic bronchodilator or steroid therapy for the lung condition, can be accepted as the diagnosis portion of this risk factor.

Acceptable documentation for “severe” includes pO₂ < 60 or pCO₂ > 50 on supplemental oxygen as well as on room air.

Do not use values obtained more than 12 months prior to the date of PCI.

Bedside spirometry may be used to identify the severity of chronic lung disease when there is a diagnosis of COPD or other qualifying chronic lung disease in the patient’s medical record. Findings on a full PFT or bedside spirometry such as “moderate obstructive defect” are not a diagnosis of chronic lung disease. For all cases, there must be a diagnosis of pre-procedure chronic lung disease to report this risk factor.

Documentation Note:

Diagnosis must be present in the medical record. This information must be included with any medical record documentation submitted for review of this risk factor. When severity is documented based on treatment of chronic lung disease, it is necessary to show that the patient was receiving the treatment at the time of admission or just prior to admission.

Descriptive Name: 22. Diabetes

Variable Name: DIABETES

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate whether patient has a history of diabetes diagnosed and/or treated by a healthcare provider.

Explanation:

Exclusions are steroid induced hyperglycemia and gestational (transient), without elevated HbA1c and/or treatment, therefore do not code.

Not all patients receiving diabetic medications are considered diabetic. It is important to remember, some medications used to treat diabetes may be used to treat other conditions.

A hemoglobin A1c value of $\geq 6.5\%$, collected within 3 months prior to surgery, is acceptable to use for documentation of diabetes.

Patients with a history of diabetes who have had a pancreatic transplant are coded as Yes to Diabetes.

Descriptive Name: 22a. Diabetes Therapy

Variable Name: DM_TRT

Format: 1-7, 0 or Blank

Definition: Indicate the control method (long-term management) the patient presented with on admission.

Choose the most aggressive therapy from the order below:

- Insulin: insulin treatment (includes any combination with insulin)
- Other subcutaneous medications (e.g., GLP-1 agonist)
- Oral: treatment with oral agent (includes oral agent with or without diet treatment)
- Diet only: Treatment with diet only
- None: no treatment for diabetes
- Other: other adjunctive treatment, non-oral/insulin/diet
- Unknown

1 – None -No treatment for diabetes

2 – Diet only -Treatment with diet only

3 – Oral Treatment – With oral agent (includes oral agent with or without diet treatment)

4 – Insulin -Insulin treatment (includes any combination with insulin)

6 – Other subcutaneous medication -Other subcutaneous medications (such as GLP-1 agonists)

7 – Unknown

5 – Other -Other adjunctive treatment, non-oral/insulin/diet

Directions:

Patients placed on a pre-procedure diabetic pathway of insulin drip at admission but were previously controlled by diet or oral method are not coded as insulin treated.

If the patient has had a pancreatic transplant code “other” since the insulin from the new pancreas is not exogenous insulin.

Report this element for all cases where “Risk Factor #22 - Diabetes” is also reported. If the patient does not qualify for “Risk Factor #22 - Diabetes,” then leave the field blank or enter 0.

Descriptive Name: 24. Renal Failure, Dialysis

Variable Name: REN_DIAL

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate whether the patient is currently (prior to PCI) undergoing dialysis on a routine basis.

Explanation:

Includes any form of peritoneal or hemodialysis patient is currently receiving prior to PCI with the intent to resume post-PCI. Also, may include Continuous Veno-Venous Hemofiltration (CVVH, CVVH-D), and Continuous Renal Replacement Therapy (CRRT) as dialysis.

Do not code for renal dialysis if ultrafiltration is the only documentation found in the record since this is for volume management.

Descriptive Name: 28. Previous CABG Surgery

Variable Name: PREVSURG

Format: 1 = Yes, 0 or Blank = No

Definition: Previous coronary artery bypass graft (CABG) surgery.

Explanation:

This risk factor may be reported if the CABG was during this admission, but before PCI, or in a previous admission.

If the patient has an “A” or “V” coded in the lesion specific section and this risk factor is not reported, the case will be returned for validation.

Descriptive Name: 32. Emergency PCI Due to DX Cath Complication

Variable Name: EME_PTCA

Format: 1 = Yes, 0 or Blank = No

Definition: Report if there was catheterization related dissection or obstruction of coronary artery during diagnostic catheterization, requiring immediate, unplanned angioplasty to treat closure or threatened closure of the vessel.

Descriptive Name: 34. Stent Thrombosis

Variable Name: STETHROM

Format: 1 = Yes, 0 or Blank = No

Definition: Report if there was formation of a blood clot/thrombus in the stented segment of an artery and/or adjacent area. This usually results in an acute occlusion, chest pain or development of an acute MI.

Patient must be currently affected by stent thrombosis as evidenced by AMI, ACS, or clinical angina to code this risk factor.

Explanation:

An occlusion alone, in-stent restenosis, or plaque build-up does not constitute coding.

Descriptive Name: 35. Any Previous Organ Transplant

Variable Name: ORGAN_TRANS

Format: 1 = Yes, 0 or Blank = No

Definition: The patient has had any organ transplant prior to the PCI. This includes, but is not limited to: heart, lung, kidney, and liver transplants.

Explanation:

Code for bone marrow transplant.

Do not code for corneal transplant or skin transplant (grafting).

Descriptive Name: 45. High Risk of Bleeding

Variable Name: HR_BLEED

Format: 1 = Yes, 0 or Blank = No

Definition: Report if any of the following apply:

- Blood dyscrasia as defined: thrombocytopenia (PLT <100K)
 - History of bleeding diathesis or coagulopathy
 - Baseline Hgb < 11 g/dl (or anemia requiring transfusion during the 4 weeks prior to PCI)
 - Any prior intracerebral bleed
 - Hospital admission for bleeding during the prior 12 months
 - Planned daily NSAID (other than aspirin) or steroids ≥ 30 days after PCI
 - Clinical indication for oral anticoagulation
-

VI. Major Events Following PCI

Check to be sure that all of the reported major events occurred during or after the intervention but before hospital discharge.

Please Note:

A documented pre-intervention condition that persists post-intervention with no increase in severity is not a reportable major event.

Descriptive Name: 0. None

Variable Name: NO_COMPS

Format: 1 = Yes, 0 or Blank = No

Definition: Check if none of the Major Events listed below occurred during or after PCI, but before hospital discharge.

Descriptive Name: 1. Stroke

Variable Name: STROKE

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate whether the patient has a post-PCI stroke (i.e., any confirmed neurological deficit of abrupt onset caused by a disturbance in blood supply to the brain) that was confirmed by imaging or did not resolve within 24 hours.

Descriptive Name: 2. Post-PCI MI

Variable Name: TRANS_MI

Format: 1 = Yes, 0 or Blank = No

Definition: Report if post-PCI there is a new MI defined as:

- Elevation of cTn values (>5 x 99th percentile URL) in patients with normal baseline values (99th percentile URL)
or
- A rise of cTn values >20% if the baseline values are elevated and are stable or falling.

And at least one of the following:

- Symptoms suggestive of myocardial ischemia or
 - New ischemic ECG changes or
 - Angiographic findings consistent with a procedural complication or
 - Imaging demonstration of new loss of viable myocardium or new regional wall motion abnormality.
-

Descriptive Name: 7a. Acute Occlusion in the Targeted Lesion

Variable Name: OCC_TL

Format: 1 = Yes, 0 or Blank = No

Definition: Acute occlusion, complete or partial, in the targeted lesion resulting in reduction of flow through the dilated artery. Usually caused by thrombosis, intimal flap, or dissection.

Directions:

- An occlusion which is reopened before the patient leaves the catheterization laboratory and stays open should not be reported.
 - An occlusion requiring the patient's return to the catheterization laboratory should be reported even if the vessel is then reopened.
 - If the acute occlusion is caused by a stent thrombosis, only code the stent thrombosis.
-

Descriptive Name: 7b. Acute Occlusion in a Significant Side Branch

Variable Name: OCC_SSB

Format: 1 = Yes, 0 or Blank = No

Definition: Acute occlusion, complete or partial, in a significant side branch resulting in reduction of flow.

Directions:

- This should include any occlusion in any location within the significant proximal or distal branches of the targeted or treated vessel.
 - Usually caused by thrombosis, intimal flap, or dissection.
 - An occlusion, which is re-opened before the patient leaves the catheterization laboratory and stays open, should not be reported.
 - An occlusion requiring the patient's return to the catheterization laboratory should be reported even if the vessel is then reopened.
-

Descriptive Name: 10. Renal Failure

Variable Name: RENALFAI

Format: 1 = Yes, 0 or Blank = No

Definition: Temporary or permanent renal dialysis of any type before hospital discharge.

Do not code this item if "Risk Factor #24 -Renal Failure, Dialysis" is reported.

Explanation:

For renal failure, initiation of dialysis is always a major event, regardless of the Pre-PCI creatinine or expectation of future need for dialysis.

Descriptive Name: 14. Emergency Cardiac Surgery

Variable Name: EMESURG

Format: 1 = Yes, 0 or Blank = No

Definition: The patient requires cardiac surgery on an emergency basis due to a complication of PCI.

Explanation:

This major event should be reported for any cardiac surgery, not just those reportable in the NYS Cardiac Surgery Reporting System (CSRS). This includes cardiac surgery that does not take place in the operating room. Examples of reportable surgeries include but are not limited to: CABG, cardiac massage and cardiac explorations.

Descriptive Name: 17. Stent Thrombosis

Variable Name: ST_THROM

Format: 1 = Yes, 0 or Blank = No

Definition: Formation of a blood clot in the stented segment of the artery and/or adjacent area. This usually results in an acute occlusion, chest pain, or development of an acute MI.

Explanation:

An occlusion alone or plaque build-up does not constitute coding.

The thrombus needs to be in or around the area that is stented for the major event to be coded.

Report only if stent thrombosis occurs before hospital discharge.

Descriptive Name: 18. Emergency Return to the Cath Lab for PCI

Variable Name: ER_CATH

Format: 1 = Yes, 0 or Blank = No

Definition: The patient is taken to the Cath Lab for PCI on an emergency basis due to a complication of a previous PCI.

Descriptive Name: 19. Coronary Perforation

Variable Name: CORN_PERF

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if there was a coronary perforation during this lab visit. Report for a Type III – extravasation through a frank (1 mm) perforation.

Directions:

- Do not code if the perforation is repaired during the same lab visit as the PCI.
 - If the perforation requires emergency cardiac surgery then the Major Event #14- Emergency Cardiac Surgery should also be coded.
-

Descriptive Name: 21. Bleeding – PCI Access Site**Variable Name:** BLDEVNT_PCI**Format:** 1 = Yes, 0 or Blank = No**Definition:** Indicate if the patient experienced a confirmed bleeding event at the PCI access site observed and documented in the medical record that was associated with any of the following:

- Hemoglobin drop of ≥ 3 g/dL;
- Transfusion of whole blood or packed red blood cells;
- Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear)

Clarification:

A “bleeding event” refers to PCI access site related bleeding meeting one of the three criteria above. This could include hematoma and retroperitoneal bleed with specified hemoglobin drop, transfusion, or intervention.

For this data element, if the PCI was reported as “Access Site Crossover,” report bleeding events as defined above at either the first attempted access site or the subsequent (final) PCI access site under this major event.

Descriptive Name: 22. Bleeding – Other Procedural Access Site**Variable Name:** BLDEVNT_OTH**Format:** 1 = Yes, 0 or Blank = No**Definition:** Indicate if the patient experienced a confirmed bleeding event at an access site other than the one used for PCI observed and documented in the medical record that was associated with any of the following:

- Hemoglobin drop of ≥ 3 g/dL;
- Transfusion of whole blood or packed red blood cells;
- Procedural intervention/surgery at the bleeding site to reverse/stop or correct the bleeding (such as surgical closures/exploration of the arteriotomy site, balloon angioplasty to seal an arterial tear).

Note: This may include injuries at the entry site used for support device or diagnostic cath if different than that used for coronary intervention.

Clarification:

For this data element, a “bleeding event” refers to additional access site related bleeding meeting one of the three criteria above. This could include hematoma and retroperitoneal associated with specified hemoglobin drop, transfusion, or intervention. Event #22 may most commonly be associated with bleeding at the access site for mechanical support devices.

Descriptive Name: 23. PCI – Access Site Other Complications Requiring Treatment

Variable Name: OTHEVNT_PCI

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient experienced any other complications (excluding bleeding) at the percutaneous entry site used for PCI that required treatment or intervention.

Example:

Code 'Yes' for patients treated with IV therapy for loss of distal pulse.

Clarification:

Examples of reportable major events include but are not limited to: access site occlusion, peripheral embolization, dissection, pseudoaneurysm and/or AV fistula related to the PCI access site requiring treatment or intervention.

For this data element, if the PCI was reported as “Access Site Crossover,” report events occurring at either the first attempted access site or the subsequent (final) PCI access site under this major event.

Descriptive Name: 24. Other Procedural Access Site Other Complications Requiring Treatment

Variable Name: OTHEVNT_OTH

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient experienced any other complications (excluding bleeding) at a procedural percutaneous entry site other than the one used for PCI that required treatment or intervention.

Example:

Code 'Yes' for patients treated with IV therapy for loss of distal pulse.

This may include injuries at the entry site used for support device or diagnostic cath if different than that used for coronary intervention.

Clarification:

Examples of reportable major events include but are not limited to: access site occlusion, peripheral embolization, dissection, pseudoaneurysm and/or AV fistula related to the percutaneous access site (other than the one used for PCI) requiring treatment or intervention.

VII. Discharge Information

Descriptive Name: Additional Procedure Planned – Staged Procedure

Variable Name: STAGE_PLAN

Format: 0-3

Definition: Use the following codes to indicate if, at the end of this procedure, it is expected that another procedure (PCI or CABG) will be performed within 60 days on a different lesion location in a non-emergency setting.

0 – No additional procedure planned as staged treatment strategy

1 – Yes, additional PCI planned as part of staged treatment strategy

2 – Yes, CABG planned as part of staged treatment strategy

3 – Yes, Valve procedure planned as part of a staged treatment strategy

Explanation:

Report “No” if at the end of this procedure there is a plan to wait for clinical or laboratory evidence to decide if another procedure is necessary.

Report “No” if this procedure was a failed attempt and the plan is to “try again” at a later time.

Descriptive Name: Discharge Status

Variable Name: STATUS

Format: 11-15, 19, or 2-8

Definition: Report the appropriate discharge disposition code.

Discharged Alive:

11 - Home

12 - Hospice

13 - Acute Care Facility

14 - Skilled Nursing Facility

15 - In-patient Physical Medicine and Rehab

19 - Other(specify)

Died In:

2 - Operating Room

3 - Recovery Room

4 - Critical Care Unit

5 - Medical/Surgical Floor

6 - Cath Lab

7 - In-transit to Another Facility

8 - Elsewhere in Hospital(specify)

Directions:

Hospice discharge (including home with hospice), should be reported as code 12. For purposes of analysis this is considered an in-hospital mortality unless the hospital provides documentation that 30 days after discharge the patient was still alive (even if still in hospice).

Use code 11-Home for patients who arrive from and are discharged to prison or correctional facility.

Use code 14 for patients who arrive from and are discharged to a skilled nursing home.

If the patient is discharged to sub-acute rehab that is in a skilled nursing facility, then use code 14. For sub-acute rehab when facility type is unknown, use code 19, specify “sub-acute” and the name of the facility in the specify text field.

Use code 15 for patients discharged to an in-patient physical medicine and rehabilitation unit for acute rehab.

Use 19–Other for a live discharge status not otherwise specified (e.g. AMA).

If 8–Died Elsewhere in Hospital is checked, specify where the patient died.

Descriptive Name: Discharge Status Other (specify)

Variable Name: STAT_SPE

Format: Free text

Definition: For patients reported with discharge status 19 – Other Live Discharge or 8 – Died Elsewhere in Hospital, enter the specific discharge disposition or location of death.

Descriptive Name: Hospital Discharge Date

Variable Name: DISDATE

Format: MM/DD/YYYY

Definition: Enter the date the patient was discharged from the hospital.

If the patient died in the hospital, the hospital discharge date is the date of death.

Descriptive Name: 30-Day Status

Variable Name: THIRTYDAY

Format: 1, 2, or 9

Definition: Report the patient's status at 30 days post-procedure using the appropriate code.

1 – Live

2 – Dead

9 – Unknown

This data element is intended as a tool to assist in tracking post-discharge outcomes. It is not required for data reporting; however, some response must be provided for each case. Enter 9-Unknown if 30-day status is not tracked by your facility and is therefore unknown.

VIII. Stages of Shock Classification

Note: The data elements in this section are required only for records with any of the following criteria: MI < 24 hours, Refractory Cardiogenic Shock, Non-refractory Cardiogenic Shock, Heart Failure - Current (within the past 2 weeks other than elective same-day admission), Cardiac Arrest or Anoxic Brain Injury Criteria.

Note: For all data elements below, the term “PCI Start” refers to the time that the guidewire leaves the catheter.

Pre-Op Biochemical Markers

Descriptive Name: Lactate in mmol/L

Variable Name: LACTATE

Format: 0.0 – 99.9 or blank

Definition: Report the last recorded Lactate (in mmol/L) prior to PCI Start but within 12 hours.

Clarification:

Report the most recent value obtained. Either venous or arterial may be reported.

Descriptive Name: Lactate Not Documented/Unknown

Variable Name: LACTATE_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if there was no Lactate recorded within 12 hours prior to PCI Start or the value is unknown or not documented.

Descriptive Name: Lactate – Date and Time Drawn

Variable Name: LAC_DT

Format: MM/DD/YYYY HH:MM

Definition: Report the date and time that the lactate reported above was drawn. Use military time.

Descriptive Name: Lactate – Date and Time Not Documented/Unknown

Variable Name: LAC_DT_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the date and/or time that the reported lactate was drawn is unknown or not available.

Descriptive Name: ALT (Alanine Transaminase) in IU/L

Variable Name: ALT

Format: 0 – 9999

Definition: Report the last recorded ALT (in IU/L) prior to PCI Start but within 12 hours.

Descriptive Name: ALT Not Documented/Unknown

Variable Name: ALT_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if there was no ALT recorded within 12 hours prior to PCI Start or the value is unknown or not documented.

Descriptive Name: ALT – Date and Time

Variable Name: ALT_DT

Format: MM/DD/YYYY HH:MM

Definition: Report the date and time that the ALT reported above was drawn. Use military time.

Descriptive Name: ALT – Date and Time Not Documented/Unknown

Variable Name: ALT_DT_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the date and/or time that the reported ALT was drawn is unknown or not available.

Descriptive Name: Arterial pH

Variable Name: PH

Format: 0.00 – 9.99

Definition: Report the last recorded pH prior to PCI Start but within 12 hours.

Descriptive Name: Arterial pH Not Documented/Unknown

Variable Name: PH_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if there was no pH recorded within 12 hours prior to PCI Start or the value is unknown or not documented.

Descriptive Name: Arterial pH – Date and Time

Variable Name: PH_DT

Format: MM/DD/YYYY HH:MM

Definition: Report the date and time that the pH reported above was measured. Use military time.

Descriptive Name: Arterial pH – Date and Time Not Documented/Unknown

Variable Name: PH_DT_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the date and/or time that the reported pH was measured is unknown or not available.

Blood Pressure Before PCI Start

For all Blood Pressure elements below, when both invasive and noninvasive values are available, the invasive value should be reported. Additionally, if the patient is on an IABP, the augmented values should be reported.

Descriptive Name: Systolic Blood Pressure, Last Before Start

Variable Name: LAST_BPSYS

Format: 0-999

Definition: Report the last systolic blood pressure recorded prior to PCI Start.

Descriptive Name: Diastolic Blood Pressure, Last Before Start

Variable Name: LAST_BPDIA

Format: 0-999

Definition: Report the last diastolic blood pressure recorded prior to PCI Start.

Descriptive Name: Blood Pressure, Last Before Start Not Documented/Unknown

Variable Name: LAST_BP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the systolic and/or diastolic blood pressure before PCI Start is unknown, not recorded, unavailable.

Descriptive Name: Mean Arterial Pressure, Last Before Start

Variable Name: LAST_MAP

Format: 0-999

Definition: Report the last Mean Arterial Pressure recorded prior to PCI Start.

Clarification:

This may be calculated based on Systolic and Diastolic blood pressure if the MAP is not recorded.

Descriptive Name: Mean Arterial Pressure, Last Before Start Not Documented/ Unknown

Variable Name: LAST_MAP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Mean Arterial Pressure before PCI Start is unknown, not recorded, unavailable.

Descriptive Name: Systolic Blood Pressure, Lowest in 1 Hour

Variable Name: LOW_BPSYS

Format: 0-999

Definition: Report the lowest systolic blood pressure within 1 hour prior to PCI Start.

Clarification:

In the event of a cardiac arrest within 1 hour prior to PCI Start, report "0".

Descriptive Name: Diastolic Blood Pressure, Lowest in 1 Hour

Variable Name: LOW_BPDIA

Format: 0-999

Definition: Report the diastolic blood pressure associated with the lowest systolic blood pressure within 1 hour prior to PCI Start.

Clarification:

In the event of a cardiac arrest within 1 hour prior to PCI Start, report "0".

Report the diastolic blood pressure recorded at the time of the lowest systolic blood pressure within 1 hour prior to PCI Start. This may not be the lowest diastolic blood pressure recorded.

Descriptive Name: Blood Pressure, Lowest in 1 Hour Not Documented/Unknown

Variable Name: LOW_BP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the lowest systolic and/or diastolic blood pressure within 1 hour prior to PCI Start is unknown, not documented, unavailable.

Descriptive Name: Mean Arterial Pressure, Lowest in 1 Hour

Variable Name: LOW_MAP

Format: 0-999

Definition: Report the lowest Mean Arterial Pressure (MAP) within 1 hour prior to PCI Start.

Clarification:

This may be calculated based on Systolic and Diastolic blood pressure if the MAP is not recorded.

In the event of a cardiac arrest within 1 hour prior to PCI Start, report "0".

Report the lowest recorded MAP within 1 hour prior to PCI Start, even if it was recorded at a different time than the lowest systolic blood pressure.

Descriptive Name: Mean Arterial Pressure, Lowest in 1 Hour Not Documented/ Unknown

Variable Name: LOW_MAP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the lowest Mean Arterial Pressure (MAP) within 1 hour prior to PCI Start is unknown, not documented, unavailable.

Vasoactive Medications

Descriptive Name: Vasoactive Drugs Used

Variable Name: VASO_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient was receiving an infusion of vasoactive medications at PCI Start or received a bolus of vasoactive medications within 1 hour prior to PCI Start.

Descriptive Name: Dobutamine, Dopamine, Epinephrine, Levosimendan, Milrinone, Norepinephrine, Phenylephrine, Vasopressin

Variable Name: VM_DOBUT, VM_DOPA, VM_EPI, VM_LVSDN, VM_MILR, VM_NOREPI, VM_PHEN, VM_VASP

Format: 1 = Bolus Only, 2 = Infusion, 0 or Blank = No

Definition:

Use the codes below to indicate the use of vasoactive medications as listed in this section.

1 = Bolus within 1 hour prior to PCI Start

2 = Infusion ongoing at time of PCI Start

Leave blank or enter 0 if the patient did not receive a bolus within 1 hour prior to PCI Start and was not receiving an infusion at the time of PCI Start.

For patient receiving an infusion at PCI Start who also received a bolus within 1 hour, report the infusion.

Descriptive Name: Other Vasoactive Medication

Variable Name: VM_OTH

Format: 1 = Bolus Only, 2 = Infusion, 0 or Blank = No

Definition: Use the codes below to indicate use of a vasoactive medication not listed above.

1 = Bolus within 1 hour prior to PCI Start

2 = Infusion ongoing at time of PCI Start

Descriptive Name: Other Vasoactive Medication Specify

Variable Name: VM_SPEC

Format: Free text

Definition: If Other Vasoactive Medication is reported, indicate specifically what drug was given in the space provided.

Mechanical Circulatory Support / Ventricular Assist Device

Descriptive Name: Mechanical Support Used

Variable Name: MECH_USED

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the patient was on a Mechanical Circulatory Support Device or Ventricular Assist Device (VAD) at the time of PCI Start.

Descriptive Name: IABP

Variable Name: IABP

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of IABP at PCI Start.

Descriptive Name: Tandem Heart

Variable Name: TANDEM

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of Tandem Heart at PCI Start.

Descriptive Name: Impella 2.5

Variable Name: IMP_25

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of Impella 2.5 at PCI Start.

Descriptive Name: Impella CP

Variable Name: IMP_CP

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of Impella CP at PCI Start.

Descriptive Name: Impella 5.0/5.5

Variable Name: IMP_50

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of Impella 5.0 or 5.5 at PCI Start.

Descriptive Name: VA ECMO

Variable Name: VA_ECMO

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of VA ECMO at PCI Start.

Descriptive Name: Percutaneous RVAD

Variable Name: PERC_RVAD

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of Percutaneous RVAD at PCI Start.

Note: Impella RP is reported in this category.

Descriptive Name: Other Mechanical Support

Variable Name: MECH_OTH

Format: 1 = Yes, 0 or Blank = No

Definition: Report the use of an Other Mechanical Circulatory Support / VAD at PCI Start.

Descriptive Name: Other Mechanical Support Specify

Variable Name: MECH_SPEC

Format: Free text

Definition: If an Other Mechanical Circulatory Support Device or VAD was reported, indicate the specific device used in the space provided.

Invasive Hemodynamic Assessment / Pulmonary Artery Catheterization

Descriptive Name: Invasive Hemodynamic Assessment

Variable Name: INV_HEMO

Format: 1 - 4, blank or 0

Definition: Use the codes below to indicate if there was invasive hemodynamic assessment and the timeframe performed.

- 1 – None within 12 hours of PCI Start
- 2 – During the same cath lab visit but prior to PCI Start
- 3 – Prior to this lab visit but within 12 hours of PCI Start
- 4 – Not Documented / Unknown

Clarification:

The RA Pressure may have been obtained at an earlier time than the other PA Catheterization values. In that situation, indicate the time frame that the other values were obtained for this question and check the box for “Right Atrial Pressure Recorded at Remote Time.”

Descriptive Name: Right Atrial Pressure (mean)

Variable Name: RA_MEAN

Format: 0-999

Definition: Report the Right Atrial (RA) pressure if available from within 12 hours prior to PCI Start.

Descriptive Name: Right Atrial Pressure Not Documented/Unknown

Variable Name: RA_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Right Atrial pressure is not documented or unknown.

Descriptive Name: Right Atrial Pressure on Vasoactive Medications

Variable Name: RA_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: If the Right Atrial pressure was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Right Atrial Pressure on Mechanical Support

Variable Name: RA_MECH

Format: 1 = Yes, 0 or Blank = No

Definition: If the Right Atrial pressure was reported, indicate if that value was recorded while the patient was receiving mechanical circulatory support.

Descriptive Name: Right Atrial Pressure Recorded at Remote Time

Variable Name: RA_REMOTE

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Right Atrial pressure was recorded at a time remote from other Pulmonary Artery Catheterization values.

Descriptive Name: Pulmonary Artery Pressure, Systolic

Variable Name: PA_SYS

Format: 0-999

Definition: Report the systolic Pulmonary Artery (PA) pressure if available from within 12 hours prior to PCI Start.

Descriptive Name: Pulmonary Artery Pressure, Diastolic

Variable Name: PA_DIA

Format: 0-999

Definition: Report the diastolic Pulmonary Artery (PA) pressure if available from within 12 hours prior to PCI Start.

Descriptive Name: Pulmonary Artery Pressure Not Documented/Unknown

Variable Name: PA_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Pulmonary Artery (PA) pressure if not documented or unknown.

Descriptive Name: Pulmonary Artery Pressure on Vasoactive Medications

Variable Name: PA_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: If the Pulmonary Artery pressure was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Pulmonary Arterial Pressure on Mechanical Support

Variable Name: PA_MECH

Format: 1 = Yes, 0 or Blank = No

Definition: If the Pulmonary Artery pressure was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Pulmonary Capillary Wedge Pressure (PCWP)

Variable Name: PCWP

Format: 0-99

Definition: Report the systolic Pulmonary Capillary Wedge Pressure (PCWP) if available from within 12 hours prior to PCI Start.

Descriptive Name: Pulmonary Capillary Wedge Pressure Not Documented/Unknown

Variable Name: PCWP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Pulmonary Capillary Wedge Pressure (PCWP) is not documented or unknown.

Descriptive Name: Pulmonary Capillary Wedge Pressure on Vasoactive Medications

Variable Name: PCWP_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: If the Pulmonary Capillary Wedge Pressure (PCWP) was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Pulmonary Capillary Wedge Pressure on Mechanical Support

Variable Name: PCWP_MECH

Format: 1 = Yes, 0 or Blank = No

Definition: If the Pulmonary Capillary Wedge Pressure (PCWP) was reported, indicate if that value was recorded while the patient was receiving mechanical circulatory support.

Descriptive Name: Left Ventricular End Diastolic Pressure

Variable Name: LVEDP

Format: 0-99 or Blank

Definition: Report the Left Ventricular End Diastolic Pressure if available from within 12 hours prior to PCI Start.

Clarification:

If the documentation includes only a range and not a specific value, the highest end of the range may be reported.

Descriptive Name: Left Ventricular End Diastolic Pressure Not Documented/Unknown

Variable Name: LVEDP_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Left Ventricular End Diastolic Pressure is not documented or unknown.

Descriptive Name: Left Ventricular End Diastolic Pressure on Vasoactive Medications

Variable Name: LVEDP_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: If the Left Ventricular End Diastolic Pressure was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Left Ventricular End Diastolic Pressure on Mechanical Support

Variable Name: LVEDP_MECH

Format: 1 = Yes, 0 or Blank = No

Definition: If the Left Ventricular End Diastolic Pressure was reported, indicate if that value was recorded while the patient was receiving mechanical circulatory support.

Descriptive Name: Cardiac Index

Variable Name: CI

Format: 0.0-9.9 or Blank

Definition: Report the Cardiac Index if available from within 12 hours prior to PCI Start.

Descriptive Name: Cardiac Index Not Documented/Unknown

Variable Name: CI_ND

Format: 1 = Yes, 0 or Blank = No

Definition: Indicate if the Cardiac Index is not documented or unknown.

Descriptive Name: Cardiac Index on Vasoactive Medications

Variable Name: CI_MEDS

Format: 1 = Yes, 0 or Blank = No

Definition: If the Cardiac Index was reported, indicate if that value was recorded while the patient was receiving vasoactive medications.

Descriptive Name: Cardiac Index on Mechanical Support

Variable Name: CI_MECH

Format: 1 = Yes, 0 or Blank = No

Definition: If the Cardiac Index was reported, indicate if that value was recorded while the patient was receiving mechanical circulatory support.

Attachment A

Response Codes for Asian and Pacific Islander Groups

These codes are to be used in the field “Detailed Asian / Pacific Islander” (AAPI_CODE) when response to “Race” (RACE) is 4-Asian Pacific Islander.

- 01 Chinese
- 02 Japanese
- 03 Filipino
- 04 Korean
- 05 Vietnamese
- 06 Asian Indian
- 07 Bangladeshi
- 08 Pakistani
- 09 Burmese
- 10 Nepalese
- 11 Taiwanese
- 12 Thai
- 13 Bhutanese
- 14 Cambodian
- 15 Hmong
- 16 Indonesian
- 17 Laotian
- 18 Malaysian
- 19 Mongolian
- 20 Sri Lankan
- 21 Other Asian
- 22 Native Hawaiian
- 23 Guamanian and Chamorro
- 24 Samoan
- 25 Other Pacific Island group

Attachment B

Response Codes for Preferred Language

Acceptable responses for “Preferred Language” (PREF_LANG). The language responses follow the ISO 639.2 conventions and there are two special codes for Other and Unknown/Not Documented.

Language	Response Code
Albanian	sqi
Arabic	ara
Bengali	ben
Cantonese	yue
Chinese	zho
English	eng
French	fra
German	deu
Greek	gre
Haitian-Creole	hat
Hindi	hin
Italian	ita
Japanese	jpn
Korean	kor
Mandarin	cmn
Polish	pol
Russian	rus
Spanish	spa
Tagalog	tgl
Urdu	urd
Yiddish	yid
SPECIAL VALUES	
Other Language Not Above	888
Language Unknown/Not Documented	999

Attachment C

PFI Numbers for Cardiac Diagnostic and Surgical Centers

PFI Facility

ALBANY AREA

0001 Albany Medical Center Hospital
0746 Bassett Medical Center
0829 Ellis Hospital
1005 Glens Falls Hospital
0756 Samaritan Hospital
0818 Saratoga Hospital
0005 St. Peter's Hospital
0135 UVM Health Network - CVPH

BUFFALO AREA

0207 Buffalo General Medical Center
0210 Erie County Medical Center
0213 Mercy Hospital of Buffalo
0574 Niagara Falls Memorial Medical Center
0066 Olean General Hospital
0103 UPMC Chautauqua

ROCHESTER AREA

0116 Arnot Ogden Medical Center
0411 Rochester General Hospital
0413 Strong Memorial Hospital
0471 The Unity Hospital of Rochester

SYRACUSE AREA

0977 Cayuga Medical Center
0636 Crouse Hospital
0630 St. Joseph's Hospital Health Center
0058 UHS-Wilson Medical Center
0635 Upstate University Hospital – SUNY
5478 Wynn Hospital

*(The full PFI for this new hospital is 15478, use 5478 for Cardiac Data Systems reporting)

PFI Facility

NEW ROCHELLE AREA

0699 Garnet Health Medical Center (formerly Orange Regional Medical Center)
0779 Good Samaritan Hospital of Suffern
0925 Good Samaritan University Hospital
0989 HealthAlliance Hospital – Mary’s Ave
0913 Huntington Hospital
0895 John T. Mather Memorial Hospital
0885 Long Island Community Hospital
0513 Mercy Medical Center
0180 MidHudson Regional Hospital of Westchester Medical Center
1072 Montefiore New Rochelle Hospital
0776 Montefiore Nyack Hospital
0694 Montefiore St. Luke’s Cornwall Hospital
0527 Mount Sinai South Nassau
0528 Nassau University Medical Center
0541 North Shore University Hospital
0192 Northern Dutchess Hospital
1117 Northern Westchester Hospital
1039 NY Presbyterian-Hudson Valley Hospital
1122 NYP Westchester
0511 NYU- Langone Hospital - Long Island
0938 Peconic Bay Medical Center
0552 Plainview Hospital
0924 South Shore University Hospital
0943 St. Catherine of Siena Medical Center
0563 St. Francis Hospital & Heart Center
1097 St. John's Riverside Hospital-St. John's Division
0551 St. Joseph Hospital
0889 Stony Brook Southampton Hospital
0245 University Hospital at Stony Brook
0181 Vassar Brothers Medical Center
1139 Westchester Medical Center
1045 White Plains Hospital

NY CITY AREA

1438 Bellevue Hospital Center
1178 BronxCare Health System-Concourse
1286 Brookdale University Hospital Medical Center
1288 Brooklyn Hospital Center-Downtown
1294 South Brooklyn Health
1626 Elmhurst Hospital Center
1309 Interfaith Medical Center
1165 Jacobi Medical Center

PFI Facility

NY CITY AREA (CONT.)

1629 Jamaica Hospital Medical Center
1301 King's County Hospital Center
1450 Lenox Hill Hospital
1630 Long Island Jewish Medical Center
1305 Maimonides Medical Center
1169 Montefiore Medical Center-Henry and Lucy Moses Division
3058 Montefiore Medical Center-Jack D. Weiler Hospital of
A. Einstein College Division
1439 Mount Sinai Beth Israel
1456 Mount Sinai Hospital
1469 Mount Sinai Morningside
1639 Mount Sinai Queens
1306 NYP Hospital - Brooklyn Methodist Hospital
1464 NYP Hospital-Columbia Presbyterian Center
1458 NYP Hospital-NY Weill Cornell Center
1637 NYP Hospital-Queens
1463 NYU Hospitals Center
1304 NYU Langone Hospital-Brooklyn
1738 Richmond University Medical Center
1176 St. Barnabas Hospital
1740 Staten Island University Hospital-North
1320 University Hospital at Downstate
1318 Wyckoff Heights Medical Center

8888 Catheterization Laboratory at a Veterans Administration Hospital in New York (For use in this reporting system; not an official Permanent Facility Identifier.)

9999 Catheterization Laboratory Outside New York State (For use in this reporting system; not an official Permanent Facility Identifier.)

A complete listing of NYS hospitals, including their PFI can be found at:

health.ny.gov/statistics/sparcs/reports/compliance/pfi_facilities.htm

Use the last four digits of the number in the PFI column PFI.

Attachment D Codes for Location of Lesion

Use the list and diagram below to find the code for location of lesion.

1. Prox RCA
2. Mid RCA
3. Dist RCA
4. R PDA
5. RPLS
6. 1st RPL
7. 2nd RPL
8. 3rd RPL
9. Inf. Septal
10. Ac Marg
11. LMCA
12. Prox LAD *
13. Mid LAD
14. Dist LAD
15. 1st Diag or Intermediate Branch
16. 2nd Diag
17. 1st Septal
18. Prox CX
19. Dist CX
20. 1st Ob Marginal
21. 2nd Ob Marginal
22. 3rd Ob Marginal
23. L A V
24. 1st LPL
25. 2nd LPL
26. 3rd LPL
27. LPDA

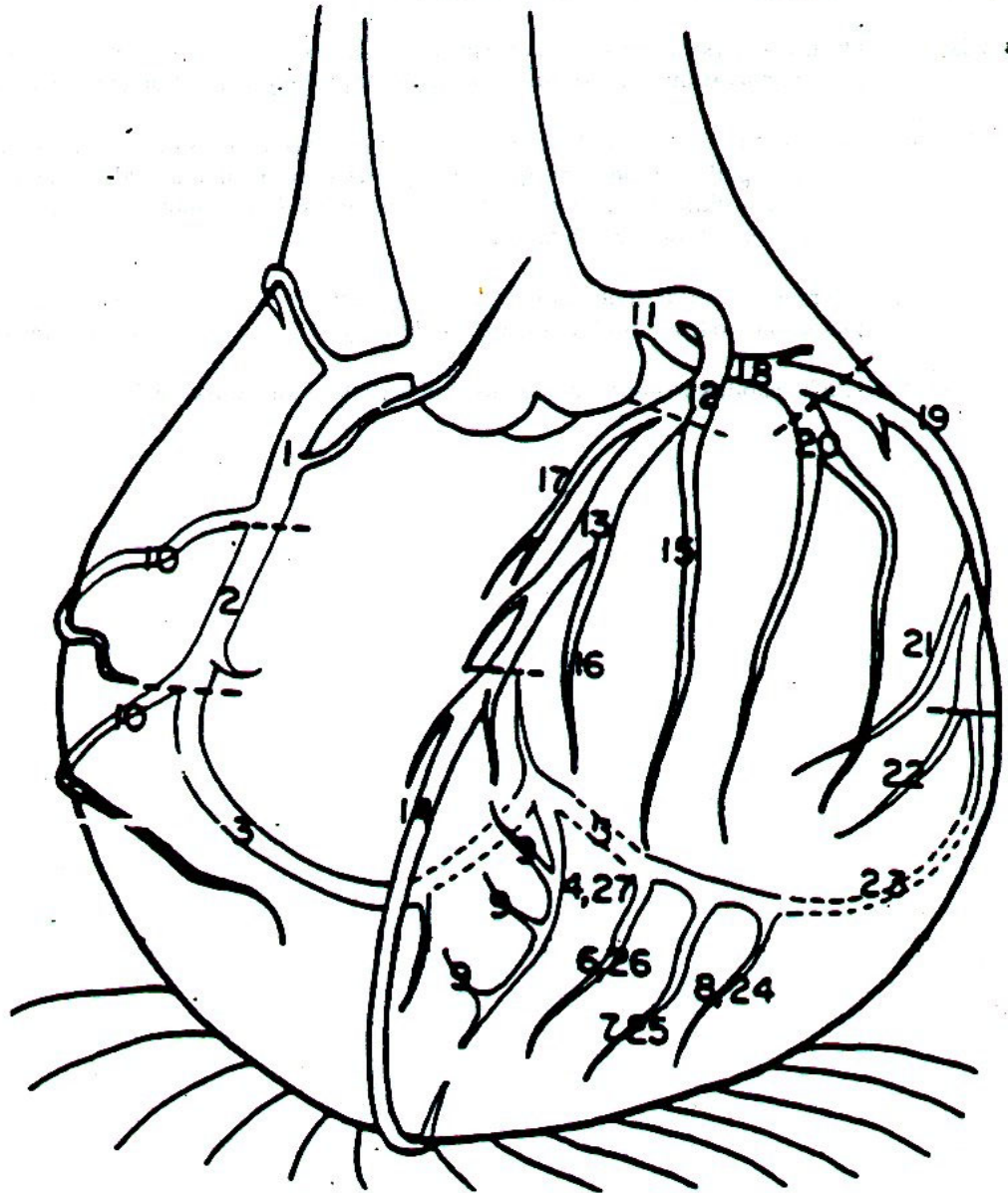
41. Vein Graft to LMCA
42. Artery Graft to LMCA

51. Vein Graft to LAD
52. Artery Graft to LAD

61. Vein Graft to LCX
62. Artery Graft to LCX

71. Vein Graft to RCA
72. Artery Graft to RCA

88. PTMR



* Code 12 refers to the region before the origin of the major septal artery.

Attachment E

2024

Device and Stent List

Use the following values to code procedures and/or devices used during the intervention.

Device Codes:

- 0 – Lesion Not Attempted or No Device Used
- 1 – Balloon
- 3 – Rotational Atherectomy
- 4 – Protective Devices (Including Filter Wires)
- 5 – Cutting Balloon
- 12 – Mechanical Thrombus Extraction
- 13 – Aspiration Thrombectomy
- 14 – Laser Atherectomy
- 15 – Orbital Atherectomy
- 16 – Coronary Lithotripsy
- 98 – Attempted PCI – No Device Used
- 99 – Other (Specify)

Stents:

- 00 No Stent Used
- 10 Bare Metal Stent
- 11 Covered Stent
- 20 Resolute (ZES)
- 30 Ion (PES)
- 40 Promus (EES)
- 41 Xience (EES)
- 42 Synergy (EES)
- 43 Absorb BVS (EES)
- 44 Orsiro (SES)
- 50 Elunir (RES)
- 60 Coroflex ISAR Neo (SES)
- 61 BioMime Lineage (SES)
- 88 Blinded Study Stent
- 99 Other Stent (Specify)