

# Voluntary PVI Discharge Data Dictionary

**Voluntary PVI Registry**  
**Data Collection Definitions**

*Definitions updated 2.1.2022*

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## Patient Information

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### Date of Admission

---

#### Data Abstraction Instructions:

Enter the date that the patient arrived to the hospital for the current stay. (mm/dd/yyyy).

##### Selections:

- Enter date

##### Supporting Definitions:

If the patient was admitted through the emergency room, use the date they arrived at the ER as the admission date.

##### Required:

Yes

---

### Date of Discharge

---

#### Data Abstraction Instructions:

Enter the date the patient was discharged from the hospital for the current hospitalization (mm/dd/yyyy).

##### Selections:

- Enter date

##### Supporting Definitions:

If the patient died in the hospital, the hospital discharge date is the date of death. If the patient was transferred to a rehab facility, then the discharge date is the date they were transferred to the rehab facility.

##### Required:

Yes

---

### Discharge Status

---

#### Data Abstraction Instructions:

Indicate the location to which the patient was discharged.

##### Selections:

- Home
- Rehabilitation
- Other acute care hospital
- Nursing home
- Hospice/Comfort care
- Left against medical advice: whereby the patient was discharged or eloped against medical advice.
- Death
- Assisted Living
- Other

##### Supporting Definitions:

Choose the location that the patient was discharged to post hospitalization.

##### Required:

Yes

---

### Case Number

---

#### Data Abstraction Instructions:

Enter a unique number to identify this case.

**Selections:**

- Enter case number

**Supporting Definitions:**

This is an optional data entry field to track patients at your facility if you choose to use it. As an example, you could use the lab log number or another identifying number to identify each individual case. Do not use patient social security number or medical record number.

**Required:**

No

**Maximum Length:**

25

---

## Study Number

---

**Data Abstraction Instructions:**

Enter Study Number assigned by your facility

**Selections:**

- Enter Study number

**Supporting Definitions:**

If patient is entered into a research study at your facility, enter study number. This is an optional data entry field to track your study patients if you choose.

**Required:**

No

**Maximum Length:**

25

---

## Date of Birth

---

**Data Abstraction Instructions:**

Enter month, day, and 4-digit year of patient's birth (mm/dd/yyyy)

**Selections:**

- Enter date

**Required:**

Yes

---

## Gender

---

**Data Abstraction Instructions:**

Indicate the patient's gender at birth.

**Selections:**

- Female
- Male

**Required:**

Yes

---

## Zip Code

---

**Data Abstraction Instructions:**

Enter zip code of patient's primary address.

**Selections:**

- ♦ Enter five-digit value

**Supporting Definitions:**

If the patient does not live within the United States or is homeless, leave it blank.

**Required:**

No

**Maximum:**

99999

**Maximum Length:**

5

---

## Height

---

**Data Abstraction Instructions:**

Enter actual or estimated height in centimeters. Enter the height that is closest to the procedure time.

Height in cm = Height in inches X 2.54

**Selections:**

- ♦ Enter value in cm

**Supporting Definitions:**

If the patient has had bilateral amputations, please enter height prior to amputation.

**Required:**

Yes

**Suffix:**

cm

**Minimum:**

100

**Maximum:**

250

---

## Weight

---

**Data Abstraction Instructions:**

Enter actual or estimated weight in kilograms. Enter the weight that is closest to the procedure time.

**Selections:**

- ♦ Enter value in kg

**Supporting Definitions:**

Weight in kgs = Weight in lbs ÷ 2.2. The weight closest to procedure time is the weight that is used to calculate the medications that are given during the procedure.

**Required:**

Yes

**Suffix:**

kg

**Maximum:**

300

---

## Pre Admission Living Location

---

**Data Abstraction Instructions:**

Indicate the last living status prior to any current, acute hospitalization or rehabilitation stay.

**Selections:**

- Home
- Rehabilitation
- Nursing home/Extended Care
- Assisted Living
- Other

**Required:**

Yes

---

**Race**

---

**Data Abstraction Instructions:**

Select the appropriate race.

**Selections:**

- White (Caucasian): Having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- Black or African American: Having origins of the black racial groups of Africa. Terms such as "Black or African American" may be used.
- Asian: Having origins of the origin 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.
- American Indian or Alaskan Native: Having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
- Native Hawaiian or Pacific Islander: Having origins in any of the original peoples of Hawaii, Guam, Samoa or other Pacific Islands.
- Other: Another race other than those listed, or if unknown.

**Required:**

Yes

---

**Ethnicity**

---

**Data Abstraction Instructions:**

Select if the patient is of Hispanic or Latino ethnicity

**Selections:**

- Hispanic: A person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race. The term "Spanish origin" can be used in addition to "Hispanic or Latino".
- Non-Hispanic: A person of a non-Spanish culture.
- Not documented

**Required:**

Yes

---

## Patient History

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### Ambulation Pre-Procedure

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#### Data Abstraction Instructions:

---

Indicate the best ambulation category experienced within one month of admission.

#### Selections:

- Ambulatory
- Ambulates with assistance
- Wheelchair
- Bedridden
- Not documented

#### Supporting Definitions:

Indicate the best functional level if in between categories. Choose Not documented if unavailable.

Example: Patient uses wheelchair but is able to move around the house with the assistance of a walker - code "Ambulatory with assistance"

#### Required:

Yes

---

### Ever Smoked

---

#### Data Abstraction Instructions:

Indicate if the patient has ever smoked.

#### Selections:

- Yes
- No

#### Supporting Definitions:

Answer yes if the patient has ever smoked at any point in their life.

#### Required:

No

---

### Current Smoker

---

#### Data Abstraction Instructions:

Select if patient is currently a smoker. Indicate if the patient has smoked cigars, cigarettes, chew (tobacco), pipe (tobacco), marijuana, or used a smokeless device to inhale nicotine (vaping, e-cigarettes) any time during the past one month arrival at your facility.

#### Selections:

- Yes
  - Cigar
  - Cigarettes
  - Chew (tobacco)
  - Pipe (tobacco)
  - Marijuana
  - Smokeless (vaping, e-cigarettes)

- No

#### Required:

Yes

---

## Former Smoker

---

### Data Abstraction Instructions:

Select if patient has stopped smoking cigars, cigarettes, chew (tobacco), pipe (tobacco), or marijuana, or stopped using a smokeless device to inhale nicotine (vaping, e-cigarettes) for one month or more prior to this admission. If patient has stopped smoking cigarettes for 1 month or more before this admission.

### Selections:

- Yes
  - Cigar
  - Cigarettes
  - Chew (tobacco)
  - Pipe (tobacco)
  - Marijuana
  - Smokeless (vaping, e-cigarettes)
- No

### Required:

Yes

---

## Family History of Premature Coronary Artery Disease

---

### Data Abstraction Instructions:

Indicate if the patient has/had any direct blood relatives (parents, siblings, children) who have had any of the following diagnosed at age less than 55 years for male relatives or less than 65 years for female relatives: Angina, Acute Myocardial Infarction, Sudden cardiac death without obvious cause, Previous CABG surgery, Previous Percutaneous Coronary Intervention.

### Selections:

- Yes
- No

### Supporting Definitions:

If the patient is adopted or the family history is unavailable, select No

### Required:

Yes

---

## Hyperlipidemia

---

### Data Abstraction Instructions:

Indicate if the patient has a history of hyperlipidemia diagnosed and/or treated by a physician. If the patient is diagnosed within 24 hours of the admission, select "yes".

### Selections:

- Yes
- No

### Supporting Definitions:

For patients with known coronary artery disease, treatment is initiated if LDL is greater than 100mg/dl, this would qualify as hypercholesterolemia.

### Criteria also includes documentation of the following:

- Total cholesterol greater than 200mg/dl (5.18mmol/l) or
- Low density lipoprotein (LDL) greater than or equal to 130 mg/dl (3.37mmol/l) or
- High Density Lipoprotein (HDL) less than 40 mg/dl (1.04mmol/l)
- Currently on lipid lowering pharmacologic therapy

### Required:

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Yes

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## Hypertension

---

### Data Abstraction Instructions:

Indicate if the patient has a history of hypertension diagnosed and/or treated by a physician. If the patient is diagnosed within 24 hours of the admission, select "yes".

### Selections:

- Yes
- No

### Supporting Definitions:

Patient qualifies with:

- History of hypertension diagnosed and treated with medication, diet and/or exercise.
- Documentation of blood pressure greater than 140 mm Hg systolic or 90 mm Hg diastolic for patients without documented diabetes or chronic kidney disease.
- Documentation of blood pressure greater than 130 mm Hg systolic and/or 80mm Hg diastolic on at least two occasions for patients with diabetes or chronic kidney disease.
- Currently on antihypertensive pharmacologic therapy for the treatment of hypertension.

### Required:

Yes

---

## Diabetes Mellitus

---

### Data Abstraction Instructions:

Indicate if the patient has a history of diabetes mellitus regardless of duration of disease or need for anti-diabetic agents. This includes any occurrence between birth and arrival at this facility.

### Selections:

- Yes
- No

### Supporting Definitions:

Diabetes mellitus is diagnosed by a physician or can be defined as a fasting blood sugar greater than 7 mmol/l or 126 mg/dL or a hemoglobin A1C value greater than or equal to 6.5%. It does not include gestational diabetes.

### Required:

Yes

---

## Diabetes Therapy

---

### Data Abstraction Instructions:

Indicate the most aggressive therapy at patient admission.

### Selections:

- None – No treatment for diabetes
- Diet – Diet management only
- Oral – Oral agent treatment (includes oral agent with/without diet management)
- Insulin – Insulin treatment (includes any combination with insulin)
- Other – Other adjunctive treatment, non-oral/insulin/diet

### Supporting Definitions:

Patients placed on a pre-procedure diabetic pathway of insulin drip after arrival, but were not on insulin therapy (treated by diet or oral method) are not coded as insulin treatment. If patient has pancreatic transplant, code "other" since the insulin from the new pancreas is not exogenous insulin.

### Required:

Yes

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## Hb A1C

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### Data Abstraction Instructions:

Record the Hb A1C closest to the procedure. This value can be taken within four months prior to procedure or during the hospitalization.

### Selections:

- Yes
  - Enter value
- Not documented

### Supporting Definitions:

HbA1C is a blood test to determine how well diabetes is being controlled. This reflects the last several weeks of blood sugar levels typically about 120 days.

### Required:

Yes

### Minimum:

0

### Maximum:

20

---

## Prior Congestive Heart Failure (CHF)

---

### Data Abstraction Instructions:

Indicate if there is a previous history of heart failure/ischemic cardiomyopathy.

### Selections:

- Yes
- No

### Supporting Definitions:

A previous hospital admission with principal diagnosis of heart failure is considered evidence of heart failure history. Heart failure is defined as physician documentation or report of any of the following clinical symptoms of heart failure described as unusual dyspnea on light exertion, recurrent dyspnea occurring in the supine position, fluid retention; or the description of rales, jugular venous distension, pulmonary edema on physical exam, or pulmonary edema on chest X-ray. A low ejection fraction alone, without clinical evidence of heart failure, does not qualify as heart failure.

### Required:

Yes

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## Ejection Fraction (EF)

---

### Data Abstraction Instructions:

Indicate whether the patient had Ejection Fraction assessed before or during the visit via invasive (i.e. LV gram) or non-invasive testing (i.e. ECHO). If yes, enter a percentage in the range of 01 – 99. If EF was estimated as a range, then take the lowest value.

Use most recent EF value within last 12 months. If the patient has an EF documented post procedure (within the hospitalization), it may be entered, provided the patient has not experienced any form of cardiac event.

### Selections:

- Documented
  - Enter value
- Not Documented

### Supporting Definitions:

The percentage of the blood emptied from the ventricle at the end of the contraction.

### Required:

Yes

**Suffix:**

%

**Minimum:**

1

**Maximum:**

99

---

## Significant Valve Disease

---

### Data Abstraction Instructions:

Indicate whether the patient has had a previous surgical replacement and/or repair of a cardiac valve by any approach prior to arrival at this facility. This includes percutaneous valve procedures and valvuloplasty. Also indicate if patient has mitral valve regurgitation of at least grade 2 or greater, mitral valve area  $< 1.5 \text{ cm}^2$ , aortic valve regurgitation of at least grade 2 or greater, or aortic valve area  $\leq 1.0 \text{ cm}^2$ .

### Selections:

- Yes
- No

### Supporting Definitions:

This may include physician documentation of moderate or severe valve disease.

**Required:**

Yes

---

## Chronic Lung Disease (COPD)

---

### Data Abstraction Instructions:

Indicate if there is a previous history of Chronic Lung Disease.

### Selections:

- Yes
- No

### Supporting Definitions:

Chronic lung disease can include patients with chronic obstructive pulmonary disease, chronic bronchitis or emphysema. It can also include a patient who is being chronically treated with inhaled or oral pharmacological therapy (e.g. beta-adrenergic agonists, anti-inflammatory agents, leukotriene receptor antagonist, or steroid) Patients with asthma or seasonal allergies are not considered to have chronic lung disease (however they may fit in this definition if they are diagnosed with asthma and are chronically treated with the above approved medications).

**Required:**

Yes

---

## Cerebrovascular Disease (CVD) or Transient Ischemic Attack (TIA)

---

### Data Abstraction Instructions:

Indicate if the patient has a history of cerebrovascular disease.

### Selections:

- Yes
- No

### Supporting Definitions:

- Cerebrovascular Accident (CVA): Patient has a history of stroke, i.e., loss of neurological function with residual symptoms at least 24 hours after onset presumed to be from vascular etiology.
- Transient Ischemic Attack (TIA): Patient has a history of loss of neurological function that was abrupt in onset but with complete return of function within 24 hours presumed to be from vascular etiology.
- Non-invasive/invasive carotid test with greater than 79% occlusion.

- Previous carotid artery surgery (CEA) or intervention for carotid stenosis..

Note: This does not include neurological disease processes such as metabolic and/or anoxic ischemic encephalopathy.

**Required:**

Yes

---

## History of Coronary Artery Disease (CAD)

---

### Data Abstraction Instructions:

Indicate if the patient has a history of Coronary Artery Disease.

### Selections:

- Yes
- No

### Supporting Definitions:

These include a history of:

- Angina: stable: (history of angina controlled by medications)
- Angina: unstable: (history of admissions for unstable angina symptoms)
- Percutaneous coronary intervention (PCI) (balloon or stent placement)
- History of MI
- History of CABG

**Required:**

Yes

---

## Prior Percutaneous Coronary Intervention (PCI)

---

### Data Abstraction Instructions:

Indicate if the patient has a previous percutaneous coronary intervention. This includes any occurrence between birth and the current procedure.

### Selections:

- Yes
  - PCI less than, or equal to, 30 days prior to procedure
  - PCI greater than 30 days to 6 months prior to procedure
  - PCI greater than 6 months prior to procedure
  - Not documented
- No

### Supporting Definitions:

This includes PCI performed after admission, but prior to the current procedure.

**Required:**

Yes

---

## Previous Myocardial Infarction (MI)

---

### Data Abstraction Instructions:

Indicate if the patient has had at least one documented previous myocardial infarction. This includes any occurrence between birth and the current procedure.

### Selections:

- Yes
  - MI less than, or equal to, 30 days prior to procedure
  - MI greater than 30 days to 6 months prior to procedure
  - MI greater than 6 months prior to procedure
  - Not documented
- No

**Supporting Definitions:**

This includes MI diagnosed upon/after admission, but prior to the current procedure.

**A myocardial infarction is evidenced by any of the following:**

1. A rise and fall of cardiac biomarkers (preferably troponin) with at least one of the values in the abnormal range for that laboratory [typically above the 99<sup>th</sup> percentile of the upper reference limit (URL) for normal subjects] together with at least one of the following manifestations of myocardial ischemia:
  - o Ischemic symptoms
  - o ECG changes indicative of new ischemia (new ST-T changes, new left bundle branch block, or loss of R wave voltage).
  - o Development of pathological Q waves in 2 or more contiguous leads in the ECG (or equivalent finding for true posterior MI).
  - o Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality.
  - o Documentation in the medical record of the diagnosis of acute myocardial infarction based on the cardiac biomarker pattern in the absence of any items enumerated in a-d due to conditions that may mask their appearance (e.g., peri-operative infarct when the patient cannot report ischemic symptoms; baseline left bundle branch block or ventricular pacing).
2. ECG changes associated with prior myocardial infarction can include the following (with or without prior symptoms):
  - o Any Q wave in leads V2-V3  $\geq$  0.02 seconds or QS complex in leads V2 and V3.
  - o Q-wave  $\geq$  0.03 seconds and  $\geq$  0.1 mV deep or QS complex in leads I, II, aVL, aVF, or V4-V6 in any two leads of a contiguous lead grouping (I, aVL, V6; V4-V6; I, III, and aVF).
  - o R-wave  $\geq$  0.04 seconds in V1-V2 and R/S  $\geq$  1 with a concordant positive T-wave in the absence of a conduction defect.
3. Imaging evidence of a region with new loss of viable myocardium at rest in the absence of a non-ischemic cause. This can manifest as:
  - o Echocardiographic, CT, MR, ventriculographic or nuclear imaging evidence of left ventricular thinning or scarring and a failure to contract appropriately (i.e., hypokinesis, akinesis, or dyskinesis).
  - o Fixed (non-reversible) perfusion defects on nuclear radioisotope imaging (e.g., MIBI, thallium).
  - o Medical records documentation of prior myocardial infarction.

**Source:**

Joint EXC-ACC-AHA=WHF 2007 Task Force consensus document "Universal Definition of Myocardial Infarction".

**Required:**

Yes

---

**Prior Coronary Artery Bypass Graft (CABG)**

---

**Data Abstraction Instructions:**

Indicate if the patient has had a coronary artery bypass surgery at any time prior to the current procedure.

**Selections:**

- Yes
  - o CABG less than, or equal to, 30 days prior to procedure
  - o CABG greater than 30 days to 6 months prior to procedure
  - o CABG greater than 6 months prior to procedure
  - o Not documented
- No

**Supporting Definitions:**

This includes CABG performed after admission but prior to the current procedure.

**Required:**

Yes

---

**Current/Recent GI Bleed**

---

**Data Abstraction Instructions:**

Indicate "yes" if any occurrence of melena or hematemesis in last 30 days or any history of GI bleed including peptic ulcer disease that may influence clinical management during this hospitalization.

**Selections:**

- Yes
- No

**Required:**  
Yes

---

## Atrial Fibrillation (AF)

---

**Data Abstraction Instructions:**

History of either paroxysmal atrial fibrillation or chronic atrial fibrillation prior to the VS intervention.

**Selections:**

- Yes
- No

**Supporting Definitions:**

This includes any prior history, even if the patient is not currently in that rhythm.

**Required:**  
Yes

---

## Renal Failure Currently Requiring Dialysis

---

**Data Abstraction Instructions:**

Indicate if the patient is currently undergoing either hemodialysis or peritoneal dialysis on an ongoing basis as a result of renal failure. For patients currently undergoing CVVH (Continuous Veno – Venous Hemofiltration) as a result of renal failure (and not as a treatment to remove fluid for heart failure) then select "Yes".

**Selections:**

- Yes
- No

**Required:**  
Yes

---

## Renal Transplant

---

**Data Abstraction Instructions:**

Indicate if the patient had a history of a renal transplant.

**Selections:**

- Yes
- No

**Supporting Definitions:**

Include transplants that have failed.

**Required:**  
Yes

---

## HDL Cholesterol

---

**Data Abstraction Instructions:**

Record HDL level.

**Selections:**

- Drawn
  - Enter value
- Not Drawn

**Supporting Definitions:**

Can be collected within 6 months prior to intervention (provided stable statin dose) or anytime during the hospitalization. If multiple values are available, select the values closest to the procedure.

**Required:**

Yes

**Suffix:**

mg/dl

---

## LDL Cholesterol

---

**Data Abstraction Instructions:**

Record LDL level.

**Selections:**

- Drawn
  - Enter value
- Not Drawn
- Not Calculated

**Supporting Definitions:**

Can be collected within 6 months prior to intervention (provided stable statin dose) or anytime during the hospitalization. If multiple values are available, select the values closest to the procedure.

**Required:**

Yes

**Suffix:**

mg/dl

---

## Total Cholesterol

---

**Data Abstraction Instructions:**

Record total cholesterol.

**Selections:**

- Drawn
  - Enter value
- Not Drawn

**Supporting Definitions:**

Can be collected within 6 months prior to intervention (provided stable statin dose) or anytime during the hospitalization. If multiple values are available, select the values closest to the procedure.

**Required:**

Yes

**Suffix:**

mg/dl

---

## Prior Procedures

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### Prior PVI

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#### Procedure Date

---

**Data Abstraction Instructions:**

Indicate if the patient has undergone a prior vascular interventional procedure, enter procedure date, if known (mm/dd/yyyy). If only year is known, enter one for month and day (01/01/yyyy).

**Selections:**

- Enter date if known

**Required:**

No

---

### Artery Location

---

**Data Abstraction Instructions:**

Identify the artery treated during single procedure.

**Selections:**

- Choose location

**Required:**

Yes

---

### PTA (percutaneous transluminal angioplasty)

---

**Data Abstraction Instructions:**

Indicate if balloon device was used during previous vascular intervention.

**Selections:**

- Yes
- No

**Required:**

Yes

---

### Stent

---

**Data Abstraction Instructions:**

Indicate if any type of stent was used during previous vascular intervention.

**Selections:**

- Yes
- No

**Required:**

Yes

---

### Atherectomy

---

**Data Abstraction Instructions:**

Indicate if atherectomy device was used during previous vascular intervention. (e.g. laser, rotational/orbital, directional, other atherectomy).

**Selections:**

- Yes
- No

**Required:**

Yes

---

## Thrombolysis

---

**Data Abstraction Instructions:**

Indicate if patient underwent local or systemic thrombolysis for arterial occlusion/thrombosis.

**Selections:**

- Yes
- No

**Required:**

Yes

---

## Other Peripheral Intervention

---

**Data Abstraction Instructions:**

Indicate if device other than balloon, stent or atherectomy was previously used (cryoplasty, cutting balloon, etc.).

**Selections:**

- Yes
- No

**Required:**

Yes

---

## Prior Vascular Surgery

---

---

### Bypass

---

**Data Abstraction Instructions:**

Indicate if the patient has had a prior bypass.

**Selections:**

- Yes
- No

**Required:**

No

---

### Bypass Date

---

**Data Abstraction Instructions:**

Specify the procedure date (mm/dd/yyyy). If only year is known, enter one for month and day (01/01/yyyy).

**Selections:**

- Enter date

**Required:**

No

---

### Bypass Origin

---

---

**Data Abstraction Instructions:**

Select origin point of bypass using the vessel artery map.

**Selections:**

- Choose Origin

**Supporting Definitions:**

Example: If the patient has a fem-pop bypass: the origin of the bypass is the common femoral artery and the insertion of the bypass is the popliteal artery.

**Required:**

Yes

---

**Insertion Point**

---

**Data Abstraction Instructions:**

Select insertion point of bypass using the vessel artery map.

**Selections:**

- Choose Insertion Point

**Supporting Definitions:**

Example: If the patient has a fem-pop bypass: the origin of the bypass is the common femoral artery and the insertion of the bypass is the popliteal artery.

**Required:**

Yes

---

**Type of Graft**

---

**Data Abstraction Instructions:**

Select the type of graft used in the procedure.

**Selections:**

- Vein
- Synthetic
- Not documented

**Required:**

Yes

---

**Endarterectomy**

---

**Data Abstraction Instructions:**

Indicate if the patient has had a prior open endarterectomy.

**Selections:**

- Yes
- No

**Required:**

Yes

---

**Endarterectomy Date**

---

**Data Abstraction Instructions:**

Specify the procedure date (mm/dd/yyyy). If only years is known, enter one for month and day (01/01/yyyy).

**Selections:**

- ♦ Enter date

**Required:**

No

---

## Endarterectomy Location

---

**Data Abstraction Instructions:**

If the patient underwent open surgical endarterectomy or patch angioplasty, and identify the vessel treated.

**Selections:**

- ♦ Choose location

**Required:**

Yes

---

## Aneurysm Repair

---

**Data Abstraction Instructions:**

Indicate if the patient has had a prior open aneurysm repair.

**Selections:**

- ♦ Yes
- ♦ No

**Required:**

Yes

---

## Aneurysm Repair Date

---

**Data Abstraction Instructions:**

Specify the procedure date (mm/dd/yyyy). If only year is known, enter one for month and day (01/01/yyyy).

**Selections:**

- ♦ Enter date

**Required:**

No

---

## Aneurysm Repair Location

---

**Data Abstraction Instructions:**

Identify the aneurysm repair location.

**Selections:**

- ♦ Choose location

**Required:**

Yes

---

## Amputation

---

**Data Abstraction Instructions:**

Indicate if the patient has had a prior amputation.

**Selections:**

- Yes
- No

**Required:**

Yes

---

## Amputation Date

---

**Data Abstraction Instructions:**

If the patient had amputation, specify date (mm/dd/yyyy). Document the most recent amputation date. If only year is known, enter one for month and day (01/01/yyyy).

**Selections:**

- Enter date

**Required:**

No

---

## Amputation Point

---

**Data Abstraction Instructions:**

Select most proximal amputation point for each leg.

**Selections:**

**Supporting Definitions:**

- RAKA = right above the knee amputation;
- LAKA = left above the knee amputation;
- RBKA = right below the knee amputation;
- LBKA = left below the knee amputation;
- R T-MET = right trans-metatarsal;
- L T-MET = left trans-metatarsal;
- R DIGIT = right digit;
- L DIGIT = left digit.

**Required:**

Yes

---

## Labs at Discharge

---

### Discharge Creatinine

---

#### Data Abstraction Instructions:

Post procedure creatinine recorded closest to the time of discharge. For extended hospitalizations, greater than 30 days, use the last creatinine prior to day 30 after the procedure.

#### Selections:

- Drawn
  - Enter value
- Not Drawn

#### Supporting Definitions:

If a creatinine is not drawn post procedure, before discharge, then enter not drawn. If only one creatinine is drawn post procedure, before discharge, then that value would be used as the discharge creatinine **and** the post procedure peak creatinine value.

#### Required:

Yes

#### Suffix:

mg/dl

#### Minimum:

0.1

#### Maximum:

15

#### Soft Minimum:

0.3

---

### Post Discharge Creatinine

---

#### Data Abstraction Instructions:

Record the highest Creatinine drawn within 3-5 days after discharge. If no labs are available in that timeframe, enter not drawn.

#### Selections:

- Drawn
  - Enter value
- Not Drawn

#### Required:

Yes

#### Minimum:

0.1

#### Maximum:

15

#### Soft Minimum:

0.3

---

### Discharge Hemoglobin (Hgb)

---

#### Data Abstraction Instructions:

Post procedure hemoglobin recorded closest to the time of discharge.

#### Selections:

- Drawn
  - Enter value
- Not Drawn

**Supporting Definitions:**

If a hemoglobin was not drawn post procedure, before discharge, then enter not drawn. If only one value is available post procedure, before discharge, use that value for post procedure nadir hemoglobin **and** discharge hemoglobin.

**Required:**

Yes

**Suffix:**

g/dl

**Minimum:**

2

**Maximum:**

20

**Soft Minimum:**

5

**Soft Maximum:**

18

---

# Discharge

---

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## Smoking Cessation Counseling

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### Data Abstraction Instructions:

Indicate if the patient received physician delivered advice, a prescription for nicotine replacement, and/or a referral for smoking cessation services submitted on the patient's behalf. Select all that apply.

### Selections:

- Yes
  - Physician delivered advice
    - Patient refused
  - Nicotine replacement therapy (NRT)
    - Patient refused
  - Referral to smoking counseling services
    - Patient refused
    - Local counseling service
    - Michigan Quitline
    - Other counseling service
- No

### Supporting Definitions:

**Yes** = Enter Yes for Smoking Cessation at Discharge if Yes was entered for Current Smoker under Patient History / Comorbidity, and at least one of the 3 steps were implemented during the hospitalization or at discharge.

**Physician delivered advice** = A surgeon, advanced practice personnel (PA, NP), or resident has a conversation with the patient and recommends that the patient stops smoking. A recommendation to stop smoking offered by a nurse, respiratory therapist, or student does not count as physician delivered advice.

If the physician recommended smoking cessation, and the patient refused, enter Physician Delivered Advice AND Patient refused. There must be adequate documentation to support this claim.

**Nicotine replacement therapy (NRT)** = The provider ordered or continued NRT at discharge. NRT may include a nicotine patch, gum, lozenge, or other pharmacologic assistance (Varenicline or Bupropion).

If a patient refuses NRT, and there is provider documentation that NRT was offered and documentation that the patient refused, enter NRT AND Patient refused.

**Referral to smoking counseling services** = The provider documents during the hospital admission or at discharge that they referred the patient to a smoking counseling service. Smoking counseling services may include a hospital specialist, a smoking cessation class, the Michigan Tobacco Quitline, or a national smoking cessation service. The provider must recommend a smoking counseling service to the patient. The standard message to stop smoking on the AVS or discharge summary template is not sufficient.

If a physician, mid-level provider, or resident does an assessment and then puts in a referral to a respiratory therapist or a dedicated smoking cessation nurse to provide smoking cessation education, you can choose Referral to smoking counseling services.

If there is documentation that the provider recommended smoking counseling services and the patient refused, enter Referral to smoking counseling services, AND Patient refused. There must be adequate documentation to support this claim.

If the referral to smoking counseling services was submitted to the Michigan Tobacco Quitline, enter Referral to smoking counseling

services AND Michigan Quitline.

**Patient Refused** = The provider documented that the patient refused the corresponding intervention.

**Local counseling service** = The provider refers the patient to the hospital's smoking counseling service or a community-based smoking counseling service. Enter Referral to smoking counseling services AND Local counseling service.

**Michigan Quitline** = The provider refers the patient to the Michigan Tobacco Quitline. Enter Referral to smoking counseling services AND Referral to Michigan Quitline.

**Other counseling service** = The provider refers the patient to a Federal or National smoking cessation service. Enter Referral to smoking counseling services AND Other counseling service.

**No** = Enter No for Smoking Cessation at Discharge if No was entered for Ever Smoked or Current Smoker under Patient History / Comorbidity. Enter No if the patient is a current smoker; however, none of the three steps were implemented during the hospitalization or at discharge.

**Required:**

Yes

---

## Exercise counseling

---

### Data Abstraction Instructions:

Indicate if the patient received exercise counseling/education.

### Selections:

- Yes
- No

### Supporting Definitions:

Verbal, written, and/or formal instruction qualifies for exercise counseling. This should include reference to a walking program or exercise plan, and does not include activity restrictions post procedure.

**Required:**

Yes

---

## Opioid Education

---

### Data Abstraction Instructions:

Indicate if the patient received pain management instructions and/or education on the correct use of opioid medication for this procedure. This education may have been provided pre or post procedure and may include alternative pain management modalities, correct use of opioid medications, and expectations surrounding pain level. An actual note referencing the education needs to be in the patient record. The note can be written by a physician, advanced practice provider or nurse. Pre-populated discharge template instructions do not qualify.

### Selections:

- Yes
- No

### Supporting Definitions:

We need to see documentation of an actual conversation between the provider and the patient. This is the reason pre-populated discharge template instruction does not qualify as documentation of opioid education.

if your providers write a note stating that opioid education was provided to the patient by using the "Opioid Start Talking" form, you can enter Yes for Opioid Education. This form must be visible to the auditors during the chart review portion of your site visit. For more

**Required:**  
Yes

---

## Michigan OPEN

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### Pre-operative opioid use

---

**Data Abstraction Instructions:**

Indicate if the patient was taking a prescribed opioid in the 30 days prior to admission.

If so, indicate the type of opioid as well as the dose/unit.

**Selections:**

- Yes
- No

**Supporting Definitions:**

This includes any opioids taken in the last 30 days.

**Required:**  
Yes

---

### Type of opioid

---

**Data Abstraction Instructions:**

Indicate the type of opioid that was prescribed in the 30 days prior to admission.

**Selections:**

- Hydrocodone(Norco, Vicodin, Lortab, Lorcet)
- Oxycodone (OxyContin, Percocet, Roxicodone)
- Codeine (Tylenol 2, 3, or 4)
- Tramadol (Ultram, Ultram ER)
- Other (Fentanyl, Morphine, Hydromorphone, Dilaudid, Methadone, etc.)

**Required:**  
Yes

---

### Pre-operative opioid dose

---

**Data Abstraction Instructions:**

Indicate the dose of the opioid that was prescribed in the 30 days prior to admission.

If no dose is available, choose "not documented"

**Selections:**

- Yes
  - Enter dose
- Not Documented

**Required:**  
Yes

---

### Pre-operative opioid dose (unit)

---

**Data Abstraction Instructions:**

Indicate the units for the dose of opioid that was prescribed in the 30 days prior to admission.

**Selections:**

- mg
- ml
- mcg/hr
- mg/ml
- mcg/ml
- other

**Required:**

Yes

---

**Discharged with opioid**

---

**Data Abstraction Instructions:**

Indicate if the patient was discharged with any opioid medication (either a new prescription or continuation of a pre procedure medication).

If so, indicate the type of opioid as well as the dose/unit and how many refills are available.

**Selections:**

- Yes
- No

**Required:**

No

---

**Type of opioid**

---

**Data Abstraction Instructions:**

Indicate the type of opioid prescribed.

**Selections:**

- Hydrocodone (Norco, Vicodin, Lortab, Lorcet)
- Oxycodone (OxyContin, Percocet, Roxicodone)
- Codeine (Tylenol 2, 3, or 4)
- Tramadol (Ultram, Ultram ER)
- Other (Fentanyl, Morphine, Hydromorphone, Dilaudid, Methadone, etc.)

**Required:**

Yes

---

**Opioid dose prescribed**

---

**Data Abstraction Instructions:**

Indicate the dose of the prescribed opioid.

**Selections:**

Enter value

**Supporting Definitions:****Supporting Definitions:**

If a dose range was written for the prescribed opioid (example: Oxycodone 5-10mg) enter the lower dose.

**Required:**  
Yes

---

### Opioid dose prescribed (unit)

---

**Data Abstraction Instructions:**

Indicate the units for the dose of opioid prescribed.

**Selections:**

- mg
- ml
- mcg/hr
- mg/ml
- mcg/ml
- other

**Required:**  
Yes

---

### Opioid quantity prescribed

---

**Data Abstraction Instructions:**

Enter the number of pills/tablets/doses of the opioid prescribed.

**Selections:**

- Yes
  - Enter value
- Not Documented

**Required:**  
Yes

---

### Opioid refills available

---

**Data Abstraction Instructions:**

Indicate if the opioid prescription at discharge has available refills.

**Selections:**

- Yes
- No
- Not Documented

**Required:**  
No

---

### Opioid number of refills

---

**Data Abstraction Instructions:**

Indicate the number of opioid refills available.

**Selections:**

Enter value

