



(Version 2)

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Entry Criteria

All patients hospitalized at your facility with a confirmed diagnosis of COVID-19 by an RT-PCR test either prior to or during the hospitalization, a positive IgM antibody test, or a clinical diagnosis using hospital specific criteria

Included:

- All patients ≥ 18 years old who are hospitalized with an active COVID-19 infection (e.g. ICD-10-CM code U07.1 among discharge diagnosis).
- The infection should be confirmed with an RT-PCR test either prior to or during the hospitalization, a positive IgM antibody test, or a clinical diagnosis using hospital specific criteria. Active infection encompasses:
 - Patients who are diagnosed prior to hospitalization, but still symptomatic during the hospitalization
 - Patients with a positive test or diagnosis during hospital admission
 - Patients who are symptomatic during the hospitalization and have a confirmed test available only after hospital discharge
 - Patients with a diagnosis, with or without COVID-related symptoms

Exclude:

- Patients < 18 years of age.
- Patients who do not have a COVID-19 diagnosis
- Patients with prior COVID-19 diagnosis, but without active infection as determined by COVID-19 related symptoms. This may include pts with positive IgG antibody tests without positive IgM antibody test.

General Notation

- ND = Not Documented. Select ND when there is no documentation in the medical record to explain why a treatment or intervention is not performed.
- NC = None-Contraindicated. Select NC when a reason for non-treatment was documented in the medical record (e.g. not indicated, contraindicated, patient/family refused).
- UTD = Unable to determine.

Abstraction Guidelines

- Do not enter any personal health information/protected health information (PHI) in any free text "Comments" fields or Custom elements
- Make use of the Suggested Sources for Abstraction as a guide to help find medical documentation for each data element. Only abstract data which is clearly documented in the medical records.
- When there is a discrepancy in documentation status or a patient's specific variable, refer to the source of medical higher authority relevant to that variable.
- Date Precisions: Date and Time fields have an additional "Precision" drop-down right above the MM/DD/YYYY HH:MM blanks. The Precision is used to indicate how much of the Date and Time data is known and can be abstracted. For most of the COVID-19 CVD Date and Time fields, there are three Precision levels.
 - The default level is "MM/DD/YYYY HH:MM". This is used if the entire Date and Time information is available. Time should be entered in 24hr/Military format.

A screenshot of a date and time input field. At the top is a dropdown menu with the text "MM/DD/YYYY HH:MM" and a downward arrow. Below the dropdown are five input boxes: the first three are for MM, DD, and YYYY, separated by slashes; the last two are for HH and MM, separated by a colon. A calendar icon is to the right of the MM box. The labels "MM", "DD", "YYYY", "HH", and "MM" are centered below their respective boxes.

- If the Time is ND, select a Precision of "MM/DD/YYYY". The "HH:MM" blanks will become grayed-out.

A screenshot of a date and time input field with the precision set to "MM/DD/YYYY". The dropdown menu at the top shows "MM/DD/YYYY". The input boxes for MM, DD, and YYYY are active, but the boxes for HH and MM are grayed out. The labels "MM", "DD", "YYYY", "HH", and "MM" are centered below their respective boxes.

- If the Date is ND, select a Precision of "Unknown". The whole "MM/DD/YYYY HH:MM" field will become grayed-out.

A screenshot of a date and time input field with the precision set to "Unknown". The dropdown menu at the top shows "Unknown". All input boxes (MM, DD, YYYY, HH, MM) and the calendar icon are grayed out. The labels "MM", "DD", "YYYY", "HH", and "MM" are centered below their respective boxes.

Suggested Sources

Admission Data may include:

- Admission sheet
- Physician documentation (including Admitting physician notes, consultation notes, ED physician notes, Physician's hospital admission, transfer, or ED discharge notes, progress notes)
- ED documentation (including ED nurse notes, ED order sets or pathway documentation, ED physician notes, ED record, ED triage sheet, Registration form, ED vital signs graphical record)
- Inpatient documentation (including physician notes, history and physical, medication documentation, nurse progress notes, nursing admission assessment note, physical or occupational therapy consultation or progress notes, speech pathology consultation or progress notes, diet or nutrition services consultation or progress notes)

Hospitalization Data may include:

- Physician documentation (including Acute physician or nursing notes, Consultation progress notes, Diagnostic report, Physician progress notes, Progress notes)
- Inpatient documentation (including physician notes, history and physical, medication documentation, nurse progress notes, nursing admission assessment note, physical or occupational therapy consultation or progress notes, speech pathology consultation or progress notes, diet or nutrition services consultation or progress notes)
- Medication Results (including Medication order sheets, Medication ordering system in the computer)
- Orders (including Physician order sheets, Printed or Electronic order sheets,)
- Lab Results
- Social services notes

Patient Identifier

Definition: Unique number assigned to a patient by the site (your hospital) for an admission. Only an identifier that contains no personal health information (PHI) is to be entered.

Allowable Values:

- Alpha-Numeric Field – up to 20 characters max
 - Customized for each site
 - Once created, number is case-sensitive

Notes for Abstraction:

- It's recommended that hospitals create a log, outside of the registry, to cross reference the COVID-19 CVD patient IDs to a hospital identifier (e.g., medical record number).
- If a patient has not been entered in the tool, please following the mapping rules provided by your site to create a unique number for the patient.
- When creating a new Patient ID, do not use date of birth, social security numbers, and/or other identifiers associated directly with the patient. Recommendation is to create a random number in PMT that corresponds to a specific patient on your end.

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Sex

Definition: The patient's documented gender on arrival at the hospital.

Allowable Values:

- Male
- Female
- Unknown

Notes for Abstraction:

- Collect the documented patient's gender at admission or the first documentation after arrival.
- Consider the gender to be unable to be determined and select "Unknown" if:
 - The patient refuses to provide their gender.
 - Documentation is contradictory.
 - Documentation indicates the patient is a Transsexual.
 - Documentation indicates the patient is a Hermaphrodite.
 - Documentation indicates the patient is Non-binary

Date of Birth

Definition: The month, day, and year the patient was born.

Note:

- Patient's age (in years) is calculated by Admission Date minus Birthdate. The algorithm to calculate age must use the month and day portion of admission date and birthdate to yield the most accurate age.
- For Get With The Guidelines, if entering a "Not Admitted" patient, patient's age is calculated by Arrival Date minus Birthdate.

Allowable Values:

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (1880 – Current Year)

Notes for Abstraction:

- Because this data element is critical in determining the population for all measures, the abstractor should NOT assume that the claim information for the birthdate is correct. If the abstractor determines through chart review that the date is incorrect, she/he should correct and override the downloaded value. If the abstractor is unable to determine the correct birthdate through chart review, she/he should default to the date of birth on the claim information.

Age

Definition: The patient's age (in years) by calculating the following: Admission Date minus Birthdate.

Allowable Values:

- Numerical Value

Notes for Abstraction:

- If the abstractor determines through medical record review that the UB-04 day is incorrect, she/ he should correct and override the download value.
- If the abstractor is unable to determine the correct birth date through medical record review, she/ he should default to the UB-04 date of birth.

Zip Code

Definition: Record the postal code of the patient's residence. For United States Zip Codes, the hyphen is implied.

Allowable Values:

- Numerical Value
- Alpha-Numeric Combination dependent on patients' residence

Notes for Abstraction:

- If the patient is determined to not have a permanent residence, then the patient is considered homeless and *Homeless* should be checked.
- If the patient resides in another country, the zip or postal code from that country should be entered as a string of alpha-numeric characters (e.g. The zip code for a patient who lives in Bras d'Or, Canada should have their zip code entered as, "B1Y3X9" with no spaces.

Homeless

Definition: Indicate if the patient is homeless

Allowable Values:

- Checkbox – Select or Leave Blank

Notes for Abstraction:

- Select the field to indicate if the user has no home or current place of residence
- If the Checkbox is selected, then the field zip code will be disabled for the user.

Payment Source

Definition: Indicate the health insurance status for this patient.

Allowable Values:

- Medicare Title 18
- Medicaid Title 19
- Medicare – Private/ HMO/ PPO/ Other
- Medicaid – Private/ HMO/ PPO/ Other
- Private/ HMO/ PPO/ Other
- VA/ CHAMPVA/ Tricare
- Self-Pay/ No Insurance
- Other/ Not Documented/ UTD

Notes for Abstraction:

- Medicare Title 18 – Traditional Fee for Service Medicare parts A, B and D
- Medicaid Title 19 – State Medicaid or Joint State/Federal Program. This program provides health insurance to individuals who have low income, including persons who are blind or disabled.
- Medicare – Private/HMO/PPO/Other – Medicare Advantage Part C Programs
- Medicaid – Private/HMO/PPO/Other – Medicaid Advantage Programs
- Private/HMO/PPO/Other – Commercial insurance (Not Medicare/ Medicaid) typically tied to employer-based plans
- If checking “Self-Pay/ No Insurance” or “Other/ Not Documented/ UTD” then no other selections should be checked.
- Patients may have a combination of "Medicare Title 18," "Medicaid Title 19," "Medicare – Private/ HMO/ PPO/ Other," "Medicaid – Private/HMO/PPO/Other," "Private/ HMO/ PPO/ Other" and "VA/CHAMPVA/ Tricare."
- States may use alternative names for Medicaid within their respective states. Be mindful of your states' name for Medicaid (e.g. MassHealth)

Race

Definition: The patient's self-assessed race/ ethnicity, or if not available, the physician or institution's assessment.

Allowable Values:

- American Indian/ Alaska Native – A person having origins in any of the original peoples of North and South American (including Central America) and who maintains tribal affiliation or community attachment (e.g. any recognized tribal entity in North and Southern American including Central America, Native American)
- Asian – A person having origins in any of the original peoples of the Far East, southeast Asia, or the Indian subcontinent, including for example, India, China, Philippines, Japan, Korea, Vietnam, or Other including, but not limited to Cambodia, Malaysia, Hmong, and Thailand. If Asian, select the specific sub-category (or sub-categories) that apply from the list provided:

- Asian Indian
- Chinese
- Filipino
- Japanese
- Korean
- Vietnamese
- Other Asian: The patient identified as some other Asian sub-category not provided in the options above or did not identify a sub-category.
- Black or African American – A person having origins in any of the black racial groups of Africa. Terms such as “Haitian” or “Negro” can be used in addition to “Black or African American.”
- Native Hawaiian/ Pacific Islander – A person having origins in any of the other original peoples of Hawaii, Guam or Mariana Islands, Samoa, or other Pacific Islands. If Native Hawaiian/ Pacific Islander, select the specific sub-category (or sub-categories). Select all that apply from the list provided.
 - Native Hawaiian
 - Guamanian or Chamorro
 - Samoan
 - Other Pacific Islander: The patient identified as some other Native Hawaiian/ Pacific Islander subcategory not provided in the options above or did not identify a subcategory.
- White – Patients’ race is White or a person having origins in any of the original peoples of Europe, Middle East or North Africa (e.g., Caucasian, Iranian, White)
- UTD (Unable to Determine) – Unable to determine the patient’s race or not stated (e.g., not documented, conflicting documentation or patient unwilling to provide). The data element Hispanic Ethnicity is required in addition to this Race data element.

Notes for Abstraction:

- Assumptions should not be made based on physical characteristics. This data allows for analysis of race-related patterns of care.
- If patient is multi-racial, select each race they designate. Select all that apply from the list provided.
- For TJC/ CM Users: If multiple options are selected for Race on the Hospitalization tab, then the Core Measures tab data element of “Race” will not auto-populate. Please complete the Core Measures tab data element of “Race” in accordance with the Specifications Manual for National Hospital Inpatient Quality Measures which states: If documentation indicates the patient has more than one race (e.g., Black-White, Indian-White), select the first listed race.
- If the patient is Asian or Native Hawaiian/ Pacific Islander, select the specific sub-category (or sub-categories) of race if known. Selection of a race sub-category is optional.
- The data element, Hispanic Ethnicity, is required in addition to this data element.
- Although terms “Hispanic” and “Latino” are descriptions of the patient’s ethnicity, it is not uncommon to find them referenced as race. If the patient’s race is documented only as Hispanic/ Latino, select “White.” If the race is documented as mixed Hispanic/ Latino with another race, use whatever race is given (e.g., Black-Hispanic – select “Black”). Other terms for Hispanic/ Latino include Chicano, Cuban, H (for Hispanic), Latin American, Latina, Mexican, Mexican American, Puerto Rican, South or Central American, and Spanish.
- If the Asian or Native Hawaiian/ Pacific Islander patient does not identify a sub-category, leave the sub-category blank.

Hispanic Ethnicity

Definition: Documentation that the patient is of Hispanic ethnicity or Latino

Allowable Values:

- Yes – Patient is of Hispanic ethnicity or Latino
- No/ UTD – Patient is not of Hispanic ethnicity or Latino or unable to determine from medical record documentation

Notes for Abstraction:

- The data element, Race, is required in addition to this data element.

If Yes, Hispanic Ethnicity

Definition: If the patient is of Hispanic ethnicity or Latino, the specific sub-category (or sub-categories) identified by the patient.

Allowable Values:

- Another Hispanic, Latino, or Spanish Origin: The patient identified as some other Hispanic, Latino or Spanish origin not provided in the options above.
- Cuban
- Mexican, Mexican American, Chicano/a
- Puerto Rican

Notes for Abstraction:

- If the patient did not identify a sub-category, select Another Hispanic, Latino or Spanish Origin.

Admin Tab

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Arrival Date / Time

Definition: The earliest documented month, day, and year the patient arrived at the hospital.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Unknown

Notes for Abstraction:

- If the date of arrival is unable to be determined from medical record documentation, select "Unknown".
- The arrival date may differ from the admission date.
- If the patient is in either an outpatient setting of the hospital other than observation status (e.g., dialysis, chemotherapy, cardiac cath) or a SNF unit of the hospital, and is subsequently admitted to acute inpatient, use the date the patient arrived at the ED or on the floor for acute inpatient care as the arrival date.
- Observation status:
 - If the patient was admitted to observation from an outpatient setting of the hospital, use the date the patient arrived at the ED or on the floor for observation care as the arrival date.
 - If the patient was admitted to observation from the ED of the hospital, use the date the patient arrived at the ED as the arrival date.
- Direct Admits:
 - If the patient is a "Direct Admit" to the cath lab, use the earliest date the patient arrived at the cath lab (or cath lab staging/holding area) as the arrival date.
 - For "Direct Admits" to acute inpatient or observation, use the earliest date the patient arrived at the nursing floor or in observation (as documented in the Only Acceptable Sources) as the arrival date.

Admit Date

Definition: The month, day, and year of admission to acute inpatient care.

Allowable Values:

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (20XX)

Notes for Abstraction:

- The admission date and time is the date documented in the medical record when the patient was admitted for inpatient care. This is frequently the date when the admission process was completed.
- If the abstractor is unable to determine the correct admission date through chart review, she/he should default to the UB-04 admission date.
- If there are multiple inpatient orders, use the order that most accurately reflects the date that the patient was admitted.

Discharge Date / Time

Definition: The date and time the patient was discharged from acute care, left against medical advice, or expired during this stay.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (20XX)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)

Notes for Abstraction:

- The discharge date is the day that the patient is discharged from your institution's acute care unit OR the date of the patient's expiration OR the date of the patient's discharge OR date patient left against medical advice (AMA) OR date of transfer to, a rehabilitating, skilled nursing, or hospice unit in your institution OR transfer to an acute in-patient unit outside of your own institution, even if that hospital is affiliated with your own OR expired.
- If the abstractor is unable to determine the discharge time, select the MM/DD/YYYY format and enter only the date.

Discharge Disposition

Definition: The final place or setting to which the patient was discharged on the day of discharge.

Allowable Values:

- 1 – Home
- 2 – Hospice – Home
- 3 – Hospice – Health Care Facility
- 4 – Acute Care Facility
- 5 – Other Health Care Facility
- 6 – Expired
- 7 – Left Against Medical Advice (AMA)
- 8 – Not Documented or Unable to Determine (UTD)

Notes for Abstraction:

- Only use documentation written on the day prior to discharge through 30 days after discharge when abstracting this data element. Example:
 - Documentation in the Discharge Planning notes on 04-01-20xx state that the patient will be discharged back home. On 04-06-20xx the physician orders and nursing discharge notes on the day of discharge reflect that the patient was being transferred to skilled care. The documentation from 04-06-20xx would be used to select value "5" (Other Health Care Facility).

- The medical record must be abstracted as documented (taken at “face value”). Inferences should not be made based on internal knowledge.
- If there is documentation that further clarifies the level of care that documentation should be used to determine the correct value to abstract. If documentation is contradictory, use the latest documentation. Examples:
 - Discharge summary dictated 2 days after discharge states patient went “home”. Physician note on day of discharge further clarifies that the patient will be going home with hospice”. Select value “2” (“Hospice – Home”).
 - Discharge planner note from day before discharge states “XYZ Nursing Home”. Discharge order from day of discharge states “Discharge home”. Contradictory documentation use latest. Select value “1” (“Home”).
 - Physician order on discharge states “Discharge to ALF”. Discharge instruction sheet completed after the physician order states patient discharged to “SNF”. Contradictory documentation use latest. Select value “5” (“Other Health Care Facility”).
- If documentation is contradictory, and you are unable to determine the latest documentation, select the disposition ranked highest (top to bottom) in the following list. See Inclusion lists for examples.
 - Acute Care Facility
 - Hospice – Health Care Facility
 - Hospice – Home
 - Other Health Care Facility
 - Home
- Hospice (values “2” and “3”) includes discharges with hospice referrals and evaluations.
- If the medical record states only that the patient is being discharged to another hospital and does not reflect the level of care that the patient will be receiving, select value “4” (“Acute Care Facility”).
- If the patient is being discharged to assisted living care or an assisted living facility (ALF) that is located within a skilled nursing facility, and documentation in the medical record also includes nursing home, intermediate care or skilled nursing facility select Value “1” (“Home”).
- If the medical record states the patient is being discharged to nursing home, intermediate care or skilled nursing facility without mention of assisted living care or assisted living facility (ALF), select Value “5” (“Other Health Care Facility”).
- If the medical record identifies the facility the patient is being discharged to by name only (e.g., “Park Meadows”), and does not reflect the type of facility or level of care, select value “5” (“Other Health Care Facility”).
- If the medical record states only that the patient is being “discharged” and does not address the place or setting to which the patient was discharged, select value “1” (“Home”).
- When determining whether to select value “7” (“Left Against Medical Advice/AMA”):
 - Explicit “left against medical advice” documentation is not required. E.g., “Patient is refusing to stay for continued care” — Select value “7”.
 - Documentation suggesting that the patient left before discharge instructions could be given does not count.
 - A signed AMA form is not required, for the purposes of this data element.
 - Do not consider AMA documentation and other disposition documentation as “contradictory”. If any source states the patient left against medical advice, select value “7”, regardless of whether the AMA documentation was written last. E.g., AMA form signed and discharge instruction sheet states “Discharged home with belongings” — Select “7”.

Discharged to Other Healthcare Facility

Definition: If Other Healthcare Facility is selected for Discharge Disposition, the specific facility to which the patient was discharged. If Other Healthcare Facility is selected for Discharge Disposition, this will be required.

Allowable Values:

- Skilled Nursing Facility (SNF)
- Inpatient Rehabilitation Facility (IRF)
- Long Term Care Hospital (LTCH)
- Intermediate Care Facility (ICF)
- Other

Notes for Abstraction:

- Skilled Nursing Facility (SNF): Patient was discharged or transferred to a skilled nursing facility (SNF) previously captured as Discharge Status (03) Dsch/Trans to skilled nursing facility (SNF) and (61) Dsch/Trans to hospital-based Medicare approved swing bed. This would include patients discharged to:
 - Skilled nursing facility (SNF)
 - SNF rehabilitation unit (a unit within the SNF)
 - Sub-Acute Care
 - Transitional Care Unit (TCU)
 - Swing Bed (patients discharged/ transferred to a SNF level of care within the hospital's approved swing bed arrangement)
 - Skilled nursing facility with hospice referral only (has not accepted hospice care by a hospice organization)
- Inpatient Rehabilitation Facility (IRF): Patient was discharged or transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of a hospital previously captured as Discharge Status (62) Dsch/Trans to an inpatient rehabilitation facility (IRF).
- Long Term Care Hospital (LTCH): Patient was discharged or transferred to a Medicare certified long term care hospital (LTCH or LTACH) or a nursing facility certified under Medicaid but not certified under Medicare previously captured as Discharge Status (63) Dsch/Trans to Medicare certified long term care hosp and (64) Dsch/Trans to a nursing facility certified under Medicaid but not certified under Medicare. LTCH Usage Note: For hospitals that meet the Medicare criteria for LTCH certification. A Long-term care hospital or long-term care facilities provide acute inpatient care with an average length of stay greater than 25 days.
- Intermediate Care facility (ICF): Patient was discharged or transferred to an intermediate care facility (ICF) previously captured as Discharge Status (04) Dsch/Trans to a facility that provides custodial or supportive care. This would include patients discharged to:
 - ECF (Extended Care Facility)
 - ICF (Intermediate Care Facility)
 - Nursing Home
 - Nursing facility for non-skilled/custodial/residential level of care
 - Veteran's Administration Nursing Facility
 - Nursing facility with neither Medicare nor Medicaid certification
 - Nursing facility with hospice referral only (has not accepted hospice care by a hospice organization)
- Other: The patient was discharged or transferred to a Psychiatric Hospital or Psychiatric Unit of a Hospital previously capture as Discharge Status (65) Dsch/Trans to a psychiatric hospital or psychiatric distinct part unit of a hospital or other healthcare facility not defined in above options.

Admission Tab

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Means of Transport to Your Facility

Definition: The method of transfer (private vehicle, ground or air ambulance), distance traveled, and duration of transfer is useful for determining patient and system costs. For this element, indicate the type of transport used to bring the patient to your facility.

Allowable Values:

- Air
- Ambulance
- Transfer from another hospital
- Walk-In
- ND or Unknown

Notes for Abstraction:

- Select "Air" for air EMS transports to your facility from home or scene.
- Select "Ambulance" whenever the patient was brought to your hospital from home/scene by EMS by ground transport. Private ambulance transport would be included in this EMS category.
- If a patient is transported by EMS from an Urgent Care Facility, satellite/free-standing ED or private physician office, choose "Ambulance".
- If a patient is transferred from another hospital, using ambulance or air as an interfacility transport, choose "Transfer from another hospital".
- If the patient arrived via a mobile stroke unit (MSU), select "Ambulance".
- Walk-In includes cab, bus, car, Uber/Lyft etc.
- If the medical record does not specify how patient arrived at your hospital, select "ND or Unknown."

Past Medical History

Definition: The conditions that are known to exist prior to this admission.

Allowable Values:

- No Medical History
- Atrial Fibrillation
- Atrial Flutter
- Cancer
- Cerebrovascular Disease
 - Stroke
 - TIA
- Chronic Kidney Disease
- Currently on Dialysis
- DVT
- Diabetes Mellitus
- Dyslipidemia
- E-Cigarette Use (Vaping)
- Smoking
- Heart Failure
- Hypertension

- Immune Disorders
 - HIV
 - Lupus
 - Rheumatoid Arthritis
 - Other
- Peripheral Artery Disease
- Prior CABG
- Prior MI
- Prior PCI
- Pulmonary Embolism
- Pulmonary Disease
 - COPD
 - Interstitial Lung Disease (ILD)
 - Asthma
 - Other
- Organ Transplant

Notes for Abstraction:

- Do not include elements that were newly diagnosed during hospitalization and were not previously part of medical history.
- Atrial Fibrillation: Documented history of Atrial Fibrillation. Do not record a history of Atrial Fibrillation if the only reference to Atrial Fibrillation history in the medical record indicates:
 - The episode was transient and entirely reversible AND terminated within 8 weeks following CABG.
 - The episode was transient AND entirely reversible due to thyrotoxicosis

NOTE: These are the only two circumstances where Atrial Fibrillation is mentioned in the medical record, but you would not record a history of Atrial Fibrillation. Any patient with a history of Atrial Fib who has undergone a procedure for Atrial Fib such as pacemaker placement or ablation or who is under medical therapy for rhythm control is still considered as having a history of Atrial Fib and you should select Atrial Fib under medical history

- Atrial Flutter: Documented history of Atrial Flutter. Do not record a history of Atrial Flutter if the only reference to Atrial Flutter history in the medical record indicates:
 - The episode was transient and entirely reversible AND terminated within 8 weeks following CABG.
 - The episode was transient AND entirely reversible due to thyrotoxicosis

NOTE: These are the only two circumstances where Atrial Flutter is mentioned in the medical record, but you would not record a history of Atrial Flutter. Any patient with a history of Atrial Flutter who has undergone a procedure for Atrial Flutter such as pacemaker placement or ablation or who is under medical therapy for rhythm control is still considered as having a history of Atrial Flutter and you should select Atrial Flutter under medical history.

- Cancer: Select if the patient has a documented history of cancer regardless of type or location prior to this admission. Do not select cancer if there is history of non-melanoma skin cancer.
- Cerebrovascular Disease: Refers to a history of stroke or transient ischemic attack. If receiving a patient in transfer (i.e. your facility receives drip and ship patients) and there is no history of stroke or TIA prior to the acute event for which the patient is being hospitalized, do not select Cerebrovascular Disease.

- Chronic Kidney Disease Select if there is a history of physician diagnosed renal insufficiency or chronic failure or if the serum creatinine is greater than 2.0mg/dl.
- Currently on Dialysis: Select if the patient requires chronic hemo- or peritoneal dialysis.
- DVT: Documented history of DVT (Deep Vein Thrombosis). Deep vein thrombosis (DVT) is a clot in a deep vein, unusually in the leg. DVT sometimes affects the arm or other veins.
- Diabetes Mellitus (DM): Select if there is a history of physician diagnosed, Diabetes Mellitus (type I or II), regardless of duration of disease or use of treatment including the use of diet, need for antidiabetic agents, oral hypoglycemic agents or insulin, or a fasting blood sugar. Do not include diabetes based on a patient's statement of or based on a single value of elevated blood sugar in the chart. In order to select this element, there must be a confirmed diagnosis of diabetes mellitus.
- Dyslipidemia: Documented history of Dyslipidemia, if high cholesterol, hyperlipidemia or hypercholesterolemia is present based on physician diagnosis, treatment with a lipid lowering agent, total cholesterol greater than 200, LDL greater than 100, HDL less than 40, or elevated triglycerides greater than 200. Patients on lipid lowering therapy are included in this category even if their LDL levels are in range. See Adult Treatment Protocol (ATP) III Clinical Guidelines for further clarification and methods of calculating goal based on Framingham risk data (www.nhlbi.nih.gov).
- E-Cigarette Use (Vaping): Indicate whether the patient has a history of e-cigarettes or vaping use anytime during the year prior to arrival.
 - Use of electronic nicotine delivery system or electronic cigarettes (e-cigarettes), which are battery-operated devices that heat a liquid containing nicotine, propylene glycol, and/or vegetable glycerin and flavorant chemicals to generate an aerosol that the user inhales, or heat-not-burn tobacco products, which are tobacco products that heat tobacco to a lower temperature than required for combustion.
 - Reference: Dehmer GJ, Badhwar V, Bermudez EA, Cleveland JC Jr, Cohen MG, D'Agostino RS, Ferguson TB Jr, Hendel RC, Isler ML, Jacobs JP, Jneid H, Katz AS, Maddox TM, Shahian DM. 2020 AHA/ACC key data elements and definitions for coronary revascularization: a report of the American College of Cardiology/American Heart Association Task Force on Clinical Data Standards (Writing Committee to Develop Clinical Data Standards for Coronary Revascularization). *Circ Cardiovasc Qual Outcomes*. 2020;13: e000059. doi: 10.1161/HCQ.0000000000000059
- Smoking: Indicate whether the patient has a history of smoking cigarettes anytime during the year prior to arrival.
 - Select "Smoking" if there is documentation that the adult patient smoked cigarettes anytime during the year prior to hospital arrival. Do not select "Smoking" if there is no documentation that the adult patient smoked cigarettes anytime during the year prior to hospital arrival, smoking history was not addressed or unable to determine from medical record documentation.
 - If there is definitive documentation anywhere that the patient either currently smokes or is an ex-smoker that quit less than one year prior to arrival, select "Smoking," regardless of whether there is conflicting documentation.
 - If there is NO definitive documentation of current smoking or smoking within one year prior to arrival in any of the only acceptable sources, select "No." The following examples would not count as inclusions:
 - "Smoked in the last year?"
 - "Probable smoker"
 - "Most likely quit 3 months ago"
 - Disregard documentation of smoking history or history of tobacco use if current smoking status or timeframe that patient quit is not defined (e.g., "20 pk/ear smoking history", "History of tobacco abuse").

- If there is documentation of current smoking or tobacco use or smoking or tobacco use within one year prior to arrival, and the type of product is not specified, assume this refers to cigarette smoking and select "Smoking."
- Do not include documentation of smoking history referenced as a "risk factor" (e.g., "risk factor: tobacco," "risk factor: smoking," "risk factor: smoker"), where current smoking status is indeterminable.
- Heart Failure: Documented history of Heart Failure.
- Hypertension: Hypertension (HTN) is present if the patient has a history of high blood pressure whether the patient is on prescribed medications, current use of antihypertensive pharmacological therapy or history of HTN diagnosed and treated with medication, diet, and/or exercise. Do not base this decision solely on blood pressure recordings taken in the ED or in the first few days of admission after stroke, since many normotensive patients will have elevated BP after stroke.
- Immune Disorders: Select if the patient has a documented history of any immune disorder including but not limited to HIV, Lupus, or Rheumatoid Arthritis. If patient has a history of a different immune disorder not listed, select Immune Disorder and select other.
- Peripheral Artery Disease: Refers to a history of peripheral vascular disease of the arteries of the extremities, especially conditions that interfere with adequate blood flow to the extremities and occurring prior to this acute event
- Prior CABG: Select if there is a history of Coronary artery bypass graft (CABG) prior to this admission.
- Prior MI: Select Prior MI if there is a history of MI or EKG evidence of an old MI prior to this admission.
- Pulmonary Embolism Documented history of PE (Pulmonary Embolism). Pulmonary embolism (PE), which occurs when a DVT clot breaks free from a vein wall, travels to the lungs and then blocks some or all the blood supply.
- Pulmonary Disease: Refers to evidence or knowledge of pulmonary disease pulmonary disease prior to this acute event. This would include COPD, Interstitial Lung Disease, Asthma or other pulmonary conditions including chronic productive cough, chronic wheezing, emphysema, chronic bronchitis or currently being chronically treated with inhaled or oral pharmacological therapy (e.g., beta-adrenergic agonist, anti-inflammatory agent, leukotriene receptor antagonist, or steroid).
- Organ Transplant: Refers to a documented history of being the recipient of any solid organ or bone marrow transplant prior to this admission.

COVID-19 Diagnosis

Definition: When the diagnosis of COVID-19 occurred.

Allowable Values:

- Yes, prior to admission
- Yes, during hospitalization
- Yes, after discharge
- Unknown/ ND

Notes for Abstraction:

- Patients with a diagnosis of COVID-19 should be entered into the registry, with or without COVID-related symptoms.

Method of Diagnosis

Definition: The method of how the COVID-19 was made.

Allowable Values:

- RT-PCR test
- Clinical diagnosis using hospital specific criteria

Notes for Abstraction:

- Select “RT-PCR test” if there is a prior RT-PCR documented in the record.
- You may select “Clinical diagnosis using hospital specific criteria” if there is documentation of a Positive IgM antibody test in the medical record.

Date of Diagnosis

Definition: The date the patient was diagnosed with COVID-19.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction: N/A

Date of COVID-19 Symptom Onset?

Definition: The reported date COVID-19 symptoms began.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If patient refers to symptoms “starting about 2 days ago”, calculate the symptom onset date by taking the arrival date and subtracting two days.
- If conflicting documentation exists in the medical record, use the earliest date.

Documented Symptoms

Definition: The symptoms of COVID-19 the patient experienced prior to and during hospitalization.

Allowable Values:

- Confusion or Altered Mental Status
- Cough
- Fatigue
- Fever/chills
- Headache
- Loss of Sense of Smell/ Taste
- Headache
- Myalgia
- Nasal Congestion
- Nausea, Vomiting, or Diarrhea
- Shortness of Breath
- Sore Throat
- Other: _____
- Not Documented

Notes for Abstraction:

- If other, enter the symptoms experienced in the text field

Presence of Interstitial Infiltrates on Initial Chest X-Ray or CT

Definition: The presence of interstitial infiltrates on the chest x-ray or CT.

Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- Presence of Interstitial Infiltrates on Chest X-Ray or CT can typically be found in progress notes or radiology reports
- You may select "Yes" if there is documentation of any of the following found in the medical record:
 - Infiltrate consistent with Pneumonia
 - Consolidation
 - Airspace Opacities
 - Pneumonia consistent with COVID
 - Ground Glass Opacities
 - Patchy Multilobar Airspace Opacity

During admission, was the patient enrolled in a clinical trial related to COVID-19?

Definition: Whether the patient is enrolled in a clinical trial related to COVID-19.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes – There is documentation that during the hospital stay the patient was enrolled in a clinical trial in which patients with a diagnosis of COVID-19 were being studied
- No/ ND – There is no documentation that during this hospital stay the patient was enrolled in a clinical trial in which patients with a diagnosis of COVID-19 were being studied, or unable to determine from medical record documentation.
- To select “Yes” to this data element, BOTH of the following must be true:
 - There must be a signed consent from for clinical trial. For the purposes of abstraction, a clinical trial is defined as an experimental study in which research subjects are recruited and assigned a treatment/ intervention and their outcomes are measured based on the intervention received. Treatments/ interventions most often include use of drugs, surgical procedures, and devices. Often a control group is used to compare with the treatment intervention. Allocation of different interventions to participants is usually randomized.
 - There must be documentation on the signed consent form that during this hospital stay the patient was enrolled in a clinical trial in which patients with diagnosis of COVID-19 were being studied. Patient may either be newly enrolled in a clinical trial during the hospital stay or enrolled in a clinical trial prior to arrival and continued achieve participation in that clinical trial during this hospital stay.
- In the following situations, select, “No.”
 - There is a signed patient consent form for an observational study only. Observational studies are non-experimental and involve no intervention (e.g., registries). Individuals are observed (perhaps with lab draws, interviews, etc.), data is collected, and outcomes are tracked by investigators. Although observational studies may include the assessments of the effects of an intervention, the study participants are not allocated into intervention or control groups.
 - It is not clear whether the study described in the signed patient consent form is experimental or observational.
 - It is not clear which study population the clinical trial is enrolling. Assumptions should not be made if it is not specified.

Medications Prescribed or Taken at Time of Admission

Anti-Hypertensive

Definition: Documentation that the patient was on any anti-hypertensive medication prior to arrival.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any antihypertensive medication within the past week and prior to hospital arrival
- No/ND: The patient has not taken any antihypertensive medications within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription or is otherwise noncompliant, answer “No/ND” to this data element.

Anti-Hypertensive Treatment

Definition: Documentation of the type of anti-hypertensive medication the patient was on prior to hospital arrival.

Allowable Values:

- Ace Inhibitors
- ARB
- ARNI
- Beta Blockers
- CA++ Channel Blockers
- Diuretics
- MRA
- Other Anti-Hypertensive Med

Notes for Abstraction:

- Select the class of anti-hypertensive treatment the patient is prescribed upon arrival to your hospital.
- ARNI includes sacubitril/valsartan (Entresto)
 - If ARNI is selected here, answer “ARB Administered During Hospitalization” below.
- MRA includes spironolactone and eplerenone

ACEI Administered During Hospitalization

Definition: For patients who were currently taking or prescribed an ACEI prior to admission at your hospital, is there documentation that ACEI was administered at least once during the hospitalization.

Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- Yes: There is documentation that the patient was administered an ACEI throughout the hospitalization.
- No/ND: The patient's ACEI was not given during the hospitalization or there is no documentation relating to administration during hospitalization.

ARB Administered During Hospitalization

Definition: For patients who were currently taking or prescribed an ARB **or ARNI** prior to admission at your hospital, is there documentation that ARB was administered at least once during the hospitalization.

Allowable Values:

- Yes
- No
- ND

Notes for Abstraction:

- If ARNI is selected for “Anti-hypertensive Treatment” above, then select Yes, No, or ND here as to whether the ARNI was administered during hospitalization.
 - Yes: There is documentation that the patient was administered an ARB throughout the hospitalization.
 - No/ND: The patients ARB was not given during the hospitalization or there is no documentation relating to admission during hospitalization.
-

Lipid Lowering Therapy

Definition: Documentation that the patient was on any lipid lowering therapy prior to arrival.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient was on a lipid-lowering medication (cholesterol-reducing/controlling medication) prior to hospital arrival.
- No/ND: There is no documentation that the patient was on a lipid-lowering medication (cholesterol reducing/ controlling medication) prior to hospital arrival or unable to determine from medical record documentation.
- If there is documentation that the patient was on a lipid-lowering medication at home but there is indication it was on temporary hold or the patient has been non-compliant/self-discontinued their medication (e.g., refusal, side effects, cost), select “Yes”.
- When conflicting information is documented in a medical record, select “Yes”.

Lipid Lowering Therapy – Select All That Apply

Definition: Documentation of the type of lipid lowering therapy the patient was on prior to hospital arrival.

Allowable Values:

- Ezetimibe
- PCSK 9 Inhibitor

- Statin
- Other Lipid Lowering Med

Notes for Abstraction:

- Select the class of lipid lowering therapy the patient is prescribed upon arrival to your hospital.

Antiplatelet

Definition: Documentation that the patient was on any antiplatelet medication prior to arrival.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any antiplatelet medication(s) within the past week and prior to hospital arrival.
- No/ND: The patient has not been taking any antiplatelet medication(s) within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription, has not taken the medication in the past week or is otherwise noncompliant, answer "No/ND" to this data element.

Antiplatelet Treatment – Select All That Apply

Definition: Documentation of the type of antiplatelet medication the patient was on prior to hospital arrival.

Allowable Values:

- Aspirin
- P2Y12 Inhibitors
- Other Antiplatelet

Notes for Abstraction:

- Select the class of anti-platelet treatment the patient is prescribed upon arrival to your hospital.

Anticoagulant

Definition: Documentation that the patient was on any anticoagulant medication prior to arrival.

Allowable Values:

- Yes
- No/ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any anticoagulant medication(s) within the past week and prior to hospital arrival.
- No/ND: The patient has not been taking any anticoagulant medication(s) within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription, has not taken the medication in the past week or is otherwise noncompliant, answer “No/ND” to this data element.

Anticoagulant Treatment – Select All That Apply

Definition: Documentation of the type of anticoagulant medication the patient was on prior to hospital arrival.

Allowable Values:

- Direct Thrombin Inhibitor
- Factor Xa Inhibitor
- Warfarin
- Other Anticoagulant

Notes for Abstraction:

- Select the class of anticoagulant treatment the patient is prescribed upon arrival to your hospital.

Anti-Hyperglycemic

Definition: Documentation that the patient was on any anti-hyperglycemic medication prior to arrival.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any anti-hyperglycemic medication within the past week and prior to hospital arrival.
- No/ND: The patient has not taken any anti-hyperglycemic medications and/or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- If documentation in the medical record indicates that therapy has been prescribed but patient has not filled the prescription or is otherwise noncompliant, answer “No” to this data element.
- Example: Patient 130a is admitted to the inpatient unit with right hemiparesis and dysarthria. His pre-admission medications were lisinopril, aspirin, metformin and furosemide. His metformin is held but all other medications are continued. Data abstractor would select “Yes.”

Anti-Hyperglycemic Treatment – Select All That Apply

Definition: Documentation of the type of anti-hyperglycemic medication the patient was on prior to hospital arrival.

Allowable Values:

- DPP-4 Inhibitors
- GLP-1 Receptor Agonist
- Insulin
- Metformin
- SGLT2 Inhibitor
- Sulfonylurea
- Thiazolidinedione
- Other Injectable/ Subcutaneous Agent
- Other Oral Agents

Notes for Abstraction:

- Select the class of anti-hyperglycemic medication(s) the patient is prescribed upon arrival to your hospital.

Corticosteroid

Definition: Documentation that the patient was on any corticosteroid medication prior to arrival.

Allowable Values:

- Inhaled
- Oral
- None/ ND

Notes for Abstraction:

- Oral: include but not limited to dexamethasone (Decadron), methylprednisolone (Solu-Medrol), prednisone
- Inhaled; medications for asthma or COPD, chronic lung disease that include but not limited to fluticasone/ salmeterol (Advair), budesonide (Pulmicort), beclomethasone
- No/ND: The patient has not been taking any Corticosteroid within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.

Immunosuppressive Medications (Other Than Steroids)

Definition: Documentation that the patient was on any immunosuppressive medications other than steroids prior to arrival.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any immunosuppressive medication(s) within the past week and prior to hospital arrival.
- No/ND: The patient has not been taking any immunosuppressive medication(s) within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.
- Includes but not limited to:
 - Abatacept, Adalimumab, Anakinra, Apremilast, Azathioprine (Imuran), Belimumab, Brodalumab, Canakinumab, Certolizumab, Chlorambucil (Leukeran), Cyclophosphamide (Cytoxan), Cyclosporine (Neoral, Sandimmune, Gengraf), Etanercept, Golimumab, Hydroxychloroquine, Infliximab, Ixekizumab, Leflunomide (Arava), Mercaptopurine, Methotrexate (Rheumatrex), Mycophenolate mofetil (Cellcept), Nitrogen mustard (Mustargen), Riloancept, Rituximab, Tacrolimus, Tofacitinib, Ustekinumab

Chemo or Biological Treatment for Cancer

Definition: Documentation that the patient was receiving chemotherapy or biologic/immunotherapy for cancer prior to arrival.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken any chemo or biological treatment for cancer within the past week and prior to hospital arrival.
- No/ND: The patient has not been taking any chemo or biological treatment for cancer within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.

Hydroxychloroquine

Definition: Documentation that the patient was on hydroxychloroquine prior to arrival.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient has taken hydroxychloroquine within the past week and prior to hospital arrival.
- No/ND: The patient has not been taking hydroxychloroquine within the past week or there is no documentation relating to medications prior to arrival, or those medications are listed as unknown.

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During this admission: If multiple events, record Date/ Time of First Episode

Documentation of Presenting EKG

Definition: Indicate whether there is documentation of an electrocardiogram (EKG) on presentation to the hospital or closest to admission.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction: The first EKG obtained in the ED or, if no ED EKG available, the first EKG done on the floor (closest to admission)

Rhythm

Definition: Documented rhythm on presenting (first) EKG

Allowable Values:

- Atrial Fibrillation
- Atrial Flutter
- Sinus
- Other

Notes for Abstraction:

- Documentation rhythm on the presenting (first) EKG from the finalized EKG report

QTC Value

Definition: QTC Value from the presenting EKG.

Allowable Values:

- QTC Value (ms): Text field
- Not Documented

Notes for Abstraction:

- Obtained from the finalized report of the baseline EKG

EKG Abnormalities

Definition: Abnormal findings on the presenting EKG.

Allowable Values:

- None
- Left Bundle Branch Block
- Right Bundle Branch Block
- ST – Segment Depression
- ST – Segment Elevation
- Not Documented

Notes for Abstraction:

- Refer to the Initial/ Presenting EKG (First EKG obtained in the ED or on the floor closest to admission)
- ST-Segment Depression or Elevation should be ≥ 1 mm in order to be selected

Sustained Ventricular Arrhythmias

Definition: Ventricular tachycardia or fibrillation lasting 30 seconds or longer or requiring cardioversion.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Documentation in the medical record of Ventricular Tachycardia or Ventricular Fibrillation lasting 30 seconds or longer or requiring cardioversion.

Date/ Time of Sustained Ventricular Arrhythmia

Definition: The date and time of documented sustained ventricular arrhythmia

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- Sustained ventricular arrhythmia: Ventricular tachycardia or fibrillation lasting 30 seconds or longer or requiring cardioversion.
 - If multiple episodes documented, enter the first recorded date and time.
 - If time is not available, enter date.
-

Atrial Fibrillation

Definition: Documentation of any persistent, intermittent (paroxysmal) atrial fibrillation during the hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: Current finding of permanent, persistent, paroxysmal, or new onset atrial fibrillation was documented during this admission.
- No/ ND: Current finding of permanent, persistent, paroxysmal, or new onset atrial fibrillation was not documented, OR unable to determine from medical record documentation.
- If there is documentation in the medical record or "Fib/Flutter", select "Yes" to "Atrial Fibrillation"

Date/ Time of A-Fib

Definition: The date and time Atrial Fibrillation was documented in the medical record.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- Use the date and time on the telemetry strip or providers documentation.
 - If multiple episodes documented, enter the first recorded date and time.
 - If no time is available, enter date only.
-

Heart Block Requiring a Temporary or Permanent Pacemaker

Definition: There is documentation that the patient experienced Heart block requiring a temporary or permanent pacemaker during this hospitalization

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Documentation of a heart block includes 2nd or 3rd degree AV block only

Date/ Time of HB Intervention

Definition: The date and time the heart block intervention occurred.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- If multiple episodes documented, enter the first recorded date and time.
- If no time is available, enter date only.

Acute Myocardial Infarction (AMI)

Definition: Documentation of Acute Myocardial Infarction during the hospitalization.

Allowable Values:

- STEMI
- NSTEMI
- No/ ND

Notes for Abstraction:

- Acute Myocardial Infarction during hospitalization documented by a physician or APN.

STEMI Reperfusion

Definition: Documentation of STEMI reperfusion during hospitalization.

Allowable Values:

- Fibrinolytic Therapy
- Primary PCI
- No Reperfusion Therapy

Notes for Abstraction:

- Select the type of reperfusion therapy documented during hospitalization.
- If no reperfusion therapy, or not documented, select “No Reperfusion Therapy”

NSTEMI Type

Definition: The type of NSTEMI documented during hospitalization.

Allowable Values:

- Type 1 MI
- Type 2 (Demand-Related) MI
- ND

Notes for Abstraction:

- Type 1 MI: Acute Coronary Syndrome
- Type 2 (Demand-Related) MI: Requires evidence of increased demand (e.g. fast HR or very high blood pressure) or non-thrombotic reduction in oxygen delivery (e.g. severe anemia, severe hypoxemia, or hypotension)
- If there is not documentation of NSTEMI type or the documentation is not clear select “ND”

Date/ Time of AMI

Definition: The date and time the AMI was documented in the medical record.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- If multiple AMI’s documented, enter the first recorded date and time.

Percutaneous Coronary Intervention (PCI)

Definition: Documentation that Percutaneous Coronary Intervention (PCI) during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation the patient received PCI at this hospital during this episode of care.
- No/ ND: There is no documentation that PCI was performed at this hospital during this episode of care or unable to determine from medical record documentation

Date/ Time of PCI

Definition: The date and time of when the PCI was initiated in the Cath Lab

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- Team would consist of the minimum number of personnel to perform procedure needed
- If time is not available, record date
- If multiple episodes documented, enter the first recorded date and time.

LVEF Assessment

Definition: Documentation in the medical record that an LVEF assessment was performed on this patient during this hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation an LVEF assessment was performed on this patient during this hospitalization.
- No/ND: The patient did have an LVEF assessment performed or there is no documentation related to LVEF assessment during this hospitalization.

Date of LVEF Assessment

Definition: The date the LVEF assessment was performed.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple assessments are documented, enter the date of the lowest recorded assessment

EF – Quantitative (%)

Definition: The patient's ejection fraction recorded as a two-digit %.

Allowable Values:

- EF Quantitative (%): Text Field
- Not Documented

Notes for Abstraction:

- If multiple EFs are documented, enter the EF associated with the date of the lowest recorded assessment.
- The numeric EF may be documented as a percentage (%), whole number, or decimal. Convert all decimals to percentages (e.g., 0.40 = 40%). The value should be between 5 and 80.
- If EF was reported as a range, use the midpoint (e.g., LVEF of 35-45%. Use 40%).
- If the EF is documented as less than (<) or greater than (>) a given number, use the value one whole number below or above the given number (e.g., EF < 40% - Use 39%; EF > 40% - Use 41%).
- If the EF is not documented as a whole number, round fractions to the nearest whole number (e.g., 39.5% = 40%, 39.4% = 39%)

Is there documentation of an LVEF Assessment within the last year?

Definition: Documentation in the medical record that an LVEF assessment was performed on this patient within 12 months prior to admission.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation an LVEF assessment was performed within 12 months of this admission.
- No/ND: The patient did not have an LVEF assessment performed within the past 12 months or there is no documentation related to LVEF assessment prior to this hospitalization.

Last Known EF

Definition: Documentation in the medical record that an LVEF assessment was performed on this patient within 12 months of admission provide the recorded ejection fraction as a two-digits %.

Allowable Values:

- EF – Quantitative (%): Text Field
- Not Documented

Notes for Abstraction:

- The numeric EF may be documented as a percentage (%), whole number, or decimal. Convert all decimals to percentages (e.g., 0.40 = 40%). The value should be between 5 and 80.
- If EF was reported as a range, use the midpoint (e.g., LVEF of 35–45%. Use 40%).
- If the EF is documented as less than (<) or greater than (>) a given number, use the value one whole number below or above the given number (e.g., EF < 40% - Use 39%; EF > 40% - Use 41%).
- If the EF is not documented as a whole number, round fractions to the nearest whole number (e.g., 39.5% = 40%, 39.4% = 39%)
- If multiple values are recorded, use the closest to admission

Coronary Angiogram

Definition: Documentation of coronary angiogram during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of a diagnostic coronary angiogram was performed during this hospitalization.
- No/ ND: There is no documentation this procedure was performed or documented during this hospitalization.

Angiogram Type

Definition: The type of angiogram performed during this hospitalization.

Allowable Values:

- CTA
- Invasive (Cath)
- ND

Notes for Abstraction:

- If multiple angiograms were performed during this hospitalization, select the first recorded angiogram type.
- If both Cardiac CTA and Invasive cardiac catheterization (Cath) are documented in the medical record, select Invasive (Cath) here.

Number of Vessels with $\geq 50\%$ Stenosis

Definition: The number of vessels with 50% or greater stenosis, as documented as a result of the cardiac angiogram, during this hospitalization.

Allowable Values:

- 0
- 1
- 2
- ≥ 3
- Left Main CAD
- Not Documented

Notes for Abstraction:

- If Left Main obstruction is present, choose "Left Main CAD" instead of the number of obstructed vessels
- If multiple of the same procedure, choose the first during the admission

Date/ Time of Cardiac Angiogram

Definition: The date and time when the cardiac angiogram procedure was started.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- If both CTA and Invasive Coronary Angiogram (CATH) are recorded in the medical record, indicate the date and time of the Invasive Coronary Angiogram (CATH). This date and time should correspond with the response to the above element – Angiogram Type.
- If time is not available, record date
- If multiple procedures are documented, enter the first recorded date and time.

In-Hospital Shock

Definition: Documentation that the patient developed shock during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Documentation of cardiogenic, distributive (sepsis), or other form in the medical record during this hospitalization.

Shock Type

Definition: The type of shock observed during hospitalization.

Allowable Values:

- Cardiogenic
- Distributive (e.g. Sepsis)
- Mixed
- Other/ Unknown

Notes for Abstraction:

- Choose the option that best matches the first episode of shock observed during this hospitalization.

Shock Management – Select All That Apply

Definition: Interventions used during the first documented in-hospital shock.

Allowable Values:

- IABP
- Impella or other PVAD
- Inotropes/ Vasopressors
- V-A ECMO
- V-V ECMO

Notes for Abstraction:

- Inotropes/ Vasopressors may include epinephrine, dopamine, vasopressin, phenylephrine, angiotensin 2, dobutamine, and milrinone.

- Note that V-V ECMO also appears in the respiratory section of this registry

Date/ Time of Mechanical Circulatory Support

Definition: The date and time the patient was put on mechanical circulatory support.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- If multiple episodes are recorded, use the date and time from the first reported instance of mechanical circulatory support.

New-Onset Heart Failure

Definition: Documentation of a diagnosis of new-onset heart failure during this hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of a diagnosis of new-onset heart failure during this hospitalization.
- No/ ND: There is no documentation of a diagnosis of new-onset heart failure documented during this hospitalization.

Specify HF

Definition: The specific type of new-onset Heart Failure diagnosed during this hospitalization.

Allowable Values:

- Systolic (HFrEF)
- Diastolic (HFpEF)

Notes for Abstraction:

- If both Systolic and Diastolic heart failure are documented, select “Systolic (HFrEF).”

Date of HF

Definition: The date the new-onset heart failure diagnosis was recorded.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of heart failure.

Myocarditis

Definition: Documentation of myocarditis during this hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of myocarditis during this hospitalization.
- No/ ND: There is no documentation of myocarditis during this hospitalization.
- Should be recorded in the discharge summary to choose “Yes”
- We expect there to be uncertainty about the diagnosis in the medical record, documentation of “suspected” or “presumed” in the medical record that not included in the discharge summary should be answered as “No/ND”

Diagnostic Test

Definition: Diagnostic test used for the diagnosis of myocarditis during this admission.

Allowable Values:

- Cardiac Biopsy
- MRI
- CT
- Clinical Diagnosis

Notes for Abstraction:

- Select the diagnostic test(s) used to determine presence of myocarditis.

- If multiple, select in this order: biopsy>MRI>CT>clinical

Date of Myocarditis

Definition: The date a diagnosis of myocarditis was made.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of myocarditis diagnosis.

Deep Vein Thrombosis (DVT)

Definition: Documentation of evidence of DVT in the medical record.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- This element refers to the in-hospital development of DVT.
- The documentation of DVT must be confirmed by ultrasound, venous imaging or another appropriate diagnostic modality.
- Ensure that the report clearly indicates that a deep vein, and not a superficial vein, is involved.
- Pre-existing DVT prior to admission should not be documented here.

Date of DVT Diagnosis

Definition: The date of DVT diagnosis

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of DVT diagnosis.

Pulmonary Embolus (PE)

Definition: Documentation of evidence of PE in the medical record.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- This element refers to the in-hospital development of PE.
- Documentation of PE must be confirmed by appropriate diagnostic modality.
- Pre-existing PE prior to admission should not be documented here.

Date of PE Diagnosis

Definition: The date of PE diagnosis

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of PE diagnosis.
-

Intracardiac Thrombus

Definition: Documentation of evidence of intracardiac thrombus during this hospitalization.

Allowable Values:

- Yes
- No / ND

Notes for Abstraction:

- Intracardiac thrombus includes evidence of a Left Atrial, Left Ventricle, Right Atrial, or Right Ventricle thrombus
- Documentation of intracardiac thrombus must be confirmed by appropriate imaging (e.g. echo, MRI, CT).

Date of Intracardiac Thrombus Diagnosis

Definition: The date of Intracardiac Thrombus diagnosis

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of intracardiac thrombus diagnosis.

Clinical Bleeding Requiring Transfusion

Definition: The presence of clinical bleeding requiring transfusion. Overt clinical bleeding is required.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Clinical Bleeding can include pericardial tamponade if it is recorded as being due to bleeding.
- Hemoglobin drops with no clinical evidence identified, should not be included, even if transfusion occurred.

Date of Transfusion

Definition: The date of transfusion.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of transfusion diagnosis.

New Hemodialysis or CRRT

Definition: Documentation of new hemodialysis or CRRT during this hospitalization with no previous history of chronic dialysis.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of new hemodialysis or CRRT during this hospitalization.
- No/ ND: There is no documentation of new hemodialysis or CRRT during this hospitalization.

Date of New Hemodialysis

Definition: The date of new hemodialysis

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- Date of new Hemodialysis or CRRT documented above.
- If multiple dates are found in the medical record, use the first recorded date of new hemodialysis.

Ischemic Stroke/ Intracranial Hemorrhage

Definition: Documentation of ischemic stroke or intracranial hemorrhage during this hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of ischemic stroke or intracranial hemorrhage during this hospitalization.
- No/ ND: There is no documentation of ischemic stroke or intracranial hemorrhage during this hospitalization.

Initial NIH Stroke Scale

Definition: Documentation of the first NIHSS score obtained closest to the onset of stroke symptoms.

Allowable Values:

- NIHSS Score (0 – 42): Text Field
- Not Documented

Notes for Abstraction:

- Enter the total score of the first NIHSS performed closest to the onset of stroke symptoms.
- The initial NIH Stroke Scale may be documented by a member of the "stroke team" (including the physician/APN/PA or nurse (RN)). It is highly recommended that the NIHSS be performed by a certified examiner.

Imaging

Definition: Documentation of the type of brain imaging completed to diagnose suspected stroke.

Allowable Values:

- CT
- MRI
- Not Documented

Notes for Abstraction:

- This data element is looking to capture information around the initial brain image for this event
- For inpatient stroke, use the first brain image performed after discovery of stroke symptoms in the hospital. If patient had brain imaging performed in the hospital prior to stroke symptom onset, use the brain imaging performed after discovery of stroke symptoms in the hospital.

Imaging Shows Acute Stroke

Definition: Documentation that imaging shows acute stroke

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There was presence of acute stroke identified (or visualized) upon reviewing the imaging.
- No/ND: There was no acute stroke identified (or visualized) upon reviewing the imaging OR No documentation in the medical record that indicates presence of acute stroke
- For inpatient stroke, use the first brain image performed after discovery of stroke symptoms in the hospital. If patient had brain imaging performed in the hospital prior to stroke symptom onset, use the brain imaging performed after discovery of stroke symptoms in the hospital.

Stroke Treatment

Definition: The type of treatment used for stroke.

Allowable Values:

- Thrombolysis
- Thrombectomy
- None/ ND

Notes for Abstraction:

- Thrombolysis may include: Alteplase, IV alteplase, Activase, tPA, recombinant tissue plasminogen activator, or tenecteplase (TNK).
- Thrombectomy refers to the interventional procedure of removing a blood clot (EVT, MER).
- Select "None/ ND" if there is no documentation in the medical record of treatment related to stroke.
- If there is documentation of both thrombolysis and thrombectomy, select "Thrombolysis."

Stroke or Intracranial Hemorrhage Type

Definition: The type of stroke or intracranial hemorrhage that occurred during this hospitalization.

Allowable Values:

- Cerebral Venous Sinus Thrombosis
- Intracerebral Hemorrhage
- Ischemic Stroke
- Stroke Not Otherwise Specified
- Subarachnoid Hemorrhage
- Subdural/ Epidural Hemorrhage
- Transient Ischemic Attack (TIA)
- Not Documented

Notes for Abstraction:

- For patients who arrive with symptoms of stroke and have complete resolution after IV alteplase select 'ischemic stroke'. These cases are sometimes referred to as "aborted stroke".
- For patients admitted with ischemic stroke who are treated with IV alteplase or other medications and develop the complication of intracerebral hemorrhage select 'ischemic stroke'.
- For patients who are documented as having "CVA" or "Stroke" in their medical record, without any additional documentation regarding the stroke type and who have no evidence of hemorrhage on initial brain imaging select 'ischemic stroke'.
- For patients whom there is evidence of both ischemic injury and brain hemorrhage on initial imaging select "stroke not otherwise specified."

Date of Stroke Diagnosis

Definition: The date of stroke diagnosis.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)

- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of stroke diagnosis.

Seizure

Definition: Documentation of a seizure during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation a seizure occurred during this hospitalization.
- No/ ND: There is no documentation a seizure occurred during this hospitalization.

Date of Seizure

Definition: The date the seizure occurred.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of seizure occurrence.
- If repeated or continuous seizure is noted requiring antiseizure medications and/or continuous EEG monitoring, include the date of first or the start of the seizure.

Cardiac Arrest (Code Blue, CPR)

Definition: Documentation of a cardiac arrest requiring medication or electrical shock for resuscitation.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction: N/A

- Yes: There is documentation cardiac arrest occurred during this hospitalization.

- No/ ND: There is no documentation cardiac arrest occurred during this hospitalization.

First Documented Pulseless Rhythm

Definition: Documentation of the first heart rhythm without a palpable pulse.

Allowable Values:

- Asystole
- Pulseless Electrical Activity (PEA)
- Pulseless Ventricular Tachycardia (VT)
- Ventricular Fibrillation (VF)
- Unknown/ ND

Notes for Abstraction:

- This is typically found in the documentation of the Code Blue/ Cardiac Arrest.

Date/ Time of Cardiac Arrest

Definition: The date and time of cardiac arrest.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Time: 24 Hour Clock (Military Time)
 - HH = Hour (00-23)
 - MM = Minutes (00-59)
- Date: MM/DD/YYYY Only
- Unknown

Notes for Abstraction:

- If multiple dates are found in the medical record, use the first recorded date of cardiac arrest occurrence.

Cause of Death Documented

Definition: Documentation of a cause of death.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation of a cause of death. This is typically found in the death summary note.
- No/ ND: There is no documentation a cause of death in the medical record.

Cause of Death

Definition: Documentation of the cause of death in the patient medical record.

Allowable Values:

- AMI
- Arrhythmia
- HF
- Respiratory
- Stroke
- Other

Notes for Abstraction:

- Cause of death is typically found in the death summary note.

Date of Death

Definition: The date of death.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- Date of death is typically found in the death summary note.
-

Was this patient managed in an ICU?

Definition: Documentation of patient management in an intensive care unit at any point during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient was managed on an intensive care unit at any point during hospitalization.
 - Include transfers to the ICU from the floor.
 - Include direct admissions to the ICU from the emergency department.
- No/ ND: There is no documentation that the patient was managed in an intensive care unit at any point during hospitalization.

Date Transferred to ICU

Definition: The date the patient was transferred to the ICU.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple transfer dates are found in the medical record, use the first recorded date of transfer to the ICU.

During this hospitalization, was the patient intubated or placed on mechanical ventilation?

Definition: Documentation of an intubation procedure and/ or mechanical ventilation during hospitalization.

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation that the patient was intubated or placed on mechanical ventilation during hospitalization.
- No/ ND: There is no documentation that the patient was intubated or placed on mechanical ventilation during hospitalization.
- Select “Yes” if there is any documentation of intubation.

Date Mechanical Ventilation Initiated

Definition: The date mechanical ventilation, including BiPAP, was initiated.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)

- DD = Day (01-31)
- YYYY = Year (2012 – Current Year)
- Unknown No

Notes for Abstraction:

- If multiple documented instances of mechanical ventilation, use the first recorded date of documented mechanical ventilation.
- If the patient is on mechanical ventilation or intubated upon arrival to your hospital, enter the admission date as “Date Mechanical Ventilation Initiated”

Date Mechanical Ventilation Terminated

Definition: The date mechanical ventilation was terminated.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- Include the date of terminal extubation as appropriate.
- Include date of death if patient remained intubated upon expiration.
- If the patient is transferred from your facility while still on mechanical ventilation, choose “Unknown”

Was V-V ECMO Performed

Definition: Documentation of venous-venous extracorporeal membrane oxygenation (V-V ECMO)

Allowable Values:

- Yes
- No/ ND

Notes for Abstraction:

- Yes: There is documentation V-V ECMO was performed during this hospitalization.
- No/ ND: There is no documentation V-V ECMO was performed during this hospitalization.

Date V-V ECMO Initiated

Definition: The date V-V ECMO was initiated

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)

- DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction: N/A

Date V-V ECMO Terminated

Definition: The date V-V ECMO was terminated

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction: N/A

Vitals – On Admission

Height

Definition: The patient's height.

Allowable Values:

- Height: Text Field
 - in.
 - cm
- ND

Notes for Abstraction:

- Indicate if height is measured in inches or cm
- If height is not documented, select ND.

Weight – Admission

Definition: The patient's weight on admission.

Allowable Values:

- Weight: Text Field
 - lbs.
 - kg
- ND

Notes for Abstraction:

- Indicate if weight is measured in lbs. or kg.
- If weight is not documented, select ND.

Temperature

Definition: The patient's temperature on admission.

Allowable Values:

- Temperature: Text Field
 - C
 - F
- Temp. ND

Notes for Abstraction:

- Indicate if temperature is measured in C or F.
- If temperature is not documented, select ND.

Heart Rate

Definition: The patient's Heart Rate in beats per minute.

Allowable Values:

- Heart Rate (bpm): Text Field
- HR ND

Notes for Abstraction:

- Enter the patient's first measurement upon presentation to your hospital.
- Enter the first heart rate obtained on admission

Blood Pressure

Definition: Documentation of the first blood pressure (systolic and diastolic values) obtained at admission. Systolic blood pressure is the amount of pressure that blood exerts on vessels while the heart is beating. In a blood pressure reading (e.g., 120/80), it is the number on the top. The diastolic blood pressure number or the bottom number indicates the pressure in the arteries when the heart rests between beats. A normal diastolic blood pressure number is less than 80.

Allowable Values:

- Systolic/ Diastolic: Text Field
- BP ND

Notes for Abstraction:

- To determine the value for this data element, review blood pressure readings obtained prior to and after hospital arrival.
- Select the earliest documented blood pressure regardless of where it was done. Blood pressure readings obtained and documented by EMS, a transferring hospital, or your hospital are acceptable. The first documented blood pressure should be used.

Respiratory Rate

Definition: The patient's Respiratory Rate in breaths per minute.

Allowable Values:

- Respiratory Rate (bpm): Text Field
- RR ND

Notes for Abstraction:

- Enter the patient's first measurement upon presentation to your hospital.
- Enter the first respiratory rate obtained on admission.

SAO2

Definition: The patient's O2 saturation on admission

Allowable Values:

- SAO2 (%): Text Field
 - Room Air
 - Supplemental O2
 - Unknown
- SAO2 ND

Notes for Abstraction:

- Indicate if patient is on room air, supplemental O2 or unknown
- If SAO2 is not documented, select ND.

Labs Tab

Labs – Closest To Admission

Definition: The first available value of the laboratories below on the first day of the admission.

Admission Labs to Collect:

- Hemoglobin (g/dL; g/L)
- WBC (K/uL; mcL)
- Platelet (K/uL)
- Absolute Lymphocyte Count ($\times 10^9$)
- Serum Creatinine – SCr (mg/dL; $\mu\text{mol/L}$)
- AST (u/L)
- ALT (u/L)
- Total Bilirubin (mg/dL)
- Bicarbonate (mEq/L; mmol/L)
- Troponin (ng/mL; $\mu\text{g/L}$)
- NT-proBNP (pg/mL; ng/L)
- BNP (pg/mL; pmol/L; ng/L)
- Ferritin (ng/mL)
- CRP (mg/L; ng/L)
- IL6 (pg/mL, ng/mL)
- D-dimer (ng/mL; $\mu\text{g/mL}$)
- Procalcitonin ($\mu\text{g/L}$, ng/mL)
- Hemoglobin A1C (%)
- Unavailable – Option for each of the above lab values

Notes for Abstraction:

- When multiple values are available on the first day of admission, include the first value on that day.
- If no value is available on the day of admission, include the first documented value during the admission.
- It is important to record results for each test that is available closest to the admission.

Serial Labs Tab

Serial Labs NOT Performed

Definition: Indicate if serial labs were not performed.

Allowable Values:

- Checkbox – Select or Leave Blank

Notes for Abstraction:

- Select the checkbox if serial labs were not performed on this patient during the hospitalization.

Serial Labs – Repeat Labs

Definition: Enter the date and the first lab value collected for the corresponding lab if available in the medical record for that day.

Serial Labs to Collect:

- Troponin (ng/mL; ug/L)
- NT-proBNP (pg/mL; ng/L)
- BNP (pg/mL; ng/L)
- Ferritin (ng/mL)
- CRP (mg/L; ng/L)
- Absolute lymphocyte Count ($\times 10^9$)
- Procalcitonin ($\mu\text{g/L}$; ng/mL)
- IL6 (pg/mL; ng/mL)
- Serum Creatinine – SCr (mg/dL; $\mu\text{mol/L}$)
- D-dimer (mg/L)

Notes for Abstraction:

- If multiple values are available for the same day, include only the first value for that day.
- It is important to record results for each test that is available on a given day, for each day of the admission.
- In the online form, enter the next date to start a new group of serial labs for that day.
- The objective of serial lab collection in this registry is to collect labs for each day of the hospitalization if available in the medical record.
- For extended hospitalizations, it is acceptable to discontinue reporting Serum Creatinine and Absolute Lymphocyte Count lab values for each day of hospitalization after 14 days.
 - If a patient has an extended hospitalization and serial Serum Creatinine and Absolute Lymphocyte Counts were not reported after hospital day 14, still record a final value for each Serum Creatinine and Absolute Lymphocyte Counts closest to discharge.
- If a patient is on renal replacement during hospitalization, reporting of Serum Creatinine may be discontinued in the serial labs.

Medications Tab

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Glucocorticoids

Definition: Documentation of glucocorticoid administration for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization.
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering.

Date of Glucocorticoids

Definition: The date of first administration of glucocorticoids for COVID-19 during hospitalization.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration

Anticoagulation for DVT Prophylaxis/ Treatment

Definition: Documentation of administration of an anticoagulant for either prophylaxis or treatment during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization.
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering.

Anticoagulant Type (DVT)

Definition: The type of anticoagulant given during hospitalization.

Allowable Values:

- Full Dose DOAC
- Full Dose Enoxaparin
- Low Dose DOAC
- Low Dose Enoxaparin
- SCD
- Sub-Q Unfractionated Heparin
- Not Documented

Notes for Abstraction:

- Select the anticoagulant option that best matches the first anticoagulant administration for DVT prophylaxis or treatment during the hospitalization.
- If both low-dose and high-dose are documented, select the full-dose anticoagulant.
- Full dose enoxaparin = Standard Full Anticoagulation 1 mg/kg BID
- Low dose enoxaparin = DVT prophylactic doses (40 mg) and new mid-range dosages being used for prophylaxis in COVID patients (i.e. 60 mg BID)
- Full dose DOAC = 20 mg rivaroxaban, 5 BID apixaban, 150 BID dabigatran, 60 QD of edoxaban
- Low dose DOAC = Any dose other than full for any DOAC

Date of Anticoagulation

Definition: The date Anticoagulation was first administered during hospitalization for DVT prophylaxis or treatment.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If both low-dose and high-dose are documented, select the date of the first administration of full-dose anticoagulant.

Immunoglobulins

Definition: Documentation of intravenous immunoglobulins (IVIG) administration for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization.
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Immunoglobulins

Definition: The date of first documented IVIG administration for COVID-19 during hospitalization.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Convalescent Serum

Definition: Documentation of administration of convalescent serum for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Convalescent serum is defined as serum taken from a person who has recovered from COVID and used as treatment in a patient with current infection.
- Yes: Medication was administered during hospitalization.
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Convalescent Serum

Definition: The date of first administration of convalescent serum for COVID-19 during hospitalization.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Ritonavir/ Lopinavir

Definition: Documentation of administration of ritonavir/ lopinavir for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Ritonavir/ Lopinavir

Definition: The date Ritonavir/ Lopinavir was first administered for COVID-19

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Hydroxychloroquine

Definition: Documentation of the administration of hydroxychloroquine for COVID-19 at any point during hospitalization

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Hydroxychloroquine

Definition: The date hydroxychloroquine was first administered for COVID-19

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Azithromycin

Definition: Documentation of the administration of azithromycin for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Azithromycin

Definition: The date Azithromycin was first administered for COVID-19.

Allowable Values:

- Date: MM/DD/YYYY

- MM = Month (01-12)
- DD = Day (01-31)
- YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Remdesivir

Definition: Documentation of the administration of remdesivir for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Remdesivir

Definition: The date remdesivir was first administered for COVID-19.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Tocilizumab

Definition: Documentation of the administration of tocilizumab for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- Yes: Medication was administered during hospitalization
- No: Medication was not administered during hospitalization.
- NC: Medication was considered but there is documentation in the medical record of a reason for not administering

Date of Tocilizumab

Definition: The date Tocilizumab was first administered for COVID-19.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.

Other (Not Listed) Medications

Definition: Documentation of the administration of any other medication for COVID-19 at any point during hospitalization.

Allowable Values:

- Yes
- No
- NC

Notes for Abstraction:

- If a medication was administered during hospitalization for the treatment of COVID-19 and it is not available in the fields above, select “Yes” here.
- Enter the name of the medication administered in the text box.
- Three “Other” fields are provided for instances when more than one medication not listed in elements above are administered to this patient during hospitalization.
- Other medications may include other anti-IL6 medications, other antiviral medications, and other immunosuppressive medications.

Date of Other Medications

Definition: The date the corresponding “Other” medication was first administered for COVID-19 during hospitalization.

Allowable Values:

- Date: MM/DD/YYYY
 - MM = Month (01-12)
 - DD = Day (01-31)
 - YYYY = Year (2012 – Current Year)
- Unknown

Notes for Abstraction:

- If multiple administrations, enter the date of the first administration.
- Three “Other” fields are provided for instances when more than one medication not listed in elements above are administered to this patient during hospitalization.