

# Comprehensive Adult Data Dictionary Change Log

This document provides a comprehensive record of all changes made to the NYSDOH Adult Sepsis and COVID-19 Data Dictionaries Versions D2.1.1 – 4.0.1 and NYSDOH Adult Data Dictionary for Severe Sepsis or Septic Shock Version D5.0 – D5.0.1.

## Data Dictionary Version D5.0.1

(Effective for Discharges beginning 7/1/2024)

Below is a comprehensive list of changes made to the Adult Data Dictionary Version D5.0.1.

1. Updated the Notes of Abstraction for the following variable:
  - a. *Comorbidity/Risk Factor Variables*
    - i. ***Pregnancy Status During Hospitalization***

## Data Dictionary Version D5.0

(Effective for Discharges beginning 1/1/2024)

Please note that Severe COVID-19 is no longer in the Inclusion Definition for data collection. In addition, some COVID-19 and other variables have been removed from this Adult Data Dictionary Version D5.0.

Below is a comprehensive list of changes made to the Adult Data Dictionary Version D5.0.

1. Removed the severe COVID-19 reference in the '*Key points to remember during data extraction*' section of the data dictionary.
2. Removed the content regarding the CSV Files for NDC codes of medications from the '*Key points to remember during data extraction*' section of the data dictionary.
3. Added information to the '*Key points to remember during data extraction*' section about two new columns that have been provided for optional use by hospitals in the CSV files.
4. Removed the Severe COVID-19 and Table B from the '*Inclusion Definition*' section of the data dictionary.
  - a. Removed all content referencing Severe COVID-19, COVID-19, and Table B.
5. Removed the following variables and any associated CSV files from the data dictionary:
  - a. *Demographic Variables*
    - i. ***Inclusion Severe COVID-19***
  - b. *Comorbidity/Risk Factor Variables*
    - i. ***History of COVID-19***
    - ii. ***History of COVID-19 Datetime***
    - iii. ***Medication Immune Modifying Pre-Hospital***
  - c. *Clinical Variables*
    - i. ***COVID-19 Exposure***
    - ii. ***Suspected Source of Infection***

- d. *Treatment (in hospital) Variables*
    - i. *During Hospital Immune Modifying Medication*
    - ii. *Vasopressor Administration*
- 6. Removed the following code/value of the following variable:
  - a. *Demographic Variables*
    - i. *Discharge Status*
      - 1. 09 = Admitted as an Inpatient to this Hospital. Patient admitted to the same short-term medical or specialty hospital where the hospital-based ambulatory surgery service was performed (excluding chronic disease hospitals).
- 7. Added the following variable to the data dictionary:
  - a. *Comorbidity/Risk Factor Variables*
    - i. *Long-COVID Post-COVID Syndrome*
- 8. Updated the Notes of Abstraction for the following variables:
  - a. *Demographic Variables*
    - i. *Discharge Status*
    - ii. *Source of Admission*
    - iii. *Transferred In*
    - iv. *Transferred Out*
  - b. *Outcome (at discharge) Variables*
    - i. *Dialysis Outcome*
    - ii. *Mechanical Ventilation Outcome*
    - iii. *Tracheostomy at Discharge*
  - c. *Severity Variables*
    - i. *Lactate Level 1*
    - ii. *Lactate Level 2*
    - iii. *Lactate Level 3*
    - iv. *Lactate Level Max*
- 9. Revised the name of all the CSV files and the referenced CSV files in the Notes of Abstraction to reflect the new data dictionary version: change from D4.0.1 to D5.0.
- 10. A list of the codes that were added, removed, or revised for variables that remain in this data dictionary version can be found in the **Summary of ICD-10 Code Changes\_VerD5.0** CSV file. Note this document does not contain the codes in the CSV files that were removed with this Data Dictionary update. CSV files that were removed are listed in #13.
- 11. Revised the CSV files for all variables to include two new columns for optional use by hospitals:
  - a. ICD-10-CM CODE DECIMAL This column was added so that all ICD-10 codes in the CSV files can be coded with or without a decimal point.
  - b. Subcategory Code – This column applies to all variables that have subcategories (e.g., History of Other Cardiovascular disease where 1 = Coronary heart disease [e.g. angina pectoris, coronary atherosclerosis]; 2 =Peripheral artery disease; etc.)
- 12. Revised the CSV files for the variables listed below:
  - a. *Treatment (in hospital) Variables*
    - i. Removed ICD-10-PCS codes from the *Mechanical Ventilation Treatment* CSV file: mechanical\_vent\_treatment\_code\_VerD5.0.csv

- b. *Comorbidity/Risk Factor Variables*
    - i. Added new CSV file and ICD-10 code for **Long-COVID Post-COVID Syndrome**: long\_covid\_post\_covid\_syndrome\_code\_VerD5.0.csv
- 13. Removed all ICD-10 codes and CSV files for the following variables:
  - a. *Demographic Variables*
    - i. **Inclusion Severe COVID-19**
  - b. *Comorbidity/Risk Factor Variables*
    - i. **Medication Immune Modifying Pre-Hospital**
  - c. *Clinical Variables*
    - i. **COVID-19 Exposure**
    - ii. **Suspected Source of Infection**
  - d. *Treatment (in hospital) Variables*
    - i. **During Hospital Immune Modifying Medication**
    - ii. **Vasopressor Administration**

## Data Dictionary Version D4.0.1

(Effective Dates: 10/1/2023 – 12/31/2023)

1. Revised the name of all the CSV files to reflect the new data dictionary version: change from D4.0 to D4.0.1.
2. Revised the CSV files for the variables listed below to add and/or revise ICD-10-CM and
3. ICD-10-PCS codes that became effective on 10/1/2023. A summary of changes made to the ICD-10-CM/PCS csv files can be found in the **Summary of ICD-10 Code Changes\_VerD4.0.1** document. This document includes the codes that were added or revised for this data dictionary version.
  - a. *Comorbidity/Risk Factor Variables*
    - i. Added **Acute Cardiovascular Conditions (POA)** ICD-10-CM codes on the csv file: acute\_cardiovascular\_conditions\_code\_VerD4.0.1.csv
    - ii. Added and revised **History of Other Cardiovascular Disease** ICD-10-CM codes on the csv file: history\_of\_other\_cvd\_code\_VerD4.0.1.csv
    - iii. Added **Hypertension** ICD-10-CM codes on the csv file: hypertension\_code\_VerD4.0.1.csv
  - b. *Clinical Variables*
    - i. Added **Drug Resistant Pathogen** ICD-10-CM codes on the csv file: drug\_resistant\_pathogen\_code\_VerD4.0.1.csv
  - c. *Treatment (in hospital) Variables*
    - i. Added **Mechanical Ventilation Treatment** ICD-10-PCS codes on the csv file: mechanical\_vent\_treatment\_code\_VerD4.0.1.csv

## Data Dictionary Version D4.0

(Effective Dates: 1/1/2023 – 9/30/2023)

1. Updated information about CSV file format in *Key points to remember during*

*data extraction.*

2. Added reminders to *Key points to remember during data extraction* about attesting to 0 and reporting all variables outlined in the Data Dictionary for all cases that meet inclusion criteria.
3. Added the following variables to *Demographic Variables* section of the data dictionary:
  - a. **Preferred Language**
  - b. **Type of Admission**
4. Changed name of Gender variable to **Sex** in *Demographic Variables*.
5. Updated codes and values for the following *Demographic Variables* to align with SPARCS data dictionaries:
  - a. **Ethnicity**
  - b. **Race**
6. Updated description of **Insurance Number** in *Demographic Variables* to request Medicare Beneficiary Information (MBI) number instead of Health Insurance Claim number (HICN).
7. Added, where applicable, a note to the Notes For Abstraction when a *Demographic Variable* is also collected in SPARCS and provided the SPARCS data element name and SPARCS Definition.
8. Removed **During Hospital Remdesivir** from *Treatment (in hospital) Variables*.
9. Revised the CSV files and the name of the referenced CSV files for the variables listed below. A summary of changes made to the ICD-10-CM and NDC csv files can be found in the **Summary of ICD-10-CM Code Changes\_VerD4.0** and **Summary of NDC Code Changes\_VerD4.0** documents, respectively. These documents include the codes that were added or removed for this data dictionary version.
  - a. *Comorbidity/Risk Factor Variables*
    - i. Added and removed **Medication Immune Modifying Pre-Hospital** NDC codes on the csv file:  
medication\_immune\_modifying\_ndc\_code\_VerD4.0.csv
    - ii. Added **Chronic Kidney Disease** ICD-10-CM codes on the csv file: chronic\_kidney\_disease\_code\_VerD4.0.csv
    - iii. Added and removed **Chronic Liver Disease** ICD-10-CM codes on the csv file: chronic\_liver\_disease\_code\_VerD4.0.csv
    - iv. Added **History of Other Cardiovascular Disease** ICD-10-CM codes on the csv file: history\_of\_other\_cvd\_code\_VerD4.0.csv
    - v. Added **Hypertension** ICD-10-CM codes on the csv file: hypertension\_code\_VerD4.0.csv
    - vi. Added **Immunocompromising** ICD-10-CM codes on the csv file: immunocompromising\_code\_VerD4.0.csv
    - vii. Added **Lymphoma Leukemia Multiple Myeloma** ICD-10-CM codes on the csv file: lymphoma\_leukemia\_multi\_myeloma\_code\_VerD4.0.csv
    - viii. Added **Metastatic Cancer** ICD-10-CM codes on the csv file:  
ix. metastatic\_cancer\_code\_VerD4.0.csv
  - b. *Clinical Variables*
    - i. Removed **COVID-19 Exposure** ICD-10-CM codes on the csv

- file: covid\_exposure\_code\_VerD4.0.csv
    - ii. Added and removed **Suspected Source of Infection** ICD-10-CM codes on the csv file: suspected\_source\_of\_infection\_code\_VerD4.0.csv
  - c. *Treatment (in hospital) Variables*
    - i. Added and removed **During Hospital Immune Modifying Medication** NDC codes on the csv file: medication\_immune\_modifying\_ndc\_code\_VerD4.0.csv
    - ii. Added and removed **Vasopressor Administration** NDC codes on the csv file: vasopressor\_administration\_ndc\_code\_VerD4.0.csv
  - d. *Severity Variables*
    - i. Removed **Organ Dysfunction Respiratory** ICD-10-CM codes on the csv file: organ\_dysfunc\_respiratory\_code\_VerD4.0.csv
- 10. Modified the CSV files for **Vasopressor Administration**, **Medication Immune Modifying Pre-Hospital** and **During Hospital Immune Modifying Medication** to indicate whether an NDC code was added or revised and if the code was active at the time of data dictionary
- 11. (DV4.0) publication. Please see the **Summary of NDC Code Changes\_VerD4.0** document for a comprehensive csv file of changes made to the NDC code csv files for this data dictionary version.
  - a. These CSV files now contain three additional columns: 'Add', 'Revise' and 'Active':
    - i. Add: 1 = newly added NDC code; 0 = not a new addition
    - ii. Revise: 1 = revised description for NDC code; 0 = no revisions
    - iii. Active: 1 = code is active NDC code; 0 = code is inactive NDC code

## Data Dictionary Version D3.0.2

(Effective Dates: 10/1/2022 – 12/31/2022)

1. Revised the CSV files and the name of the referenced CSV files for the variables listed below. Specifically, added ICD-10-CM codes or revised ICD-10-CM code descriptions to align with the ICD-10-CM FY 2023 October 1 release (effective 10/01/2022). Please refer to the Adult D3.0.2 Summary Change CSV file document to see the complete list of ICD-10-CM code changes and their respective variables.
  - a. *Comorbidity Variables*
    - i. Added **Chronic Liver Disease** ICD-10-CM codes on the csv file: chronic\_liver\_disease\_code\_VerD3.0.2.csv
    - ii. Added **Coagulopathy** ICD-10-CM codes on the csv file: coagulopathy\_code\_VerD3.0.2
    - iii. Added and Revised **Dementia ICD-10-CM Codes** ICD-10-CM codes on the CSV File: dementia\_code\_verD3.0.2
    - iv. Added **History of Other Cardiovascular Disease** ICD-10-CM codes on the CSV File: history\_of\_other\_cvd\_code\_verD3.0.2
    - v. Added **Immunocompromising** ICD-10-CM codes on the CSV File: immunocompromising\_code\_verD3.0.2
    - vi. Revised **Lymphoma Leukemia Multiple Myeloma** ICD-10-CM codes on

the CSV File: lymphoma\_leukemia\_multi\_myeloma\_code\_verD3.0.2

- b. *Clinical Variables*
  - i. Revised **Suspected Source of Infection** ICD-10-CM codes on the CSV File: suspected\_source\_of\_infection\_code\_verD3.0.2
2. Modified all CSV files to indicate whether a code has been added or whether the code description has been revised.
  - a. All CSV files now contain two columns: 'Add' and 'Revise'
    - i. These two columns are marked off as either: '0' or '1'
      1. '0' means 'No' change (either 'Add' or 'Revise') was made
      2. '1' means 'Yes' change (either 'Add' or 'Revise') was made

## Data Dictionary Version D3.0.1

(Effective Dates: 4/1/2022 – 9/30/2022)

1. Modified the CSV files and the name of the referenced CSV files for the following variables of the *Demographic Variables* section of the data dictionary:
  - a. **Inclusion Septic Shock**
  - b. **Inclusion Severe COVID**
  - c. **Inclusion Severe Sepsis**

## Data Dictionary Version D3.0

(Effective Dates: 1/1/2022 – 3/31/2022)

1. Added to the “Key points to remember during data extraction” of the data dictionary:
  - a. For patients who are not admitted to the hospital (i.e., ED/Observation only), the patient’s age at arrival should be used to determine reporting to the adult or the pediatric database.
  - b. Appendices no longer available as of Data Dictionary Version D3.0.
2. Added eight (8) new variables to the *Demographic Variables* section of the data dictionary:
  - a. **Inclusion Septic Shock**
  - b. **Inclusion Severe COVID**
  - c. **Inclusion Severe Sepsis**
  - d. **Patient City**
  - e. **Patient County Code**
  - f. **Patient Street Address Line 1**
  - g. **Patient Street Address Line 2**
  - h. **Patient State**
3. Added **Skin Disorders/Burns (POA)** to the *Comorbidity/Risk Factor Variables*, and a corresponding appendix of ICD-10-CM codes to the csv file.
4. Added Notes of Abstraction to **Payer** in the *Demographic Variables* section of the data dictionary:
  - a. If the patient has no insurance prior to admission and is pending Medicaid approval during hospitalization, please report the payer as Medicaid.

5. Added Notes of Abstraction to clarify the role of POA indicator for these following
6. *Comorbidity/Risk Factor Variables*:
  - a. *Acute Cardiovascular Conditions (POA)*
  - b. *Coagulopathy (POA)*
  - c. *Dialysis Comorbidity (POA)*
  - d. *Mechanical Ventilation (POA)*
  - e. *Tracheostomy on Arrival (POA)*
7. Modified variable name and description to the following *Comorbidity/Risk Factor Variables*:
  - a. *AIDS/HIV Disease*
  - b. *Asthma*
  - c. *Chronic Liver Disease*
  - d. *Chronic Kidney Disease*
  - e. *Chronic Respiratory Failure*
  - f. *Congestive Heart Failure*
  - g. *COPD*
  - h. *Dementia*
  - i. *Diabetes*
  - j. *History of Other Cardiovascular Disease*
  - k. *Hypertension*
  - l. *Immunocompromising*
  - m. *Lymphoma/Leukemia/Multiple Myeloma*
  - n. *Medication Immune Modifying Pre-Hospital*
  - o. *Metastatic Cancer*
  - p. *Obesity*
  - q. *Pregnancy Comorbidity*
  - r. *Skin Disorders/Burns*
  - s. *Smoking Vaping*
8. Modified Notes of Abstraction of all variables with references to an appendix.
  - a. With the removal of the Appendix document, the applicable ICD-10/NDC codes are found in the csv file of the corresponding version of the data dictionary.
9. Modified the Codes and Values of *ICD-10-CM POA Indicator (n)* in the *Demographic Variables* section of the data dictionary:
  - a. Aligned the definition of the Codes and Values to the official indicator definitions (CMS).
  - b. Replaced “E = Exempt from POA reporting” to “1 = Unreported/Not used. Exempt from POA reporting”
10. Added Notes of Abstraction to *ICD-10-CM POA Indicator (n)* in the *Demographic Variables*
11. section of the data dictionary:
  - a. *ICD-10-CM POA Indicator (n)* is mandatory. In rare instances, when the values are truly unattainable from the EHR, report missing values as blank.
  - b. *ICD-10-CM POA Indicator (n)* is not applicable to emergency department (ED)/observation only cases. For ED/observation only cases, report as blank.



12. Modified variable name and the Description and the Notes of Abstraction of *History of COVID-19* in the *Comorbidity/Risk Factor Variables* section of the data dictionary to include “within 12 weeks” timeframe.
13. Modified variable name and added Notes of Abstraction to *History of COVID-19 Datetime* in the *Comorbidity/Risk Factor Variables* section of the data dictionary:
  - a. If the *History of COVID-19* is reported as “0 = No”, then *History of COVID-19 Datetime* should be reported as blank.
14. Modified variable name of *Chronic Renal Failure (POA)* in the *Comorbidity/Risk Factor Variables* section of the data dictionary to: *Chronic Kidney Disease*.
15. Removed the following *Comorbidity/Risk Factor Variables* from the data dictionary and the csv file:
  - a. *Altered Mental Status (POA)*
  - b. *Medication Anticoagulation (POA)*
16. Removed the following *Treatment Variables* from the data dictionary and the csv file:
  - a. *During Hospital Anticoagulation*
17. Removed the following *Outcome (at discharge) Variables* from the data dictionary and the csv file:
  - a. *Cardiovascular Outcomes at Discharge*
18. Removed the following *Outcome (in hospital) Variables* from the data dictionary and the csv file:
  - a. *PE/DVT*
19. Revised *Dialysis Treatment* ICD-10-PCS codes on the csv file: dialysis\_treatment\_code\_VerD3.0.csv
  - a. Removed the following ICD-10-PCS codes:
    - i. 5A1D00Z – Performance of Urinary Filtration Single
    - ii. 5A1D60Z – Performance of Urinary Filtration Multiple
  - b. Added the following ICD-10-PCS code:
    - i. 3E1M39Z – Peritoneal Dialysis

## Data Dictionary Version D2.1.2

(Effective Dates: 9/1/2021 – 12/31/2021)

1. For consistency reasons and alignment with the upcoming pediatric data dictionary all lab- based severity variables are named after the lab while all ICD-10-CM code-based severity variables are named organ dysfunction and organ name.
  - a. Specifically, the existing lab-based variables *Organ Dysfunction Hepatic* and *Datetime* was renamed *Bilirubin Arrival, Max*, and *Datetime*. A new ICD-10-CM code-based variable *Organ Dysfunction Hepatic* was added.
  - b. Specifically, the existing lab-based variable *Organ Dysfunction Renal* and *Datetime* was renamed *Creatinine Arrival, Max*, and *Datetime*. A new ICD-10-CM code-based variable *Organ Dysfunction Renal* was added.
2. New data elements were added:
  - a. *Organ Dysfunction Cardiovascular*



- b. *Organ Dysfunction Hematologic*
  - c. *Organ Dysfunction Hepatic*
  - d. *Organ Dysfunction Renal*
  - e. *Cardiovascular Outcomes at Discharge*
- 3. Variable value was updated for the following variables:
  - a. *Patient Care Considerations*
  - b. *Cardiovascular Outcomes in Hospital*
  - c. *History of Cardiovascular Disease*
  - d. *Lactate Level 1*
  - e. *Lactate Level 2*
  - f. *Lactate Level 3*
  - g. *Lactate Level Max*
  - h. *Patient Care Considerations*
  - i. *Payer*
- 4. Data element name and template variable name were updated for the following variables:
  - a. *Bilirubin Arrival*
  - b. *Bilirubin Max*
  - c. *Bilirubin Arrival Datetime*
  - d. *Bilirubin Max Datetime*
  - e. *Cardiovascular Outcomes in Hospital*
  - f. *Creatinine Arrival*
  - g. *Creatinine Max*
  - h. *Creatinine Arrival Datetime*
  - i. *Creatinine Max Datetime*
- 5. Variable length was updated for the following variables:
  - a. *aPTT 1*
  - b. *aPTT 2*
  - c. *aPTT 3*
  - d. *aPTT Max*
  - e. *Bilirubin Arrival*
  - f. *Bilirubin Max*
  - g. *Platelets 1*
  - h. *Platelets 2*
  - i. *Platelets 3*
  - j. *Platelets Min*
  - k. *SIRS Leukocyte Arrival*
  - l. *SIRS Leukocyte Min*
  - m. *SIRS Leukocyte Max*
- 6. Notes of abstraction were updated for the following variables
  - a. *aPTT 1, 2, 3, MAX* and corresponding *Datetimes*
  - b. *Bilirubin Arrival and MAX* and corresponding *Datetimes*
  - c. *Cardiovascular Outcomes in Hospital*
  - d. *Creatinine Arrival, MAX* and corresponding *Datetimes*
  - e. *Diastolic First, Second, Third, MIN* and corresponding *Datetimes*

- f. *INR 1, 2, 3, MAX* and corresponding *Datetimes*
  - g. *Lactate Level 1, 2, 3, MAX* and corresponding *Datetimes*
  - h. *Organ Dysfunction CNS*
  - i. *Organ Dysfunction Respiratory*
  - j. *Platelets 1, 2, 3, MIN* and corresponding *Datetimes*
  - k. *SIRS Heart Rate 1, 2, 3, Max* and corresponding *Datetimes*
  - l. *SIRS Leukocyte Arrival, MIN, MAX* and corresponding *Datetimes*
  - m. *SIRS Respiratory Rate 1, 2, 3, Max* and corresponding *Datetimes*
  - n. *SIRS Temperature 1, 2, 3, Max* and corresponding *Datetimes*
  - o. *Diastolic First, Second, Third, Min* and corresponding *Datetimes*
  - p. *Systolic First, Second, Third, Max* and corresponding *Datetimes*
7. Several appendices were added. Be sure to review Appendices D2.1.1 change log for the specific variables that were added. The following appendices were added:
    - a. Appendix 4A: Cardiovascular Outcomes at Discharge ICD-10 CM Codes
    - b. Appendix 6A: Organ Dysfunction Cardiovascular ICD-10 CM Codes
    - c. Appendix 6C: Organ Dysfunction Hematologic ICD-10-CM Codes
    - d. Appendix 6D: Organ Dysfunction Hepatic ICD-10 CM Codes
    - e. Appendix 6E: Organ Dysfunction Renal ICD-10 CM Codes
  8. The numbers of the following appendices were updated:
    - a. Appendix 5A: Cardiovascular Outcomes in Hospital ICD-10-CM Codes
    - b. Appendix 5B: Pulmonary Embolism (PE) and/or Deep Venous Thrombosis (DVT)
      - i. Outcome ICD-10-CM Codes
    - c. Appendix 5C: Tracheostomy in Hospital ICD-10-PCS Codes
    - d. Appendix 6B: Organ Dysfunction CNS Severity ICD-10-CM Codes
    - e. Appendix 6F: Organ Dysfunction Respiratory Severity ICD-10-CM Codes
  9. The following appendices were updated to include additional codes:
    - a. Appendix 1A: Acute Cardiovascular Comorbidity / Risk Factor (POA) ICD-10 CM Codes
    - b. Appendix 1N: History of Other Cardiovascular Comorbidity / Risk Factor (POA) ICD- 10-CM Codes
    - c. Appendix 4E: Cardiovascular Outcomes in Hospital ICD-10-CM Codes
  10. The names of the following appendices were updated:
    - a. Appendix 1A: Acute Cardiovascular Conditions Comorbidity / Risk Factor (POA) ICD- 10 CM Codes
    - b. Appendix 1N: History of Other Cardiovascular Disease Comorbidity / Risk Factor (POA) ICD-10-CM Codes
    - c. Appendix 1W: Pregnancy Comorbidity / Risk Factor (POA) ICD-10 CM Codes
    - d. Appendix 4E: Cardiovascular Outcomes in Hospital ICD-10-CM Codes

## **Data Dictionary Version D2.1.1**

(Effective Dates: 12/1/2020 – 8/31/2021)

1. For consistency reasons and alignment with the upcoming pediatric data dictionary all lab-based severity variables are named after the lab while all ICD-10-CM code-based

severity variables are named organ dysfunction and organ name.

- a. Specifically, the existing lab-based variables *Organ Dysfunction Hepatic* and *Datetime* was renamed *Bilirubin Arrival, Max*, and *Datetime*. A new ICD-10-CM code-based variable *Organ Dysfunction Hepatic* was added.
- b. Specifically, the existing lab-based variable *Organ Dysfunction Renal* and *Datetime* was renamed *Creatinine Arrival, Max*, and *Datetime*. A new ICD-10-CM code-based variable *Organ Dysfunction Renal* was added.
2. New data elements were added:
  - a. *Organ Dysfunction Cardiovascular*
  - b. *Organ Dysfunction Hematologic*
  - c. *Organ Dysfunction Hepatic*
  - d. *Organ Dysfunction Renal*
  - e. *Cardiovascular Outcomes at Discharge*
3. Variable value was updated for the following variables:
  - a. *Patient Care Considerations*
  - b. *Cardiovascular Outcomes in Hospital*
  - c. *History of Cardiovascular Disease*
  - d. *Lactate Level 1*
  - e. *Lactate Level 2*
  - f. *Lactate Level 3*
  - g. *Lactate Level Max*
  - h. *Patient Care Considerations*
  - i. *Payer*
4. Data element name and template variable name were updated for the following variables:
  - a. *Bilirubin Arrival*
  - b. *Bilirubin Max*
  - c. *Bilirubin Arrival Datetime*
  - d. *Bilirubin Max Datetime*
  - e. *Cardiovascular Outcomes in Hospital*
  - f. *Creatinine Arrival*
  - g. *Creatinine Max*
  - h. *Creatinine Arrival Datetime*
  - i. *Creatinine Max Datetime*
5. Variable length was updated for the following variables:
  - a. *aPTT 1*
  - b. *aPTT 2*
  - c. *aPTT 3*
  - d. *aPTT Max*
  - e. *Bilirubin Arrival*
  - f. *Bilirubin Max*
  - g. *Platelets 1*
  - h. *Platelets 2*
  - i. *Platelets 3*
  - j. *Platelets Min*
  - k. *SIRS Leukocyte Arrival*
  - l. *SIRS Leukocyte Min*
  - m. *SIRS Leukocyte Max*

6. Notes of abstraction were updated for the following variables
  - a. *aPTT 1, 2, 3, MAX* and corresponding *Datetimes*
  - b. *Bilirubin Arrival and MAX* and corresponding *Datetimes*
  - c. *Cardiovascular Outcomes in Hospital*
  - d. *Creatinine Arrival, MAX* and corresponding *Datetimes*
  - e. *Diastolic First, Second, Third, MIN* and corresponding *Datetimes*
  - f. *INR 1, 2, 3, MAX* and corresponding *Datetimes*
  - g. *Lactate Level 1, 2, 3, MAX* and corresponding *Datetimes*
  - h. *Organ Dysfunction CNS*
  - i. *Organ Dysfunction Respiratory*
  - j. *Platelets 1, 2, 3, MIN* and corresponding *Datetimes*
  - k. *SIRS Heart Rate 1, 2, 3, Max* and corresponding *Datetimes*
  - l. *SIRS Leukocyte Arrival, MIN, MAX* and corresponding *Datetimes*
  - m. *SIRS Respiratory Rate 1, 2, 3, Max* and corresponding *Datetimes*
  - n. *SIRS Temperature 1, 2, 3, Max* and corresponding *Datetimes*
  - o. *Diastolic First, Second, Third, Min* and corresponding *Datetimes*
  - p. *Systolic First, Second, Third, Max* and corresponding *Datetimes*
7. Several appendices were added. Be sure to review Appendices D2.1.1 change log for the specific variables that were added. The following appendices were added:
  - a. Appendix 4A: Cardiovascular Outcomes at Discharge ICD-10 CM Codes
  - b. Appendix 6A: Organ Dysfunction Cardiovascular ICD-10 CM Codes
  - c. Appendix 6C: Organ Dysfunction Hematologic ICD-10-CM Codes
  - d. Appendix 6D: Organ Dysfunction Hepatic ICD-10 CM Codes
  - e. Appendix 6E: Organ Dysfunction Renal ICD-10 CM Codes
8. The numbers of the following appendices were updated:
  - a. Appendix 5A: Cardiovascular Outcomes in Hospital ICD-10-CM Codes
  - b. Appendix 5B: Pulmonary Embolism (PE) and/or Deep Venous Thrombosis (DVT)
    - i. Outcome ICD-10-CM Codes
  - c. Appendix 5C: Tracheostomy in Hospital ICD-10-PCS Codes
  - d. Appendix 6B: Organ Dysfunction CNS Severity ICD-10-CM Codes
  - e. Appendix 6F: Organ Dysfunction Respiratory Severity ICD-10-CM Codes
9. The following appendices were updated to include additional codes:
  - a. Appendix 1A: Acute Cardiovascular Comorbidity / Risk Factor (POA) ICD-10 CM Codes
  - b. Appendix 1N: History of Other Cardiovascular Comorbidity / Risk Factor (POA) ICD- 10-CM Codes
  - c. Appendix 4E: Cardiovascular Outcomes in Hospital ICD-10-CM Codes
10. The names of the following appendices were updated:
  - a. Appendix 1A: Acute Cardiovascular Conditions Comorbidity / Risk Factor (POA) ICD- 10 CM Codes
  - b. Appendix 1N: History of Other Cardiovascular Disease Comorbidity / Risk Factor (POA) ICD-10-CM Codes
  - c. Appendix 1W: Pregnancy Comorbidity / Risk Factor (POA) ICD-10 CM Codes
  - d. Appendix 4E: Cardiovascular Outcomes in Hospital ICD-10-CM Codes