I. Specification of Records Included in Dataset

One record per hospitalization. Each record meets all of the following criteria:

a. Female age 18-50 at time of inpatient admission. Exclude any women that were less than 18 years or over 50 years at any time during the pre-defined flu season.

b. Pregnant at time of admission.

c. Date of admission during flu season 2010/11 thru 2015/16

d. Eventual pregnancy outcome of live birth or stillbirth at >= 20 weeks gestational age.

e. Discharge diagnosis of ARI/Febrile illness OR any influenza testing performed during hospitalization or in 3 days prior to admission.

Data may include more than one hospitalization per woman across seasons; more than one hospitalization within a season will be addressed as follows:
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- A second hospitalization (with an ARI/F code) admission that occurs ≥15 days from discharge date of a previous hospitalization with ARI/F will be considered a new hospitalization, adding to the denominator of observed hospital events for that season.
- A second hospitalization (with an ARI/F code) will be considered part of the same hospital event if the second admission occurs ≤14 days of the prior hospitalization discharge date. How information from both hospitalizations will be utilized may vary by manuscript project. For the VE project:
  - Any influenza testing that occurred during either hospitalization or within 3 days prior to either admission will be examined. RT-PCR influenza positive result from any of these tests will indicate an influenza positive hospitalization.
  - Reference both sets of discharge codes when creating derived variables. For example, ICD-10 code of J10 listed in the second set of discharge codes but not the first would still result in a “1” for ARIF_SUM_PI.

Different manuscript projects will utilize these events differently. For example, the vaccine effectiveness (VE) paper will exclude hospitalizations if they do not involve an ARI/F code even if influenza testing was performed.

The variables in Section XIII: Vaccination Patterns apply to the following population:

One record per pregnancy per influenza season (Unique PID-SEASON_YEAR combo). Each record meets all of the following criteria:

a) Female age 18-50 years as of pregnancy start date. Exclude any women that were less than 18 years or over 50 years as of pregnancy start date.

b) Pregnancy overlapped at least one of the pre-defined, site-specific influenza seasons.

c) Pregnancy reached ≥20 weeks gestation

Notes: If a pregnancy overlaps two flu seasons, two records are generated, one for each season. If a woman has two pregnancies in a single influenza season, use the first pregnancy.

XV.
### II. Setting and Season Information

| Variable Name         | Variable Label                  | Variable Description                                                                 | Value Labels                                                                 | Notes                                                                 |
|-----------------------|---------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------|
| SITE                  | Sub-site or region              | Region within a site – larger than the hospital-level                                  | Site specific variable                                                       |                                                                      |
| PID                   | Participant ID                  | Participant ID – uniquely associated with each individual like medic rec # or unique ID for your site | Site specific variable                                                       | Same woman can appear more than once in the dataset.                  |
| SEASON_YEAR           | Season year of hospitalization   | Each site to create variable to uniquely identify each season. Sites will have documented start and end of season in supplemental materials. | “2010/11” “2011/12” “2012/13” “2013/14” “2014/15” “2015/16”                  | Each site will document the start and end date of each local influenza season per Network procedures |
| SEASON_Flu_PERIOD     | Level of influenza circulation when hospitalized | Level of influenza circulation when hospitalized | 1 = Early season with sustained local circulation at low levels  
2 = High and peak periods of circulation  
3 = Late season with sustained local circulation at low levels | Each site will document how each of these periods are defined per season in their supplemental material, using common cross-site procedures. Data set may include women enrolled outside of flu season for sub-studies such as focus on RSV. |
| SEASON_RSV_PERIOD | Hospitalization during or outside of defined RSV season | Hospitalization during or outside of defined RSV season | 0 = Outside of RSV season  
1 = Early season with sustained local circulation at low levels  
2 = High and peak periods of circulation  
3 = Late season with sustained local circulation at low levels | Start and end dates of RSV season are defined using common cross-site procedures that are consistent with the procedures for defining influenza season. |
### Variable Name | Variable Label | Variable Description | Value Labels | Notes |
|----------------|---------------|----------------------|--------------|-------|
| ARIF_SUM_DI    | ARI/F dx at discharge dichotomy | Acute respiratory or febrile ICD dx at discharge | 0 = None of ARI/F codes listed at discharge; 1 = One or more ARI/F codes listed at discharge | Note that all events in the primary study analyses will have one of these codes. It is included as a variable for sites that plan to extract a broader set of hospital events that may not be ARI/F. See Appendix of this document for ICD-10 code definitions. ICD-9: 079.6, 079.99, 460-466, 478.19, 480-488, 490, 510.9, 511.0, 511.1, 511.89, 518.0, 518.4, 518.81, 519, 659.21, 669.11, 669.12, 669.14, 672.02, 672.04, 780.60, 780.64, 785.50, 785.52, 786.00, 786.02, 786.05, 786.09, 786.30, 786.05, 786.06, 786.07, 786.09, 786.1, 786.2, 786.4, 786.52, 786.7, 799.02, 799.1, 995.91, 995.92 | |
| ARIF_SUM_PRIMARY | ARI/F code is primary diagnostic code | Indicates if one of the ARI/F codes listed in ARIF_SUM_DI above was the primary diagnosis or first listed | 0 = ARI/F code not primary or first diagnosis; 1 = ARI/F code was primary or first diagnosis; 99 = No ARI/F code at discharge | ICD-10: A41.9, B34, B97.4, B97.8, J00-J04, J06, J09-J18, J20, J21, J22, J39.8, J39.9, J40, J80, J81, J86.9, J90, J96.00-J96.02, J96.90-J96.92 (ICD-10-CA: J9690, J9691, J9699), J98.09 (ICD-10-CA: J980), J98.11 (ICD-10-CA: J9810), J98.19, J98.4, J98.8, J98.9, J07.1, J07.5.2 (ICD-10-CA: O75201, O75203, O75209), O86.4 (ICD-10-CA: O86402, O86404, O86409), O98.51-O98.53 (ICD-10-CA: O98501, O98502, O98504, O98509), O98.81, O98.811-O98.813, O98.819 (ICD-10-CA: O98801-O98804, O98809), O99.511-O99.513, O99.519 (ICD-10-CA: O99501-O99504, O99509), R04.2, R05, R06.0 (ICD-10-CA/AM: R060), R06.1, R06.2, R06.8, R06.82 (ICD-10-CA: R064), R07.1, R09.0, R09.02, R09.1, R09.2, R09.3, R09.81, R09.89 R50, R57.9, R65.21, R68.83 (ICD-10-CA: R680) | |
| ARIF_SUM_PI     | Pneumonia or influenza dx | Pneumonia or influenza listed in DC | 0 = Neither pneumonia or influenza listed; 1 = Either pneumonia and or influenza listed in DC | ICD-9: 480 – 487 ICD-10: J10 – J18, J09 | |
| ARIF_SUM_INFLU  | Influenza dx | Influenza listed in DC | 0 = No influenza code listed; 1 = One or more influenza code listed in DC | ICD-9: 487 ICD-10: J09, J10, J11 |
| Variable Name       | Variable Label            | Variable Description             | Value Labels                                                                 | Notes                                                                 |
|---------------------|---------------------------|----------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------|
| ARIF_SUM_PNEUM      | Pneumonia dx              | Pneumonia listed in DC           | 0 = No pneumonia code listed 1 = One or more pneumonia code listed in DC | ICD-9: 480-486, 487.01  
ICD-10: J12-J18                                                                   |
| ARIF_SUM_FEBRILE    | Febrile dx                | Febrile dx listed in DC          | 0 = No febrile code listed 1 = One or more febrile code listed              | ICD-9: 659.21, 672.02, 672.04, 780.60, 780.64  
ICD-10: 075.2 (ICD-10-CA: 075201, 075203, 075209), O86.4 (ICD-10-CA: 086402, 086404, 086409), R50, R68.83 (ICD-10-CA: R680) |
| ARIF_SUM_RESP       | Acute respiratory diagnosis | Acute respiratory diagnosis at DC | 0 = No ARI dx 1 = 1 or more ARI dx                                         | Any of the following sub-variables is equal to 1:  
ARIF_SUM_PNEUM  
ARIF_RESP_FAIL_ARREST  
ARIF_PULM_COLL  
ARIF_PLEUR_EFFSN  
HR_ARDS  
HR_ASTHMA_EXACER  
HR_PNEUMOTHORAX  
HR_LUNG_ABSD |
| HOSP_SUM_METABOLIC  | Acute renal or liver failure | Acute renal or liver failure at DC | 0 = None 1 = Acute renal or liver failure                                   | Any of the following sub-variables is equal to 1:  
HR_RENAL_FAIL  
HR_LIVER_FAIL |
| HOSP_SUM_CARDIO     | Acute cardiovascular event | Acute cardiovascular event at DC  | 0 = None 1 = Acute cardiovascular event                                     | Any of the following sub-variables is equal to 1:  
HR_HEART_FAIL  
HR_ART_VEN_EMBOL  
HR_PULM_EMBOL  
HR_CARDITIS  
HR_CARD_ARREST |
| HOSP_SUM_NEURO      | Acute neurologic event     | Acute neurologic event at DC     | 0 = None 1 = Acute neurologic event                                         | Any of the following sub-variables is equal to 1:  
HR_ALT_MENT  
HR_ENCEPHAL  
HR_MENINGITIS  
HR_ANOX_BRN_DMG  
HR_ENCEPH_MYEL  
HR_COMA  
HR_EPILEP  
HR_POLYNEURO |
## Variable Name | Variable Label | Variable Description | Value Labels | Notes | Notes |
|----------------|----------------|---------------------|--------------|-------|-------|
| HOSP_SUM_MUSC  | Acute musculoskeletal event | Acute musculoskeletal event at DC | 0 = None 1 = Acute musculoskeletal event | Any of the following sub-variables is equal to 1:  
HR_RHABDOMYOL  
HR_MYOSITIS  
HR_MYOPATHY | |
| HOSP_SUM_CEREBRO | Acute cerebrovascular event | Acute cerebrovascular event at DC | 0 = none 1 = Acute cerebrovascular event | Any of the following sub-variables is equal to 1:  
HR_CEREBRAL_INFARC  
HR_CEREBRAL_HEMR  
HR_CEREBRAL_EDEMA | |
| HOSP_SUM_ENDOCRINE | Acute endocrine event | Acute endocrine event at DC | 0 = None 1 = Acute endocrine event | Any of the following sub-variables is equal to 1:  
HR_KETAOACIDOSIS  
HR_HYPRSMOLRTY  
HR_DIABET_COMA  
HR_THYRD_STORM | |
| HOSP_SUM_VOM_HYPER | Excessive vomiting complication | Excessive vomiting complication at DC | 0 = None 1 = Excessive vomiting complication | PC_VOMIT is equal to 1 | |
| HOSP_SUM_ANY_CRIT | Any critical illness | Any critical illness at DC | 0 = None 1 = Critical illness | Any of the following sub-variables is equal to 1:  
ICU_ANY  
ARIF_RESP_FAIL_ARREST  
HOSP_ECMO  
Or HOSP_DCSTATUS is equal to 4. | |

### IV. Acute Respiratory or Febrile Illness (ARI/F) Specific Diagnosis Codes

| Variable Name | Variable Label | Variable Description | Value Labels | Notes | Notes |
|---------------|----------------|---------------------|--------------|-------|-------|
| ARIF_RSV     | RSV dx at discharge | RSV dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 079.6  
ICD-10: B97.4 | |
| ARIF_VIRAL_UNSPEC | Unspecified viral infection dx at discharge | Unspecified viral infection dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 079.99  
ICD-10:B34, B97.8 | |
| Index  | Description                                                                 | Codes                                                                 | Notes                                                                 |
|--------|------------------------------------------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|
| ARIF_NASOPHAR | Acute nasopharyngitis (common cold) dx at discharge | Acute nasopharyngitis (common cold) dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 460  
ICD-10: J00 |
| ARIF_SINUS | Acute sinusitis dx at discharge | Acute sinusitis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 461  
ICD-10: J01 |
| ARIF_PHARYN | Acute pharyngitis dx at discharge | Acute pharyngitis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 462  
ICD-10: J02 |
| ARIF_TONSIL | Acute tonsillitis dx at discharge | Acute tonsillitis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 463  
ICD-10: J03 |
| ARIF_LARYN | Acute laryngitis and tracheitis dx at discharge | Acute laryngitis and tracheitis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 464  
ICD-10: J04 |
| ARIF_MULTARI | Acute upper respiratory infections of multiple or unspecified sites dx at discharge | Acute upper respiratory infections of multiple or unspecified sites dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 465  
ICD-10: J06 |
| ARIF_BRONCH | Acute bronchitis and bronchiolitis dx at discharge | Acute bronchitis and bronchiolitis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge  
ICD-9: 466  
ICD-10: J20, J21 |
| ARIF_PNEUMON_VIRAL            | Viral pneumonia dx at discharge | Viral pneumonia dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 480  
|                              |                                |                                |                                                                              | ICD-10: J12 |
| ARIF_PNEUMOCOCCAL            | Pneumococcal pneumonia dx at discharge | Pneumococcal pneumonia dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 481  
|                              |                                |                                |                                                                              | ICD-10: J13, J14, J15 |
| ARIF_PNEUMON_OTHERBAC       | Other bacterial pneumonia dx at discharge | Other bacterial pneumonia dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 482 |
| ARIF_PNEUMON_OTHERSPEC      | Pneumonia due to other specified organism dx at discharge | Pneumonia due to other specified organism dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 483  
|                              |                                |                                |                                                                              | ICD-10: J16 |
| ARIF_PNEUMON_ID             | Pneumonia in infectious diseases classified elsewhere dx at discharge | Pneumonia in infectious diseases classified elsewhere dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 484  
|                              |                                |                                |                                                                              | ICD-10: J17 |
| ARIF_BRONCHPNEUMON          | Bronchopneumonia, organism unspecified dx at discharge | Bronchopneumonia, organism unspecified dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 485  
|                              |                                |                                |                                                                              | ICD-10: J18 |
| ARIF_PNEUMON_UNSPEC         | Pneumonia, organism unspecified dx at discharge | Pneumonia, organism unspecified dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 486 |
| ARIF_INFLU   | Influenza dx at discharge | Influenza dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 487  
|             |                           |                           |                           | ICD-10: J10, J11  
| ARIF_INFLUA | Influenza due to identified novel influenza A virus dx at discharge | Influenza due to identified novel influenza A virus dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 488.01-488.89  
|             |                           |                           |                           | ICD-10: J09  
| ARIF_BRONCH_UNSPEC | Bronchitis, unspecified dx at discharge | Bronchitis, unspecified dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 490  
|             |                           |                           |                           | ICD-10: J40  
| ARIF_PULMON_COLL | Pulmonary collapse dx at discharge | Pulmonary collapse dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 518.0  
|             |                           |                           |                           | ICD-10: J98.19  
| ARIF_PULMON_EDEMA | Pulmonary edema dx at discharge | Pulmonary edema dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 518.4  
|             |                           |                           |                           | ICD-10: J81  
| ARIF_RESP_FAIL_ARREST | Acute respiratory failure or arrest dx at discharge | Acute respiratory failure or arrest dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 518.81, 799.1  
|             |                           |                           |                           | ICD-10: J96.0, J96.00-J96.02, J96.2, J96.90-J96.92, R09.2  
|             |                           |                           |                           | ICD-10-CA: J9600, J9601, J9690, J9691, J9699  
| ARIF_RESP_UNSPEC | Unspecified disease of respiratory system dx at discharge | Unspecified disease of respiratory system dx at discharge | 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-9: 519  
|             |                           |                           |                           | ICD-10: J22, J39.8, J39.9, J98.09, J98.4, J98.8, J98.9  
|             |                           |                           |                           | ICD-10-CA: J980  

| **ARIF_FEVER** | Fever, unspecified dx at discharge | Fever, unspecified dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 780.60  
ICD-10: R50 |
| **ARIF_CHILLS** | Chills (without fever) dx at discharge | Chills (without fever) dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 780.64  
ICD-10: R68.83 (does not exist to specificity in ICD-10-AM)  
ICD-10-CA: R680 |
| **ARIF_RESP_ABNORM** | Respiratory abnormality, unspecified dx at discharge | Respiratory abnormality, unspecified dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.00  
ICD-10: J98.9  
ICD-10-AM: Does not exist (maps to R06.8) |
| **ARIF_SHORT_BREATH** | Shortness of breath dx at discharge | Shortness of breath dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.05  
ICD-10: R06.02  
ICD-10-CA: R060  
ICD-10-AM: R06.0 |
| **ARIF_TACHYP** | Tachypnea dx at discharge | Tachypnea dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.06  
ICD-10: R06.82  
ICD-10-CA: R064  
ICD-10-AM: R06.8 |
| **ARIF_WHEEZE** | Wheezing dx at discharge | Wheezing dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.07  
ICD-10: R06.2 |
| **ARIF_RESP_OTHER** | Respiratory abnormality, other dx at discharge | Respiratory abnormality, other dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.09 |
| ARIF_STRIDOR         | Stridor dx at discharge  | Stridor dx at discharge  | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.1  
ICD-10: R06.1 |
|---------------------|--------------------------|--------------------------|---------------------------------|-----------------|
| ARIF_COUGH          | Cough dx at discharge    | Cough dx at discharge    | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.2  
ICD-10: R05 |
| ARIF_SPUTUM         | Abnormal sputum dx at discharge | Abnormal sputum dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.4  
ICD-10: R09.3 |
| ARIF_RESP_PAIN      | Painful respiration dx at discharge | Painful respiration dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.52  
ICD-10: R07.1 |
| ARIF_SOUND          | Abnormal chest sounds dx at discharge | Abnormal chest sounds dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.7  
ICD-10: R09.89 |
| ARIF_HYPOX          | Hypoxemia dx at discharge | Hypoxemia dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 799.02  
ICD-10: R09.02  
ICD-10-AM: R09.0 |
| ARIF_RDS            | Acute respiratory distress syndrome dx at discharge | Acute respiratory distress syndrome dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-10: J80 |
| ARIF_ATELECT        | Atelectasis dx at discharge | Atelectasis dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-10: J98.11  
ICD-10-CA: J9810 |
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| ARIF_RESP_PC | Diseases of the respiratory system complicating pregnancy dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-10: O99.511, O99.512, O99.513, O99.519  
ICD-10-CA: O99501, O99502, O99503, O99504, O99509  
ICD-10-AM: O99.5 |
| ARIF_PYREX_LABOR | Pyrexia during labor dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 659.21  
ICD-10: O75.2  
ICD-10-CA: O75201, O75203, O75209 |
| ARIF_PYREX_DELIV | Pyrexia following delivery dx at discharge | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 672.02, 672.04  
ICD-10: O86.4  
ICD-10-CA: O86402, O86404, O86409 |
| ARIF_ID_MAT | Other maternal infectious and parasitic diseases complicating pregnancy | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-10: O98.81, O98.811-O98.813, O98.819  
ICD-10-CA: O98801-O98804, O98809 |
| ARIF_VIRAL_MAT | Other viral diseases complicating pregnancy | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-10: O98.51-O98.53  
ICD-10-CA: O98501-O98504, O98509 |
| ARIF_PLEUR_EFFSN | Pleural effusion, not elsewhere classified | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 510.9, 511.0, 511.1, 511.89  
ICD-10: J86.9, J90, R09.1 |
| ARIF_HEMTYS | Hemoptysis | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.30  
ICD-10: R04.2 |
| ARIF_DYSPNEA | Dyspnea | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 786.02, 786.05, 786.09  
ICD-10: R06.0 |
| ARIF_CONGEST | Nasal congestion | 0 = No code listed at discharge  
1 = One or more codes listed at discharge | ICD-9: 478.19  
ICD-10: R09.81 |
### ARIF_SEPSIS

| Sepsis | Sepsis | Sepsis | ICD-9: 669.11, 669.12, 669.14, 785.50, 785.52, 995.91, 995.92 |
|--------|--------|--------|---------------------------------------------------------|
| 0 = No code listed at discharge 1 = One or more codes listed at discharge | ICD-10: A41.9, R57.9, R65.21, O75.1 |
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| Variable Name   | Variable Label                        | Variable Description                                      | Value Labels                                                                 | Notes                                                                 |
|-----------------|---------------------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------|
| MAT_DOB         | Maternal DOB                          | Date of admission                                        |                                                                              |                                                                      |
| MAT_AGE_ADM     | Maternal Age at Admission             | Date of admission minus DOB: ADM_DT minus MAT_DOB         | Age in years (whole number)                                                 |                                                                      |
| MAT_AGE_35      | Maternal Age at Admission LT or GE 35 years | Maternal Age at Admission LT or GE 35 years              | 1 = < 35 years, 2 = ≥35 years, 99 = Unknown                                  |                                                                      |
| MAT_RACE        | Maternal race                         |                                                                           | 1 = Caucasian, 2 = Other, 99 = Unknown                                       | Each site defines additional categories other than Caucasian; common variables limited to “Caucasian” and “Other.” |
| MAT_REGION      | Population density of maternal region of residence | Woman resides in either urban or rural region            | 1 = Urban, 2 = Rural, 99 = Unknown                                           | Use country-specific classification of urban vs. rural                  |
| MAT_ENROLL      | Maternal eligibility for sample       | Woman member of health plan or population for at least 12 months | 1 = Enrolled/eligible for ≥12 months prior to pregnancy start date, 2 = Enrolled/eligible for <12 months prior to pregnancy start date, 99 = Unknown | Each site to define whether enrollment needs to be continuous across the 12-month period. |
| MAT_SES         | Maternal SES site categories          | SES using site categories                                 | 1 = Not low SES, 2 = Low SES, 99 = Unknown                                   | Optional – for sites who have data available. Sites should define variable for their site, e.g. Medicaid vs. not, deprivation index. |
| MAT_SMOKE_PREG  | Maternal smoking documented at any time during pregnancy |                                                                             | 0 = No, smoking during pregnancy documented, 1 = Yes, smoking during pregnancy documented, 99 = Unknown | Optional – for sites who have data available. This is a characteristic of pregnancy that is not limited to the index hospitalization. Sites should document method used to collect. |
| Variable          | Description                                           | Details                                                                 | Possible Values |
|-------------------|-------------------------------------------------------|-------------------------------------------------------------------------|-----------------|
| MAT_SMOKE_PRIOR   | Maternal smoking documented prior to pregnancy       | Maternal smoking documented within ~2 years prior to pregnancy          | 1 = Yes, smoking documented prior to pregnancy, 2 = No, smoking not documented, 99 = unknown |
| MAT_HEIGHT        | Height measurement prior to pregnancy                 | Height recorded since aged >17 years old                                | Centimeters (cm) | Optional – for sites who have data available |
| MAT_WEIGHT_PRIOR  | Weight measurement prior to pregnancy                 | Weight recorded within ~2 years prior to pregnancy; most recent weight prior to pregnancy | Kilograms (kg) | Optional – for sites who have data available |
| MAT_BMI_PRIOR     | BMI prior to pregnancy                                | Pre-pregnancy BMI documented or calculated from measurements; most recent weight prior to pregnancy | Optional – for sites who have data available |
| MAT_BMI_PRIOR_OBESE| Obese prior to pregnancy by BMI                       | Pre-pregnancy BMI meets standard definition of obesity                  | 1 = Obese (BMI >= 30), 0 = Not obese (BMI < 30), 99 = Unknown |

WHO standard at [http://www.who.int/mediacentre/factsheets/fs311/en/](http://www.who.int/mediacentre/factsheets/fs311/en/)
### VI. High Risk Medical Conditions in Discharge Codes

| Variable Name       | Variable Label                                                                 | Variable Description                                                                 | Value Labels                                                                 | Notes                                                                                       |
|---------------------|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| HR_DI               | High risk medical conditions identified at index hospitalization dichotomy    | High risk medical condition (chronic condition, not pregnancy complication) identified from discharge code of index hospital admission | 0 = No high risk medical condition (not pregnancy complication) documented at index hospitalization  
1 = One or more high risk medical condition(s) documented at index hospitalization | See Appendix of this document for ICD-10 code definitions.  
Sites may include additional variables if they are able to also collect high risk conditions for one-year prior to admission from any encounters, ambulatory or inpatient. |
| HR_DI_EXCLD_ANEMIA  | High risk medical conditions identified at index hospitalization dichotomy EXCEPT ANEMIA | High risk medical condition (chronic condition, not pregnancy complication) identified from discharge code of index hospital admission EXCEPT ANEMIA | 0 = No high risk medical condition (not pregnancy complication) documented at index hospitalization, OTHER THAN ANEMIA  
1 = One or more high risk medical condition(s) documented at index hospitalization, OTHER THAN ANEMIA | HR_DI_EXCLD_ANEMIA = (HR_DI) – (HR_BLOOD) + (HR_BLOOD_EXCLD_ANEMIA)                         |
| HR_BLOOD | Blood disorder dx identified at index hospitalization | Blood disorder dx, identified from discharge code of index hospitalization | 0 = No blood disorder dx documented 1 = Blood disorder dx | ICD-9: 280, 281, 282, 283, 284, 285.0, 285.21, 285.22, 285.29, 285.3, 285.8, 285.9, 286, 287, 288, 288.0-288.2, 289  
ICD-10: D50.0, D50.8, D50.9, D51, D52, D53, D58, D59, D61, D64.0-3, D63.1, D63.0, D63.8, D64.81, D64.89, D64.9, D68, D69, D70, D71, D72, D73, D74, D75, D77  
ICD-10-AM: D63.1 does not exist. D63.8 existed until July 2010. D63* is assigned for anaemia in specific conditions for which chronic kidney disease is not one. Both anaemia and CKD would be coded separately. D63.0 does not exist after July 2010. Post July 2010 the anaemia and neoplastic disease are coded separately (D63.0 until July 2010 and then D64.9 and C00-D48). D63.8 does not exist post July 2010. D63 is coded for anaemia in specific conditions only ([D63.8 until July 2010 then D63 with specific conditions]. D64.8 is other specified anaemias, D64.89 does not exist. Chronic lymphadenitis 289.1 maps to I88.1, 289.2 maps to I88.0, 289.3 maps to I88.9. |
| --- | --- | --- | --- |
| HR_BLOOD_EXCLD_ANEMIA | Blood disorder dx identified at index hospitalization OTHER THAN ANEMIA | Blood disorder dx, identified from discharge code of index hospitalization OTHER THAN ANEMIA | 0 = No blood disorder dx documented OTHER THAN ANEMIA 1 = Blood disorder dx OTHER THAN ANEMIA | ICD-9: 282, 283, 284, 285.0, 285.21, 285.22, 285.29, 285.3, 286, 287, 288, 288.0-288.2, 289  
ICD-10: D58, D59, D61, D64.0-3, D63.1, D63.0, D63.8, D64.81, D68, D69, D70, D71, D72, D73, D74, D75, D77  
ICD-10-AM: Also include D53 |
| HR_DIABT | Diabetes dx identified at index hospitalization | Diabetes dx, identified from discharge code of index hospitalization | 0 = No diabetes dx documented 1 = Diabetes dx | ICD-9: 249, 250, 357.2, 362.0, 366.41  
ICD-10: E08-E11  
ICD-10-AM: E08 does not exist. E13.x other specified diabetes i.e. drug induced. Diabetes mellitus is classified to type 1 and type 2, intermediate hyperglycaemia, other specified and unspecified [E09, E10, E11, E12, E13, E14]. |
**SUPPLEMENTAL METHODS: DATA DICTIONARY**

| HR_HEART_FAIL | Acute heart failure dx identified at index hospitalization | Acute heart failure dx identified at index hospitalization | 0 = No acute heart failure dx documented | 1 = Acute heart failure dx documented | ICD-9: 428.21, 428.23, 428.31, 428.33, 428.41, 428.43 | ICD-10: I50.21, I50.23, I50.31, I50.33, I50.41, I50.43 | ICD-10-AM: I50 (do not have codes to specificity) |
|---------------|-----------------------------------------------------------|-----------------------------------------------------------|----------------------------------------|----------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| HR_CARD_ARRST | Cardiac arrest dx identified at index hospitalization     | Cardiac arrest dx identified at index hospitalization     | 0 = No cardiac arrest dx documented   | 1 = Cardiac arrest dx documented      | ICD-9: 427.5                                  | ICD-10: I46.9                                    |  |
| HR_HEART      | Heart disease dx, identified from discharge code of index hospitalization | Heart disease dx, identified from discharge code of index hospitalization | 0 = No heart/cardiac disease dx documented | 1 = Heart/cardiac disease dx | ICD-9: 093, 112.81, 130.3, 362.11, 391, 393, 394, 395, 396, 397, 398, 402, 404, 410, 411, 412, 413, 414, 415, 416, 417, 421, 423, 424, 425, 427.1-427.5, 427.8, 427.9, 428, 429, 440, 441, 442, 443, 444, 445, 446, 447, 745, 746, 747, 996.0, 996.1, V43.3, V45.0, V45.81, V45.82 | ICD-10: H35.031-039, I01, I09.2, I05, I06, I34, I35, I36, I37, I09, I11, I12, I13, I21, I24, I25.2, I20, I25.700-I25.799, I26, I27, I28, I33, I30, I31, I38, I39, I42, I46, I47, I48, I49, I50, I40, I41, I51, I52, I70, I71, I72, I73, I74, I75 (ICD-10-AM: I70.9), M30.0, M31, I77, Q21, Q22, Q23, Q24, Q25, Q26, Q27, T82, Z95 |
| HR_CANCER     | Cancer dx identified at index hospitalization              | Cancer dx, identified from discharge code of index hospitalization | 0 = No cancer dx documented           | 1 = Cancer dx                          | ICD-9: 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 170, 171, 172, 174, 175, 176, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 231.0-231.2, 231.8-231.9, 235-238, V58.0-V58.1 | ICD-10: C00, C01, C02, C07, C08, C03, C04, C05, C06, C09, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C48, C26, C30, C31, C32, C33, C34, C36, C37, C39, C40, C41, C44, C49, C43, C50, C46, C55, C53, C58, C54, C56, C51, C52, C61, C62, C60, C67, C64, C69, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C83, C90, C91, C92, C93, C94, C95, C7A (does not exist in ICD-10-AM), D02, D37-44, D48, Z51.11, Z51.12 |
| HR_IMMUNE     | Immune disorder dx identified at index hospitalization     | Immune disorder dx, identified from discharge code of index hospitalization | 0 = No immune disorder dx documented  | 1 = Immune disorder dx documented      | ICD-9: 042, 079.5, 136.3, 279, 289.4, 289.5, 358.3, 710, 714, 795, 960.7, 963.1, V08, V42.0-V42.2, V42.6-V42.9 | ICD-10: B20, B33.3, B59, B80, B81, B82, B73.1, D73, G70.8, M32.10, M35, M05, M06, R82.8, R84.7, R85.7, R86.7, R87.7, R89.7, T45 (ICD-10-AM: T45.1), Z21, Z94 |
| HR_RENAL_FAIL | Acute renal failure dx identified at index hospitalization | Acute renal failure dx identified at index hospitalization | 0 = No acute renal failure dx documented | 1 = Acute renal failure dx documented | ICD-9: 404.02, 404.03, 572.4, 584 | ICD-10: I13.11, I13.2, K76.7, N17 |
|---------------|----------------------------------------------------------|----------------------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------------|
| HR_RENAL      | Renal disease dx identified at index hospitalization     | Renal disease dx, identified from discharge code of index hospitalization | 0 = No renal disease dx documented | 1 = Renal disease dx documented | ICD-9: 285.21, 403, 581, 582, 583, 584, 585, 586, 587, 588.0, 589, 593.8, 753.1, 996.56, 996.73, V56, V45.1 | ICD-10: D63.1 (does not exist in ICD-10-AM), I12.0, I13.11 (does not exist to specificity in ICD-10-AM), I13.2, N04, N03, N05, N17, N18, N19, N26.9 (does not exist to specificity in ICD-10-AM), N25.0, N25.1, N27.0, N27.1, N27.9, N28.89 (does not exist to specificity in ICD-10-AM), Q61, T85, Z49, Z91.15 (does not exist to specificity in ICD-10-AM) |
| HR_LIVERFAIL  | Acute liver failure dx identified at index hospitalization | Acute liver failure dx identified at index hospitalization | 0 = No acute liver failure dx documented | 1 = Acute liver failure dx documented | ICD-9: 570, 573.4 | ICD-10: K72.00, K76.3, K76.2 |
| HR_LIVER      | Liver disease dx identified at index hospitalization      | Liver disease dx, identified from discharge code of index hospitalization | 0 = No liver disease dx documented | 1 = Liver disease dx documented | ICD-9: 571, 572.1-572.8 | ICD-10: K70, K73, K74, K75.1-K75.9 |
| HR_ASTHMA     | Asthma dx identified at index hospitalization             | Asthma dx, identified from discharge code of index hospitalization | 0 = No asthma dx documented | 1 = Asthma dx documented | ICD-9: 493 | ICD-10: J45 |
| HR_ASTHMA_EXACER | Asthma exacerbation dx identified at index hospitalization | Asthma exacerbation dx identified at index hospitalization | 0 = No asthma exacerbation dx documented | 1 = Asthma exacerbation dx documented | ICD-9: 493.01, 493.02, 493.11, 493.12, 493.21, 493.22, 493.91, 493.92 | ICD-10: J44.0, J44.1, J45.21, J45.22, J45.901, J45.902 |
| HR_ARDS       | Other pulmonary insufficiency not elsewhere classified dx identified at index hospitalization | Other pulmonary insufficiency not elsewhere classified dx identified at index hospitalization | 0 = No ARDS dx documented | 1 = ARDS dx documented | ICD-9: 518.82 | ICD-10: J80 |
| HR_PNEUMOTHORAX | Pneumothorax dx identified at index hospitalization | Pneumothorax dx identified at index hospitalization | 0 = No pneumothorax dx documented | 1 = Pneumothorax dx documented | ICD-9: 512 | ICD-10: J93 |
| HR_LUNG_ABSC  | Lung abscess dx identified at index hospitalization       | Lung abscess dx identified at index hospitalization       | 0 = No lung abscess dx documented | 1 = Lung abscess dx documented | ICD-9: 513 | ICD-10: J85 |
| **SUPPLEMENTAL METHODS: DATA DICTIONARY** |
|-------------------------------------------------|
| **HR_OLUNG** | Lung disease dx not asthma at index hospitalization | Lung disease dx, not asthma identified from discharge code of index hospitalization | 0 = No lung disease dx documented
   1 = Lung disease dx documented |
| **ICD-9:** | 010, 011, 012, 018, 031.0, 135, 137.0, 277, 490, 491, 492, 494, 495, 496, 500, 501, 502, 503, 504, 505, 506, 507.0, 507.1, 507.8, 508, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 748.4-748.6 |
| **ICD-10:** | A15, A17, A18, A19, A31, D86, E84, J40, J41, J42, J43, J47, J60, J61, J62.0, J62.8, J63.6 (ICD-10-AM: J63.8), J64, J67, J68, J69.0, J69.1, J69.8, J70.9, 385, 393, 398, M34, M35, Q34, R09.1 |
| **HR_OBESE** | Obesity dx identified at index hospitalization | Obesity dx identified from discharge code of index hospitalization | 0 = No obesity dx documented
   1 = Obesity dx documented |
| **ICD-9:** | 649.1, 278.00, 278.01, 278.03 |
| **ICD-10:** | E66, O99.210-215, O99.840-845 |
| **ICD-10-AM:** | O99.210-215, O99.840-845 does not exist |
| **HR_OMETBOL** | Metabolic disorder not obesity dx identified at index hospitalization | Metabolic disorder dx not obesity, identified from discharge code of index hospitalization | 0 = No metabolic disorder dx documented
   1 = Metabolic disorder dx documented |
| **ICD-9:** | 240-246, 253, 254, 255, 260-269, 270, 271, 272, 273, 274, 275, 277.0-9 |
| **ICD-10:** | E03-E07, E22, E23, E32, E27, E40-E46, E50-E56, E70-E72, E74, E78, E88, M10, E83 |
| **HR_ALT_MENT** | Altered mental status dx identified at index hospitalization | Altered mental status dx, identified from discharge code of index hospitalization | 0 = No altered mental status dx documented
   1 = Altered mental status dx documented |
| **ICD-9:** | 293, 437.7, 780.02, 780.09, 780.1, 780.97 |
| **ICD-10:** | F05, F06.0, F06.1, F06.2, F06.30, F06.4, F06.8, G45.4, R40.0, R40.4, R41.82, R44.0 |
| **HR_ENCEPHAL** | Encephalopathy dx identified at index hospitalization | Encephalopathy dx, identified from discharge code of index hospitalization | 0 = No encephalopathy dx documented
   1 = Encephalopathy dx documented |
| **ICD-9:** | 348.3, 437.2, 572.2 |
| **ICD-10:** | G93.4, I67.4, K72.90, K72.91 |
| **HR_MENINGITIS** | Meningitis dx identified at index hospitalization | Meningitis dx, identified from discharge code of index hospitalization | 0 = No meningitis dx documented
   1 = Meningitis dx documented |
| **ICD-9:** | 003.21, 036, 047, 049.1, 112.83, 114.2, 320, 321, 322 |
| **ICD-10:** | A02.21, A39, A87.0, A87.1, B37.5, B38.4, G00, G01, G02, G03 |
| **HR_ANOX_BRN_DMG** | Anoxic brain damage dx identified at index hospitalization | Anoxic brain damage dx, identified from discharge code of index hospitalization | 0 = No anoxic brain damage dx documented
   1 = Anoxic brain damage dx documented |
| **ICD-9:** | 348.1 |
| **ICD-10:** | G93.1 |
| **HR_ENCEPH_MYEL** | Encephalitis or myelitis dx identified at index hospitalization | Encephalitis or myelitis dx, identified from discharge code of index hospitalization | 0 = No encephalitis or myelitis dx documented
   1 = Encephalitis or myelitis dx documented |
| **ICD-9:** | 036.1, 323, 341.2 |
| **ICD-10:** | A39.81, G05, G37.3 |
### HR_COMA
Coma dx identified at index hospitalization
Coma dx, identified from discharge code of index hospitalization
0 = No coma dx documented
1 = Coma dx
ICD-9: 780.01, 780.03
ICD-10: R40.20, R40.3

### HR_EPILEP
Status epilepticus dx identified at index hospitalization
Status epilepticus dx, identified from discharge code of index hospitalization
0 = No status epilepticus dx documented
1 = Status epilepticus dx
ICD-9: 345.2, 345.3
ICD-10: G40.A01, G40.A09, G40.A11, G40.A19, G40.301

### HR_POLYNEURO
Critical illness polyneuropathy dx identified at index hospitalization
Critical illness polyneuropathy dx, identified from discharge code of index hospitalization
0 = No critical illness polyneuropathy dx documented
1 = Critical illness polyneuropathy dx
ICD-9: 357.82
ICD-10: G62.81

### HR_CEREBRAL_INFARC
Cerebral infarction dx identified at index hospitalization
Cerebral infarction dx, identified from discharge code of index hospitalization
0 = No cerebral infarction dx documented
1 = Cerebral infarction dx
ICD-9: 346.6, 433.01, 433.11, 433.21, 433.31, 433.81, 433.91, 434.01, 434.11, 434.91
ICD-10: G43.6, I63.019, I63.119, I63.139, I63.20, I63.219, I63.22, I63.239, I63.30, I63.40, I63.50, I63.59

### HR_CEREBRAL_HEMR
Cerebral hemorrhage dx identified at index hospitalization
Cerebral hemorrhage dx, identified from discharge code of index hospitalization
0 = No cerebral hemorrhage dx documented
1 = Cerebral hemorrhage dx
ICD-9: 430, 431, 432
ICD-10: I60.9, I61.9, I62

### HR_CEREBRAL_EDEMA
Cerebral edema dx identified at index hospitalization
Cerebral edema dx, identified from discharge code of index hospitalization
0 = No cerebral edema dx documented
1 = Cerebral edema dx
ICD-9: 348.5
ICD-10: G93.6

### HR_NEURO
Neurologic disease dx identified at index hospitalization
Neurologic disease dx, identified from discharge code of index hospitalization
0 = No neurologic disease dx documented
1 = Neurologic disease dx
ICD-9: 013, 046, 137.1, 290, 294.1, 310, 318, 330, 331, 332, 333, 334, 335, 336, 337, 340, 341, 342, 343, 344, 345, 348, 349.1-9, 392, 430, 431, 432, 433, 434, 435, 436, 437, 438, 756.4, 780.3, 907.2, 996.2, 996.75
ICD-10: A17, A81, B90.0, F01, F02, F03, F07, F71, F72, F73, E75, G20, G25, G26, G47, G60, G35, G36, G81, G80, G82, G40, G93, G96, I02, I60, I61, I62, I65, I66, I67.82 (ICD-10-AM: G45.9), I67.9, I69, G71.13 (does not exist to specificity in ICD-10-AM), R56, T85 (ICD-10-AM: T85.1)

### HR_ART_VEN_EMBOL
Arterial or venous embolism dx identified at index hospitalization
Arterial or venous embolism dx, identified at index hospitalization
0 = No arterial or venous embolism dx documented
1 = Arterial or venous embolism dx
ICD-9: 444, 449, 453
ICD-10: I74, I76, I82
| Code       | Description                          | Definition                                                                 | ICD-9                  | ICD-10                  |
|------------|--------------------------------------|---------------------------------------------------------------------------|------------------------|-------------------------|
| HR_PULM_EMBOL | Pulmonary embolism dx identified at index hospitalization | Pulmonary embolism dx identified at index hospitalization | 0 = No pulmonary embolism dx documented 1 = Pulmonary embolism dx | ICD-9: 415.1  
ICD-10: I26 |
| HR_CARDITIS | Carditis dx identified at index hospitalization | Carditis dx identified at index hospitalization | 0 = No carditis dx documented 1 = Carditis dx | ICD-9: 112.81, 391, 420, 421, 422, 429  
ICD-10: A39.50, B37.6, I01.0, I01.1, I01.2, I30, I33, I40, I51.4 |
| HR_DIC     | Defibrination syndrome dx identified at index hospitalization | Defibrination syndrome dx identified at index hospitalization | 0 = No defibrination syndrome dx documented 1 = Defibrination syndrome dx | ICD-9: 286.6  
ICD-10: D65 |
| HR_CARDIOPULM | Any cardiopulmonary disease at index hospitalization | Any cardiopulmonary disease at index hospitalization | 0 = No heart or lung code at index hospitalization 1 = One more heart or lung medical condition documented at index hospitalization | Any HEART, LUNG, ASTHMA, or ASTHMA_EXACER code |
| HR_KETOACIDOSIS | Ketoacidosis dx identified at index hospitalization | Ketoacidosis dx, identified from discharge code of index hospitalization | 0 = No ketoacidosis dx documented 1 = Ketoacidosis dx | ICD-9: 249.1, 250.1  
ICD-10: E08.1, E10.1, E13.1 |
| HR_HYPRSMOLRTY | Hyperosmolarity dx identified at index hospitalization | Hyperosmolarity dx, identified from discharge code of index hospitalization | 0 = No hyperosmolarity dx documented 1 = Hyperosmolarity dx | ICD-9: 249.2, 250.2  
ICD-10: E08.0, E11.0, E13.0 |
| HR_DIABET_COMA | Diabetic coma dx identified at index hospitalization | Diabetic coma dx, identified from discharge code of index hospitalization | 0 = No diabetic coma dx documented 1 = Diabetic coma dx | ICD-9: 249.3, 250.3, 251  
ICD-10: E08.11, E08.641, E09.11, E09.641, E10.11, E11.01, E11.641, E13.11, E13.641, E15 |
| HR_THYRD_STORM | Thyroid storm dx identified at index hospitalization | Thyroid storm dx, identified from discharge code of index hospitalization | 0 = No thyroid storm dx documented 1 = Diabetic coma dx | ICD-9: 242.01, 242.11, 242.21, 242.31, 242.41, 242.81, 242.91  
ICD-10: E05.01, E05.11, E05.21, E05.31, E05.41, E05.81, E05.91 |
| HR_RHABDOMYOL | Rhabdomyolysis dx identified at index hospitalization | Rhabdomyolysis dx, identified from discharge code of index hospitalization | 0 = No rhabdomyolysis dx documented 1 = Rhabdomyolysis dx | ICD-9: 728.88  
ICD-10: M62.82 |
| HR_MYOSITIS          | Myositis dx identified at index hospitalization | Myositis dx, identified from discharge code of index hospitalization | 0 = No myositis dx documented | 1 = Myositis dx | ICD-9: 728 | ICD-10: M60 |
|----------------------|------------------------------------------------|---------------------------------------------------------------------|-------------------------------|----------------|------------|------------|
| HR_MYOPATHY          | Critical illness myopathy dx identified at index hospitalization | Critical illness myopathy dx, identified at index hospitalization | 0 = No critical illness myopathy dx documented | 1 = Critical illness myopathy dx | ICD-9: 359.81 | ICD-10: G72.81 |
## VII. Pregnancy History and at Admission

| Variable Name | Variable Label | Variable Description | Value Labels | Notes |
|---------------|----------------|----------------------|--------------|-------|
| PREG_GA_ADM   | GA at hosp admission | Gestational age of fetus at hospital admission (days) ADM_DT minus PREG_LMP_DT | Completed weeks with up to 2 decimal places for the number of days (obtained by dividing the number of days by 7) | |
| PREG_TRI      | Trimester at admission | Trimester at admission | Per ACOG: 1 = First trimester: day 14 through 13 weeks + 6 days (i.e., day 14 to day 97) 2 = Second trimester: 14 weeks + 0 days through 27 weeks + 6 days (i.e., day 98 to day 195) 3 = Third trimester: 28 weeks + 0 days through the end of pregnancy (i.e., day 196 to end of pregnancy) | |
| PC_DI         | Pregnancy complication identified at index hospitalization dichotomy | Any pregnancy complication identified from index hospitalization discharge codes dichotomy | 0 = No pregnancy complication documented at index hospitalization 1 = One or more pregnancy complication identified | See list of variables below for ICD codes |
| PC_HEMOR      | Hemorrhage in early pregnancy | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 640.00, 640.01, 640.03, 640.80, 640.81, 640.83, 640.90, 640.91, 640.93  ICD-10: O20.0, O20.8, O20.9 |
| Code  | Description                                      | Identification and Documentation | ICD-9 Codes                                                                 | ICD-10 Codes                                                                 |
|-------|--------------------------------------------------|----------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| PC_BLEED | Bleeding in pregnancy                           | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 641.00, 641.01, 641.03, 641.10, 641.11, 461.20, 641.21, 641.23, 641.30, 641.31, 641.33, 641.80, 641.81, 641.83, 641.90, 641.91, 641.93, 649.3, 649.5  
 IC-10: O26.851-O26.853 (no equiv ICD-10-CA code), O26.859 (no equiv ICD-10-CA code), O44 (ICD-10-CA: O44101, O44103, O44109), O45 ICD-10-AM: Would be recorded as O99.01 followed by D50-D64 (inclusive) |
| PC_HYPRTNSN | Hypertension complicating pregnancy               | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 642.00-642.04, 642.10-642.14, 642.20-642.24, 642.30-642.34, 642.40-642.44, 642.50-642.54, 642.60-642.64, 642.70-642.74, 642.90-642.94  
 IC-10: O10.011-O10.013, O10.019, O10.02, O10.911-O10.913, O10.919, O10.92 ICD-10-CA: O10001-O10004, O10009, O10401-O10404, O10409, O10901-O10904, O10909 |
| PC_VOMIT | Excessive vomiting during pregnancy               | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 643.00, 643.01, 643.03, 643.10, 643.11, 643.13, 643.20, 643.21, 643.23, 643.80, 643.81, 643.83, 643.90, 643.91, 643.93  
 IC-10: O21.0-O21.2, O21.8, O21.9 |
| PC_RENAL | Renal disease during pregnancy                   | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 646.2  
 IC-10: O26.83, O26.831-O26.839  
 ICD-10-CA: O10201-O10209, O10301-O10304 |
| PC_INFCT | Infectious and parasitic diseases complicating pregnancy | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 647.00-647.04, 647.80-647.84, 647.90-647.94  
 IC-10: A70, A82, A83, A84, A85, A86, A90, A91, A92, A95, A96, A98, B25, B27, B97.11 (no equiv ICD-10-CA code), O85, O98.011, O98.012, O98.013, O98.019 (ICD-10-CA: O98001-O98004, O98009), R07.81 ICD-10-AM: O98.8, O98.5O99.4; A82, A90, A91, B97.11, and R07.81 do not exist in Australia |
| PC_DIABT | Diabetes during pregnancy                        | Identified by diagnostic codes during discharge from index hospitalization | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 648.00-648.04, 648.80-648.84  
 IC-10: O24.0, O24.1, O24.3, O24.4, O24.8, O24.9 (inclusive) – BUT NOTE THAT THIS INCLUDES BOTH PREEXISTING AND GESTATIONAL DIABETES |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Code       | Description                          | Identified by diagnostic codes during discharge from index hospitalization | Diagnostic Code Details                                                                 |
|------------|--------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| PC_THYRD   | Thyroid dysfunction in pregnancy     | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 648.10-648.14  
ICD-10: O90.5                                                                                               |
| PC_DRG_DEPEND | Drug dependence during pregnancy    | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 648.30-648.34  
ICD-10: O99.32 (no equiv ICD-10-CA code)                                                                 |
| PC_CVD    | Congenital cardiovascular disorders complicating pregnancy | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 648.50-648.54  
ICD-10: O99.4  
ICD-10-CA: O99401-O99404, O99409                                                                                |
| PC_SMOKE   | Maternal smoking at index admission | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code  
99 = Code does not exist in country's coding system | ICD-9: 649.0  
ICD-10: O99.33 (no equiv ICD-10-CA or ICD-10-AM code)                                                      |
| PC_EPILEPSY | Epilepsy complicating pregnancy     | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code  
99 = Code does not exist in country's coding system | ICD-9: 649.4  
ICD-10: O99.35 (no equiv ICD-10-CA code)                                                                 |
| PC_MALPOSTN | Malposition of fetus               | 0 = No dx documented 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 652  
ICD-10: O32                                                                                               |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Variable               | Description                                      | Identification Method                                                                 | Code for No Diagnostic Code Documented | Code for Diagnostic Code Documented | ICD-9/Codes | ICD-10/Codes |
|------------------------|--------------------------------------------------|----------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------|-------------|--------------|
| PC_CEPHAL_DISP         | Cephalopelvic disproportion                      | Identified by diagnostic codes during discharge from index hospitalization             | 0 = No dx documented                  | 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 653 | ICD-10: O33  |
|                        |                                                  |                                                                                        |                                        |                                     |             |              |
| PC_ORG_ABNORM          | Abnormalities of organs and soft tissues of pelvis| Identified by diagnostic codes during discharge from index hospitalization             | 0 = No dx documented                  | 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 654.00-654.04,654.10-654.14,654.20-654.24,654.30-654.34,654.40-654.44,654.50-654.54,654.60-654.64,654.70-654.74,654.80-654.84,654.90-654.94 | ICD-10: O34 |
|                        |                                                  |                                                                                        |                                        |                                     |             |              |
| PC_FETUS_DRG           | Suspected damage to fetus due to maternal drug use| Identified by diagnostic codes during discharge from index hospitalization             | 0 = No dx documented                  | 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 655.53 | ICD-10: O35.5 |
|                        |                                                  |                                                                                        |                                        |                                     |             | O35501, O35503, O35509 |
| PC_FETAL_GRWTH         | Fetal growth restriction                         | Identified by diagnostic codes during discharge from index hospitalization             | 0 = No dx documented                  | 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 656.53 | ICD-10: O36.5  |
|                        |                                                  |                                                                                        |                                        |                                     |             |              |
| PC_PRETERM             | Early or threatened labor                        | Identified by diagnostic codes during discharge from index hospitalization             | 0 = No dx documented                  | 1 = Dx during index hospitalization as documented by diagnostic code | ICD-9: 644.0, 644.2, 649.7, 654.0, 654.1, 654.3, 654.4, 654.5, 654.6, 657, 658.0, 658.4 | ICD-10: O26, O34, O40-O42, O60-O69 |
| Variable          | Description                                                                 | Codes                                                                 | Notes                                                                 |
|-------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
| PC_OTHER          | Other pregnancy complication identified by diagnostic codes during discharge from index hospitalization | ICD-9: 052-055, 060-066, 070, 071, 073, 099.1, 099.3, 262, 263, 280.1, 280.8, 280.9, 291-293, 295-299, 301, 303, 305, 307.1, 307.5, 308, 309, 442.2, 449, 459.0, 459.1, 459.2, 459.3, 645, 646.0, 646.3, 646.6, 646.7, 646.8, 649.3, 651, 653.6, 656.0, 656.3, 656.4, 656.6, 656.7, 656.8, 656.9  | ICD-10: A55, A60, B01.0, B01.11, B01.12, B01.2, B01.81, B01.89, B02 39, B15-B19, D59.6, F04-F06, F10-F16, F18-F19, F20, F29, F30-F34, F43, F48.8, F48.9, F53, F60, F68.8, F69, F84.0, F84.3, F84.8, F84.9, I81, I82, I87, I95, M02, N96, O10-O16, O20.8, O20.9, O26.20-23, O30, O31, O43, O45, O48.1, O98.02, O98.03, O98.111-119, O98.211-219, O98.22, O98.23, O98.711, O98.712, O98.713, O98.719, R82.3  |
| MAT_GRAVIDITY     | Gravidity – total number of previous pregnancies regardless of the outcome. Note: a multiple pregnancy is considered as one pregnancy. | 0 – 10 99 = missing or unknown | ICD-10-CA alternatives for those ICD-10 that do not exist: B0111, B0112, B0181, B0189, B0239, O2621, O2622, O2623, O481, O9802, O9803, O9811, O98112, O98113, O98114, O98115, O98116, O98117, O98118, O98119, O98211, O98212, O98213, O98214, O98215, O98216, O98217, O98218, O98219, O9822, O9823, O98711, O98712, O98713, O98719  |
| MAT_PARITY        | Parity – total number of previous pregnancies that reached a viable gestational age (includes live births and stillbirths). Note: a multiple pregnancy is considered as one pregnancy. | 0 – 10 99 = missing or unknown |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Variable          | Description                                                                 | Values                                                                 |
|-------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------|
| MAT_PRIMIPAR      | Indicates whether mother is primiparous (includes live births and stillbirths). Note: a multiple pregnancy is considered as one pregnancy. | 0 = Primiparous (MAT_PARITY_NUM=0)  
1 = Not primiparous (1≤MAT_PARITY_NUM<9) |
| MAT_PARITY_NUM    | Analytic variable to categorize MAT_PARITY                                     | 0 = MAT_PARITY = 0  
1 = MAT_PARITY = 1  
2 = MAT_PARITY = 2-10  
99 = MAT_PARITY = 99 |
| PREG_MULT         | Pregnancy singleton or multiple                                                | 1 = One fetus  
2 = More than one fetus  
99 = Unknown |
| PREG_GA_AV        | GA at first antenatal visit                                                   | Gestational age of fetus at first antenatal visit  
Completed weeks with up to 2 decimal places for the number of days (obtained by dividing the number of days by 7)  
99 = Unknown |
| PREG_AV_ADM       | Antenatal visits prior to hospitalization                                     | Number of antenatal visits prior to hospital admission  
0 – XX  
99 = Unknown |
| Variable Name | Variable Label | Variable Description | Value Labels | Notes |
|---------------|----------------|----------------------|--------------|-------|
| HOSP_ADM_DATE | Index hosp admission date | Index hospital admission date | | |
| HOSP_DC_DATE  | Index hosp discharge date | Index hospital discharge date | | |
| HOSP_ADM_TIME | Index hosp admission time | Index hospital admission time – in 24:00 format | 99 = Unknown or could not be determined | |
| HOSP_DC_TIME  | Index hosp discharge time | Index hosp discharge time – in 24:00 format | 99 = Unknown or could not be determined | |
| HOSP_24       | Index hosp admission >24 hours | Index hospital admission lasted greater than 23 hours | | |
| HOSP_YR       | Index hospital admission year | Index year of hospital admission | 2010 to 2016 | |
| HOSP_WK       | Index hospital admission week | Index week of hospital admission (using MMWR week windows) | 0 – 53 | Will use date windows for MMWR weeks specific to each year. Week #1 of an MMWR year is the first week of the year that has at least four days in the calendar year. [https://ibis.health.state.nm.us/resource/MMWRWeekCalendar.html](https://ibis.health.state.nm.us/resource/MMWRWeekCalendar.html) |
| HOSP_DAYS     | Index hospitalization days | Index total days hospitalized (Discharge minus admission date) | 0 – 100+ | In cases of readmission within 14 days, only days from the first hospitalization are included. |
| HOSP_HOURS    | Index hospitalization hours | Index total hours hospitalized (from admission hour to discharge hour) | 9999 = unknown or unavailable | Will be unknown for sites unable to use time variables |
| ICU_ANY       | ICU admission during index hospitalization | Dichotomous indicator of any ICU admission during hospitalization | 0 = No ICU admission with this hospitalization 1 = ICU admission during hospitalization 99 = Unknown or no way to determine | |
| Variable          | Description                                                                 | Value                        | Notes                                                                 |
|-------------------|-----------------------------------------------------------------------------|------------------------------|----------------------------------------------------------------------|
| ICU_ADM_DT        | ICU admission date                                                          | ICU admission date           | 99 = Unknown or could not be determined If woman was discharged and then re-admitted to the ICU within the same hospitalization, use first admission date/time |
| ICU_ADM_TIME      | ICU admission time                                                          | ICU admission time           | 99 = Unknown or could not be determined If woman was discharged and then re-admitted to the ICU within the same hospitalization, use first admission date/time |
| ICU_DISCH_DT      | ICU discharge date                                                          | ICU discharge date           | 99 = Unknown or could not be determined If woman was discharged and then re-admitted to the ICU within the same hospitalization, use last discharge date/time |
| ICU_DISCH_TIME    | ICU discharge time                                                          | ICU time – in 24:00 format   | 99 = Unknown or could not be determined If woman was discharged and then re-admitted to the ICU within the same hospitalization, use last discharge date/time |
| ICU_DAYS          | ICU days                                                                    | Total days in ICU            | (Discharge minus admission date)                                       |
| ICU_HOURS         | ICU hours                                                                   | Total hours in ICU           | (from admission hour to discharge hour)                               |
| HOSP_DC_CODE1-15  | Hospital discharge code variables                                          |                              |                                                                      |
| HOSP_DC_PRIME     | Primary discharge code                                                      |                              |                                                                      |
| HOSP_DCSTATUS     | Index hosp discharge status                                                 | Index hosp discharge status  | 1 = Discharged home 2 = Discharged to long term care facility 3 = Transferred to another hospital or rehabilitation facility 4 = Died while hospitalized 5 = Other Describe where patient discharged to or whether patient died while hospitalized |
| HOSP_VENT         | Ventilation received during index hospitalization                           | Ventilation received during index hospitalization | 0 = No ventilation 1 = Ventilation received 99 = Unknown |
| HOSP_ECMO         | Requirement for ECMO during index hospitalization                           | Requirement for ECMO during index hospitalization | 0 = No ECMO 1 = ECMO received 99 = Unknown ICD-10 procedure code: 5A15223 ICD-9 procedure code: 39.65 |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Variable          | Description                                                                 | Codes                                                                 |
|-------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------|
| HOSP_ANTIVRL      | Received influenza antiviral medication during index hospitalization        | 0 = No antiviral received  
1 = Antiviral received  
99 = Unknown                                                     |
| HOSP_ANTIVRL_DAYS | Days between admission for index hospitalization and first antiviral dose  | 99 = No antiviral received or unknown                                 |
| HOSP_DELIV        | Indicates whether the index hospitalization was also the delivery hospitalization | 0 = Pregnancy end date does not fall between hospitalization start and end date  
1 = Pregnancy end date falls between hospitalization start and end date  
99 = Unknown                                                   |
| HOSP_GEST_GP      | Indicates when index hospital admission occurred during pregnancy           | 1 = Admission at <14 weeks gestation  
2 = Admission at 14-27 weeks gestation  
3 = Admission at 28-36 weeks gestation  
4 = Admission at ≥37 weeks gestation  
Variable needed to inform exclusions for preterm analysis |
| HOSP_READMIT      | Readmission for qualifying ARI/F event within 14 days of discharge date of index hospitalization | 0 = No qualifying readmission within 14 days  
1 = Qualifying readmission within 14 days  
99 = Unknown  
Intended to count the number of instances where clinical testing may have been done in two temporally close hospitalizations. Both admissions must be within 14 days of one another and have a qualifying ARI/F discharge diagnosis. Only discharge diagnoses from the first hospitalization are included in the analysis. |
| Variable Name    | Variable Label                      | Variable Description                                                                 | Value Labels                                                                                                                                                                                                 | Notes                                                                                                                                                                                                                   |
|------------------|-------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IX. Illness Onset|                                     |                                                                                       |                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                           |
| ILL_ONSET_CONF   | ARI/F illness onset confirmed        | ARI/F illness onset date confirmation by category                                       | 1 = onset listed and within 10 days of admission  
2 = onset listed, but >10 days of admission  
99 = no onset date available                                                                                                                   | Admission date is day zero  
Illness refers to the ARI/febrile illness that resulted in the index hospitalization.                                                                                                                                 |                                                                                                                                                                                                                           |
| ILL_ONSET_DT     | Illness onset date                   |                                                                                       | 99 = Unknown                                                                                                                  | From protocol: two days prior to admission date if unknown                                                                                                                                                                                                                     |                                                                                                                                                                                                                           |
| ILL_ONSET_DAYS   | Days since illness onset             | Days from admission to illness onset (HOSP_ADM_DT minus ILL_ONSET_DT)                   | 99 - Unknown                                                                                                                                                                                                                                                      | Admission date is day zero                                                                                                                                                                                                |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Variable Name       | Variable Label | Variable Description                                                                 | Value Labels                                                                 | Notes                                                                 |
|---------------------|----------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| X. Virus Testing    |                |                                                                                       |                                                                           |                                                                      |
| **FLU_METHOD_ANY**  | Flu tested by any assay | Flu tested by any assay, including RT-PCR, RIDT, DFA, culture, or other; during hospitalization or 3 days prior to admission | 0 = Not tested with any assay  
1 = Tested with any assay, including RT-PCR, RIDT, DFA, culture, serology, or other |                                                                      |
| **FLU_TEST_PRIOR**  | Flu testing occurred prior to hospitalization, within 3 day prior | Flu testing occurred prior to hospitalization, within 3 day prior | 0 = Testing occurred during hospitalization  
1 = Testing occurred in 3 days prior to admission |                                                                      |
| **FLU_METHOD_SUM**  | Flu tested by PCR or Other | Flu tested by PCR or other lab | 0 = Not tested for flu  
1 = Tested by PCR for flu  
2 = Tested by non-PCR lab for flu | If FLU_METHOD_ANY EQ 1 but FLU_RTPCR EQ 99 then  
FLU_METHOD_SUM EQ 2 |                                                                      |
| **FLU_CONF**        | Confirmed flu by any method | Confirmed flu by any method | 0 = Flu negative  
1 = Flu positive  
99 = Excluded – No PCR result | 1. |                                                                      |
| **FLU_RTPCR**       | Flu outcome by RT-PCR universal A and B | Flu outcome for primary analysis relying on RT-PCR only - earliest test result during hospitalization or 3 days prior to admission is default | 0 = PCR confirmed influenza negative  
1 = PCR confirmed influenza A or B positive  
99 = Excluded - No PCR result |                                                                      |
| **FLU_RTPCR_A**     | Flu A by RT-PCR | Confirmed influenza A by RT-PCR | 0 = Not influenza A  
1 = A influenza confirmed by RT-PCR |                                                                      |
| **FLU_RTPCR_AH3N2** | Flu A H3N2 subtype by RT-PCR | Confirmed A H3N2 subtype by RT-PCR | 0 = Not A H3N2  
1 = A H3N2 subtype confirmed by RT-PCR |                                                                      |
| Variable                  | Description                                                                 | Value Definitions                                      |
|--------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------|
| FLU_RTPCR_AH1PDM         | Flu A H1N1 PDM subtype by RT-PCR                                           | 0 = Not A H1N1 pdm09, 1 = A H1N1 pdm09 subtype confirmed by RT-PCR |
| FLU_RTPCR_B              | Flu B by RT-PCR                                                             | 0 = Not influenza B, 1 = Influenza B confirmed by RT-PCR |
| SPEC_DT                  | Specimen collection date                                                    | Specimen collection date - earliest test result during hospitalization or 3 days prior to admission is default |
| SPEC_HR                  | Specimen collection hour                                                    | Specimen collection hour - earliest test result during hospitalization or 3 days prior to admission is default |
| SPEC_24ADM               | Specimen collection within 24 hours of admission                            | 0 = specimen collected >24 hours after admission, 1 = specimen confirmed collected within 24 hours of admission, 9 = unknown or unavailable |
| FLU_METHOD_RIDT          | Flu tested by RIDTs                                                         | 0 = RIDT flu negative, 1 = RIDT flu positive, 99 = No RIDT testing |
| FLU_METHOD_DFA           | Flu tested by DFA/IFA                                                       | 0 = DFA/IFA flu negative, 1 = DFA/IFA flu positive, 99 = No DFA/IFA testing |
| Variable               | Description                                                                 | Code meanings                                                                 |
|-----------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------|
| **FLU_METHOD_CULTURE** | Flu tested by viral culture - earliest test result during hospitalization or 3 days prior to admission is default | 0 = Viral culture flu negative  
1 = Viral culture flu positive  
99 = No viral culture testing |
| **FLU_METHOD_OTHER**   | Flu tested by other non RT-PCR assays during hospitalization or 3 days prior to admission | 0 = OTHER flu negative  
1 = OTHER flu A positive  
2 = OTHER flu B positive  
3 = OTHER flu positive, unspecified  
99 = No OTHER testing |
| **RSV_TESTED**         | RSV tested by any assay - earliest test result during hospitalization or 3 days prior to admission | 0 = Not tested with any assay  
1 = Tested with an assay, including RT-PCR, DFA, culture, serology, or other |
| **RSV_TEST_METHOD**    | Testing method used to detect RSV - earliest test result during hospitalization or 3 days prior to admission | 1 = RT-PCR  
2 = DFA  
3 = Culture  
4 = Serology  
5 = Other |
| **RSV_RTPCR_RESULT**   | RSV outcome by RT-PCR - earliest test result during hospitalization or 3 days prior to admission is default | 0 = PCR confirmed RSV negative  
1 = PCR confirmed RSV positive  
99 = Excluded – No PCR |
| **RSV_RESULT**         | RSV result - earliest test result during hospitalization or 3 days prior to admission is default | 0 = RSV negative  
1 = RSV positive  
99 = Not tested |
| Column | Description | Value Definitions |
|--------|-------------|------------------|
| RSV_POS_AB | RSV type A or B viruses – earliest test result during hospitalization or 3 days prior to admission is default | 0 = RSV negative, 1 = RSV A virus, 2 = RSV B virus, 99 = Not tested or unknown |
| hMPV_RESULT | hMPV result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = hMPV negative, 1 = hMPV positive, 99 = Not tested |
| PARA_RESULT | Parainfluenza result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = Para negative, 1 = Para positive, 99 = Not tested |
| ADENO_RESULT | Adenovirus result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = Adeno negative, 1 = Adeno positive, 99 = Not tested |
| CORONA_RESULT | Coronavirus result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = Corona negative, 1 = Corona positive, 99 = Not tested |
| RHINO_RESULT | Rhinovirus result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = Rhino negative, 1 = Rhino positive, 99 = Not tested |
**SUPPLEMENTAL METHODS: DATA DICTIONARY**

| Variable Name         | Variable Label               | Variable Description                                                                 | Value Labels                           | Notes                                                                                                                                 |
|-----------------------|------------------------------|--------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| ENTERO_RESULT         | Enterovirus result           | Enterovirus result – earliest test result during hospitalization or 3 days prior to admission is default | 0 = Entero negative  
1 = Entero positive  
99 = Not tested           |                                                                                                                                                     |
| OTHER_VIRUS_RESULT    | Other non influenza virus result | Other non influenza virus result - earliest test result during hospitalization or 3 days prior to admission is default | 0 = Other non influenza virus negative  
1 = Other non influenza virus positive  
99 = Not tested           |                                                                                                                                                     |

**XI. Influenza Vaccination**

| Variable Name         | Variable Label               | Variable Description                                                                 | Value Labels                           | Notes                                                                                                                                 |
|-----------------------|------------------------------|--------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| VX_SEASON_DT          | Current season vx date       | Current season influenza vaccination date                                             |                                        | Those known to be vaccinated 0-14 days prior to admission will be excluded from the analytic sample as immunization status indeterminate |
| VX_SEASON_DAYS        | Days from vx date to hospital admission | Days from influenza vaccination date to hospital admission                        | 0 - 364  
999 = not available           |                                                                                                                                                     |
| VX_SEASON_ADM         | Current season vx delivered  | Current season influenza vaccination delivered                                        | 0 = Not vaccinated  
1 = Vaccinated 0-14 days prior to admission  
2 = Vaccinated >14 days from admission | Those known to be vaccinated 0-14 days prior to admission will be excluded from the analytic sample as immunization status indeterminate |
| VX_SEASON_FINAL       | Current season vx or not     | Current season influenza vaccinated >14 days prior to admission                       | 0 = Unvaccinated  
1 = Vaccinated           | This is the final analytic vaccination variable. Those known to be vaccinated 0-14 days from hospitalization are excluded from analysis. Thus, a patient is vaccinated with any accepted vaccination documentation and known to be vaccinated >14 days or missing vaccination date and thus assumed to be >14 days |
### VX_SEASON_PRIOR

Vaccination for both current and prior season

| Value | Description                                      |
|-------|--------------------------------------------------|
| 0     | Unvaccinated both current and prior season       |
| 1     | Vaccinated in prior season only                  |
| 2     | Vaccinated in current season only                |
| 3     | Vaccinated in both current and prior season      |
| 99    | Unknown or not in prior season data              |

Sites will code as 99 women who would not be expected to have prior season vaccination records because they were not health plan members or did not live in study area when vaccine became widely available (such as October 1st in NH sites).

### Birth Outcomes

#### OUT_ADVERSE

Adverse birth outcome

- 1 = Adverse birth outcome
- 0 = No adverse birth outcome

Coded 1 if: 

\[ \text{PREG_TRI} = 3 \text{ AND } (\text{OUT_PRETERM} = 1 \text{ OR } \text{OUT_STILLBIRTH} = 1) \]

#### OUT_PRETERM

Preterm birth

- 1 = Preterm infant
- 0 = Term infant
- 99 = Ineligible (e.g., stillbirth)

#### OUT_SGA

Small for gestational age birth

- 1 = Small for gestational age birth
- 0 = No SGA birth

Sites will use appropriate local or national benchmark values for birthweight percentiles by gestational age and gender to determine the lowest 10th percentile.

#### OUT_LBW

Low birthweight

- 1 = Low birthweight
- 0 = Not low birthweight

#### OUT_STILLBIRTH

Stillborn infant

- 1 = Stillborn infant
- 0 = No stillbirth
**SUPPLEMENTAL METHODS: DATA DICTIONARY**

| Variable Name          | Variable Label                  | Variable Description                                                                 | Value Labels                                                                                                      | Notes                                                                                                                                 |
|------------------------|---------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| OUT_FLU_HOSP_STATUS    | Exposure status category        | Category of exposure for analysis of birth outcomes                                     | 0 = No record of hospital admission for ARI during pregnancy*  
1 = Admissions for ARI during pregnancy and RT-PCR NEGATIVE for influenza (FLU_RTPCR=0)  
2 = Admitted for ARI during pregnancy and RT-PCR POSITIVE for influenza (FLU_RTPCR=1) | *For non-hospitalized women, this includes women who have a record of pregnancy overlapping with the pre-defined, site-specific influenza season, but had no record of admission to hospital with ARI. NOTE: some sites have information available on non-admitted influenza cases. If possible, exclude these from the non-hospitalized group (0). |
| OUT_QTR_CONCEPT        | Quarter of conception           | Estimated quarter of calendar year of pregnancy start                                  | 1 = Jan-Mar  
2 = Apr-Jun  
3 = Jul-Sep  
4 = Oct-Dec  
99 = Unknown | Variable will be used to time match exposed and unexposed pregnancies |
| OUT_VP_HR_DI           | High risk medical conditions identified at any point in the year prior to pregnancy start date dichotomy | High risk medical condition (chronic condition, not pregnancy complication) identified from medical records in the one year prior to pregnancy start date | 0 = No high risk medical condition (not pregnancy complication) documented  
1 = One or more high risk medical condition(s) documented | This is the same variable as the Vaccination Patterns paper, but with obesity as a HR condition (MAT_BMI_PRIORI_OBESE) |

| Variable Name | Variable Label | Variable Description | Value Labels | Notes |
|---------------|----------------|----------------------|--------------|-------|
| VP_PID        | Participant ID | Participant ID - uniquely associated with each individual like medic rec # or unique ID for your site | Site specific variable | Same woman can appear more than once in the dataset, but only once per influenza season. |
| Variable          | Description                                                                 | Value Options                                                                 | Notes                                                                                           |
|-------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| VP_SEASON_YEAR    | Influenza season in which pregnancy occurs                                  | "2010/2011" "2011/2012" "2012/2013" "2013/2014" "2014/2015" "2015/2016"         | This variable defines the window for population capture. Pregnancy overlapping specified flu season is captured. |
| VP_MAT_AGE_35     | Maternal age as of pregnancy start date, LT or GE 35 years                  | 1 = < 35 years 2 = >= 35 years 99 = unknown                                     |                                                                                                |
| VP_HR_DI          | High risk medical conditions identified at any point in the year prior to pregnancy start date dichotomy | 0 = No high risk medical condition (not pregnancy complication) documented 1 = One or more high risk medical condition(s) documented | Use code list from HR_DI                                                                    |
| VP_PC_DI          | Pregnancy complication identified at any point in the pregnancy (start date through end date) dichotomy | 0 = No pregnancy complication documented 1 = One or more pregnancy complications documented | Use code list from PC_DI                                                                    |
| VP_VX_DI          | Current season vx or not                                                    | 0 = Unvaccinated 1 = Vaccinated                                                | Vaccination Status for the flu season, but allowing vaccines from Aug 1 – ENDDT, where ENDDT is the MAXIMUM of 4/30 or the end of the flu season. |
| Variable                      | Description                                                                 | Values                                                                                           | Notes |
|-------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-------|
| VP_VX_TIMING                  | Current season vx timing, relative to pregnancy                              | 0 = Unvaccinated, 1 = Prior to pregnancy start date, 2 = 1st trimester, 3 = 2nd trimester, 4 = 3rd trimester, 5 = After pregnancy end date |       |
| VP_SEASON_FLU.PERIOD          | Current season vx timing, relative to flu circulation                         | 0 = Unvaccinated, 1 = Vaccinated prior to early season, 2 = Vaccinated during early season with sustained local circulation at low levels, 3 = Vaccinated during high and peak periods of circulation, 4 = Vaccinated during late season with sustained local circulation at low levels, 5 = Vaccinated after late season |       |

Early, peak, and late periods defined by site for SEASON_FLU_PERIOD variable.
| Variable Name        | Variable Label                                | Variable Description | Value Labels                                                                 | Notes                                                                                                                                                        |
|----------------------|-----------------------------------------------|----------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| XIV. Analysis Specification |                                              |                      |                                                                             |                                                                                                                                                              |
| ANALYSIS_FLU_VE      | Record included in VE analysis                |                      | 0 – Record not included in VE analysis                                      | Record is included in VE analysis if all of the following criteria are met:                                                                                 |
|                      |                                               |                      | 1 – Record included in VE analysis                                         | a. Woman age 18-50 at time of inpatient admission.<br>b. Pregnant at time of admission.<br>c. Date of admission during flu season 2010/11 thru 2015/16<br>d. Eventual pregnancy outcome of LB or SB at >= 20 weeks gestational age.<br>e. Discharge diagnosis of ARI/Febrile illness<br>f. Flu PCR tested during hospitalization or in 3 days prior to admission.<br>g. Vaccination status documented (excludes those with vaccination 0-14 days prior to admission; if VX_SEASON_ADM = 1). |
| ANALYSIS_RSV         | Record included in RSV analysis               |                      | 0 – Record not included in RSV analysis                                     | Record is included in RSV analysis if:                                                                                                                      |
|                      |                                               |                      | 1 – Record included in RSV analysis                                         | a. Woman was pregnant during RSV season<br>b. Had an eventual pregnancy outcome of LB or SB at >=20 weeks gestational age |
| ANALYSIS_VAC_NOTVAC  | Record included in vac/not vac analysis       |                      | 0 – Record not included in vac/not vac analysis                            | Detailed specifications needed for the vac/not vac analysis.                                                                                                 |
|                      |                                               |                      | 1 – Record included in vac/not vac analysis                                |                                                                                                                                                              |
### APPENDIX: Primary Code Sets

| Description                                                                 | ICD-10 Code | ICD-10-AM Code | ICD-10-CA Code | Notes         |
|----------------------------------------------------------------------------|-------------|----------------|----------------|---------------|
| **Acute Respiratory or Febrile Illness (ARI/F) Diagnostic Codes**          |             |                |                |               |
| Viral infection of unspecified site                                       | B34         | B34            | B34            |               |
| Adenovirus infection, unspecified                                         | B34.0       | B34.0          | B34.0          |               |
| Enterovirus infection, unspecified                                         | B34.1       | B34.1          | B34.1          |               |
| Coronavirus infection, unspecified                                         | B34.2       | B34.2          | B34.2          |               |
| Parvovirus infection, unspecified                                          | B34.3       | B34.3          | B34.3          |               |
| Papovavirus infection, unspecified                                         | B34.4       | B34.4          | B34.4          |               |
| Other viral infection, unspecified                                         | B34.8       | B34.8          | B34.8          |               |
| Viral infection, unspecified                                               | B34.9       | B34.9          | B34.9          |               |
| Respiratory syncytial virus as the cause of diseases classified elsewhere   | B97.4       | B97.4          | B97.4          |               |
| Other viral agents as the cause of diseases classified elsewhere            | B97.8       | B97.8          | B97.8          |               |
| **Acute nasopharyngitis**                                                  |             |                |                |               |
| Acute sinusitis                                                            | J00         | J00            | J00            |               |
| Acute maxillary sinusitis, unspecified                                     | J01.00      | J01.0          | J01.00         |               |
| Acute recurrent maxillary sinusitis                                        | J01.01      | J01.0          | J01.01         |               |
| Acute frontal sinusitis, unspecified                                       | J01.10      | J01.1          | J01.10         |               |
| Acute recurrent frontal sinusitis                                          | J01.11      | J01.1          | J01.11         |               |
| Acute ethmoidal sinusitis, unspecified                                     | J01.20      | J01.2          | J01.20         |               |
| Acute recurrent ethmoidal sinusitis                                        | J01.21      | J01.2          | J01.21         |               |
| Acute sphenoidal sinusitis, unspecified                                    | J01.30      | J01.3          | J01.30         |               |
| Acute recurrent sphenoidal sinusitis                                       | J01.31      | J01.3          | J01.31         |               |
| Acute pansinusitis, unspecified                                            | J01.40      | J01.4          | J01.40         |               |
| Acute recurrent pansinusitis                                              | J01.41      | J01.4          | J01.41         |               |
| Other acute sinusitis                                                      | J01.80      | J01.8          | J01.80         |               |
| Other acute recurrent sinusitis                                            | J01.81      | J01.8          | J01.81         |               |
| Acute sinusitis, unspecified                                               | J01.90      | J01.9          | J01.90         |               |
| Acute recurrent sinusitis, unspecified                                     | J01.91      | J01.9          | J01.91         |               |
| **Acute pharyngitis**                                                      |             |                |                |               |
| Acute pharyngitis                                                          | J02         | J02            | J02            |               |
| Streptococcal pharyngitis                                                 | J02.0       | J02.0          | J02.0          |               |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code J02.8 | Code J02.8 | Code J02.8 |
|---------------------------------------------------------------------------|------------|------------|------------|
| Acute pharyngitis due to other specified organisms                         | J02.8      | J02.8      | J02.8      |
| Acute pharyngitis, unspecified                                            | J02.9      | J02.9      | J02.9      |
| Acute tonsillitis                                                          | J03        | J03        | J03        |
| Acute streptococcal tonsillitis, unspecified                               | J03.00     | J03.0      | J03.00     |
| Acute recurrent streptococcal tonsillitis                                 | J03.01     | J03.8      | J03.01     |
| Acute tonsillitis due to other specified organisms                         | J03.80     | J03.8      | J03.80     |
| Acute recurrent tonsillitis due to other specified organisms              | J03.81     | J03.9      | J03.81     |
| Acute tonsillitis, unspecified                                            | J03.90     | J03.8      | J03.90     |
| Acute recurrent tonsillitis, unspecified                                   | J03.91     | J03.8      | J03.91     |
| Acute laryngitis and tracheitis                                           | J04        | J04        | J04        |
| Acute laryngitis                                                          | J04.0      | J04.0      | J04.0      |
| Acute tracheitis without obstruction                                      | J04.10     | J04.1      | J04.10     |
| Acute tracheitis with obstruction                                         | J04.11     | J04.1      | J04.11     |
| Acute laryngotracheitis                                                   | J04.2      | J04.2      | J04.2      |
| Supraglottitis, unspecified, without obstruction                          | J04.30     | Code does not exist | J04.30 |
| Supraglottitis, unspecified, with obstruction                             | J04.31     | Code does not exist | J04.31 |
| Acute upper respiratory infections of multiple and unspecified sites       | J06        | J06        | J06        |
| Acute laryngopharyngitis                                                  | J06.0      | J06.0      | J06.0      |
| Other acute upper respiratory infections of multiple sites                 | J06.8      | J06.8      | J06.8      |
| Acute upper respiratory infection, unspecified                            | J06.9      | J06.9      | J06.9      |
| Influenza due to certain identified influenza viruses                      | J09        | J09        | J09        |
| Influenza due to identified novel influenza A virus                        | J09.X      | J09        | J09.X      |
| Influenza due to identified novel influenza A virus with pneumonia         | J09.X1     | J09        | J09.X1     |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code | Code | Code |
|---------------------------------------------------------------------------|------|------|------|
| Influenza due to identified novel influenza A virus with other respiratory manifestations | J09.X2 | J09 | J09.X2 |
| Influenza due to identified novel influenza A virus with gastrointestinal manifestations | J09.X3 | J09 | J09.X3 |
| Influenza due to identified novel influenza A virus with other manifestations | J09.X9 | J09 | J09.X9 |
| Influenza due to other identified influenza virus | J10 | J10 | J10 |
| Influenza due to other identified influenza virus with pneumonia | J10.0 | J10.0 | J10.0 |
| Influenza due to other identified influenza virus with unspecified type of pneumonia | J10.00 | J10.0 | J10.00 |
| Influenza due to other identified influenza virus with the same other identified influenza virus pneumonia | J10.01 | J10.0 | J10.01 |
| Influenza due to other identified influenza virus with other specified pneumonia | J10.08 | J10.0 | J10.08 |
| Influenza due to other identified influenza virus with other respiratory manifestations | J10.1 | J10.1 | J10.1 |
| Influenza due to other identified influenza virus with gastrointestinal manifestations | J10.2 | Code does not exist | J10.2 |
| Influenza due to other identified influenza virus with other manifestations | J10.8 | J10.8 | J10.8 |
| Influenza due to other identified influenza virus with encephalopathy | J10.81 | J10.8 | J10.81 |
| Influenza due to other identified influenza virus with myocarditis | J10.82 | J10.8 | J10.82 |
| Influenza due to other identified influenza virus with otitis media | J10.83 | J10.8 | J10.83 |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code 1  | Code 2  | Code 3  |
|---------------------------------------------------------------------------|---------|---------|---------|
| Influenza due to other identified influenza virus with other manifestations | J10.89  | J10.8   | J10.89  |
| Influenza due to unidentified influenza virus                              | J11     | J11     | J11     |
| Influenza due to unidentified influenza virus with pneumonia               | J11.0   | J11.0   | J11.0   |
| Influenza due to unidentified influenza virus with unspecified type of pneumonia | J11.00  | J11.0   | J11.00  |
| Influenza due to unidentified influenza virus with specified pneumonia     | J11.08  | J11.0   | J11.08  |
| Influenza due to unidentified influenza virus with other respiratory manifestations | J11.1   | J11.1   | J11.1   |
| Influenza due to unidentified influenza virus with gastrointestinal manifestations | J11.2   | Code does not exist | J11.2 |
| Influenza due to unidentified influenza virus with other manifestations    | J11.8   | J11.8   | J11.8   |
| Influenza due to unidentified influenza virus with encephalopathy          | J11.81  | J11.8   | J11.81  |
| Influenza due to unidentified influenza virus with myocarditis             | J11.82  | J11.8   | J11.82  |
| Influenza due to unidentified influenza virus with otitis media            | J11.83  | J11.8   | J11.83  |
| Influenza due to unidentified influenza virus with other manifestations    | J11.89  | J11.8   | J11.89  |
| Viral pneumonia, not elsewhere classified                                  | J12     | J12     | J12     |
| Adenoviral pneumonia                                                      | J12.0   | J12.0   | J12.0   |
| Respiratory syncytial virus pneumonia                                      | J12.1   | J12.1   | J12.1   |
| Parainfluenza virus pneumonia                                             | J12.2   | J12.2   | J12.2   |
| Human metapneumovirus pneumonia                                           | J12.3   | J12.3   | J12.3   |
| Other viral pneumonia                                                     | J12.8   | J12.8   | J12.8   |
| Pneumonia due to SARS-associated coronavirus                              | J12.81  | J12.8   | J12.81  |
| Other viral pneumonia                                                     | J12.89  | J12.8   | J12.89  |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Diagnosis                                | Code  | Code  | Code  |
|------------------------------------------|-------|-------|-------|
| Viral pneumonia, unspecified             | J12.9 | J12.9 | J12.9 |
| Pneumonia due to Streptococcus pneumoniae | J13   | J13   | J13   |
| Pneumonia due to Hemophilus influenzae   | J14   | J14   | J14   |
| Bacterial pneumonia, not elsewhere classified | J15   | J15   | J15   |
| Pneumonia due to Klebsiella pneumoniae   | J15.0 | J15.0 | J15.0 |
| Pneumonia due to Pseudomonas             | J15.1 | J15.1 | J15.1 |
| Pneumonia due to staphylococcus          | J15.2 | J15.2 | J15.2 |
| Pneumonia due to staphylococcus, unspecified | J15.20 | J15.2 | J15.20 |
| Pneumonia due to Methicillin susceptible Staphylococcus aureus | J15.211 | J15.2 | J15.211 |
| Pneumonia due to Methicillin resistant Staphylococcus aureus | J15.212 | J15.2 | J15.212 |
| Pneumonia due to other staphylococcus    | J15.29 | J15.2 | J15.29 |
| Pneumonia due to streptococcus, group B  | J15.3 | J15.3 | J15.3 |
| Pneumonia due to other streptococci      | J15.4 | J15.4 | J15.4 |
| Pneumonia due to Escherichia coli        | J15.5 | J15.5 | J15.5 |
| Pneumonia due to other aerobic Gram-negative bacteria | J15.6 | J15.6 | J15.6 |
| Pneumonia due to Mycoplasma pneumoniae   | J15.7 | J15.7 | J15.7 |
| Pneumonia due to other specified bacteria | J15.8 | J15.8 | J15.8 |
| Unspecified bacterial pneumonia          | J15.9 | J15.9 | J15.9 |
| Pneumonia due to other infectious organisms, not elsewhere classified | J16   | J16   | J16   |
| Chlamydial pneumonia                     | J16.0 | J16.0 | J16.0 |
| Pneumonia due to other specified infectious organisms | J16.8 | J16.8 | J16.8 |
| Condition                                                                 | Code  | Code  | Code  |
|----------------------------------------------------------------------------|-------|-------|-------|
| Pneumonia in diseases classified elsewhere                                 | J17   | J17   | J17   |
| Pneumonia, unspecified organism                                            | J18   | J18   | J18   |
| Bronchopneumonia, unspecified organism                                     | J18.0 | J18.0 | J18.0 |
| Lobar pneumonia, unspecified organism                                      | J18.1 | J18.1 | J18.1 |
| Hypostatic pneumonia, unspecified organism                                 | J18.2 | J18.2 | J18.2 |
| Other pneumonia, unspecified organism                                      | J18.8 | J18.8 | J18.8 |
| Pneumonia, unspecified organism                                            | J18.9 | J18.9 | J18.9 |
| Acute bronchitis                                                           | J20   | J20   | J20   |
| Acute bronchitis due to Mycoplasma pneumoniae                             | J20.0 | J20.0 | J20.0 |
| Acute bronchitis due to Hemophilus influenzae                              | J20.1 | J20.1 | J20.1 |
| Acute bronchitis due to streptococcus                                      | J20.2 | J20.2 | J20.2 |
| Acute bronchitis due to coxsackievirus                                    | J20.3 | J20.3 | J20.3 |
| Acute bronchitis due to parainfluenza virus                               | J20.4 | J20.4 | J20.4 |
| Acute bronchitis due to respiratory syncytial virus                       | J20.5 | J20.5 | J20.5 |
| Acute bronchitis due to rhinovirus                                        | J20.6 | J20.6 | J20.6 |
| Acute bronchitis due to echovirus                                         | J20.7 | J20.7 | J20.7 |
| Acute bronchitis due to other specified organisms                          | J20.8 | J20.8 | J20.8 |
| Acute bronchitis, unspecified                                              | J20.9 | J20.9 | J20.9 |
| Acute bronchiolitis                                                        | J21   | J21   | J21   |
| Acute bronchiolitis due to respiratory syncytial virus                    | J21.0 | J21.0 | J21.0 |
| Acute bronchiolitis due to human metapneumovirus                          | J21.1 | J21.1 | J21.1 |
| Acute bronchiolitis due to other specified organisms                      | J21.8 | J21.8 | J21.8 |
| Condition                                                        | Code 1 | Code 2 | Code 3 |
|-----------------------------------------------------------------|--------|--------|--------|
| Acute bronchiolitis, unspecified                                | J21.9  | J21.9  | J21.9  |
| Unspecified acute lower respiratory infection                   | J22    | J22    | J22    |
| Other specified diseases of upper respiratory tract             | J39.8  | J39.8  | J39.8  |
| Disease of upper respiratory tract, specified                  | J39.9  | J39.9  | J39.9  |
| Bronchitis, not specified as acute or chronic                  | J40    | J40    | J40    |
| Acute respiratory distress syndrome                             | J80    | J80    | J80    |
| Pulmonary edema                                                 | J81    | J81    | J81    |
| Acute pulmonary edema                                           | J81.0  | J81    | J81.0  |
| Chronic pulmonary edema                                         | J81.1  | J81    | J81.1  |
| Acute respiratory failure                                       | J96.0  | J96.0  | J96.0  |
| Acute respiratory failure, unspecified whether with hypoxia or hypercapnia | J96.00 | J96.00 | J96.00 |
| Acute respiratory failure with hypoxia                          | J96.01 | J96.01 | J96.01 |
| Acute respiratory failure with hypercapnia                      | J96.02 | Code does not exist | J96.02 |
| Respiratory failure, unspecified, unspecified whether with hypoxia or hypercapnia | J96.90 | J96.90 | J9690 |
| Respiratory failure, unspecified with hypoxia                   | J96.91 | J96.91 | J9691 |
| Respiratory failure, unspecified with hypercapnia               | J96.92 | Code does not exist | J9699 |
| Other diseases of bronchus, not elsewhere classified            | J98.09 | J98.0  | J980   |
| Atelectasis                                                     | J98.11 | J98.1  | J9810  |
| Other pulmonary collapse                                        | J98.19 | J98.1  | J98.19 |
| Other disorders of lung                                         | J98.4  | J98.4  | J98.4  |
| Other specified respiratory disorders                            | J98.8  | J98.8  | J98.8  |
| Respiratory disorder, unspecified                               | J98.9  | J98.9  | J98.9  |
| Pyrexia during labor, not elsewhere classified                  | O75.2  | O75.2  | O75201, O75203, O75209 |
| Condition                                                                 | Code 1  | Code 2  | Code 3                                      |
|--------------------------------------------------------------------------|---------|---------|---------------------------------------------|
| Pyrexia of unknown origin following delivery                             | O86.4   | O86.4   | O86402, O86404, O86409                      |
| Other viral diseases complicating pregnancy                              | O98.51  | O98.5   | O98.51                                      |
| Other viral diseases complicating pregnancy, first trimester             | O98.511 | O98.5   | O98.511                                     |
| Other viral diseases complicating pregnancy, second trimester           | O98.512 | O98.5   | O98.512                                     |
| Other viral diseases complicating pregnancy, third trimester            | O98.513 | O98.5   | O98.513                                     |
| Other viral diseases complicating pregnancy, unspecified trimester      | O98.519 | O98.5   | O98.519                                     |
| Other viral diseases complicating childbirth                             | O98.52  | O98.5   | O98.52                                      |
| Other viral diseases complicating the puerperium                        | O98.53  | O98.5   | O98.53                                      |
| Other maternal infectious and parasitic diseases complicating pregnancy | O98.81  | O98.8   | O98801-O98804, O98809                       |
| Other maternal infectious and parasitic diseases complicating pregnancy, first trimester | O98.811 | O98.8   |                                             |
| Other maternal infectious and parasitic diseases complicating pregnancy, second trimester | O98.812 | O98.8   |                                             |
| Other maternal infectious and parasitic diseases complicating pregnancy, third trimester | O98.813 | O98.8   |                                             |
| Other maternal infectious and parasitic diseases complicating pregnancy, unspecified trimester | O98.819 | O98.8   |                                             |
| Diseases of the respiratory system complicating pregnancy              | O99.51  | O99.5   | O99501-O99504, O99509                       |
| Diseases of the respiratory system complicating pregnancy, first trimester | O99.511 | O99.5   |                                             |
| Diseases of the respiratory system complicating pregnancy, second trimester | O99.512 | O99.5   |                                             |
| **Diseases of the respiratory system complicating pregnancy, third trimester** | O99.513 | O99.5 |
|---|---|---|
| **Diseases of the respiratory system complicating pregnancy, unspecified trimester** | O99.519 | O99.5 |
| Cough | R05 | R05 | R05 |
| Shortness of breath | R06.02 | R06.0 | R060 |
| Stridor | R06.1 | R06.1 | R06.1 |
| Wheezing | R06.2 | R06.2 | R06.2 |
| Tachyypnea, not elsewhere classified | R06.82 | R06.8 | R064 |
| Chest pain on breathing | R07.1 | R07.1 | R07.1 |
| Asphyxia | R09.01 | R09.0 | R09.01 |
| Hypoxemia | R09.02 | R09.0 | R09.02 |
| Respiratory arrest | R09.2 | R09.2 | R09.2 |
| Abnormal sputum | R09.3 | R09.3 | R09.3 |
| Other specified symptoms and signs involving the circulatory and respiratory systems | R09.89 | R09.89 | R09.89 |
| Fever of other and unknown origin | R50 | R50 | R50 |
| Drug induced fever | R50.2 | R50.2 | R50.2 |
| Fever presenting with conditions classified elsewhere | R50.81 | R50.8 | R50.81 |
| Postprocedural fever | R50.82 | R50.8 | R50.82 |
| Postvaccination fever | R50.83 | R50.8 | R50.83 |
| Febrile nonhemolytic transfusion reaction | R50.84 | R50.8 | R50.84 |
| Fever, unspecified | R50.9 | R50.9 | R50.9 |
| Chills (without fever) | R68.83 | R68.8 (not specific to chills) | R680 |
| Pleural effusion, not elsewhere classified | J90 | J90 |
| Acute and chronic respiratory failure | J96.2 | No J96.2 – J96.1 (chronic respiratory failure) |
| Description                                                                 | ICD-10 Code | ICD-10-AM Code | ICD-10-CA Code | Notes                     |
|----------------------------------------------------------------------------|-------------|----------------|----------------|--------------------------|
| Acute and chronic respiratory failure, unspecified whether with hypoxia or  | J96.20      | --             |                |                          |
| hypercapnia                                                                |             |                |                |                          |
| Acute and chronic respiratory failure with hypoxia                          | J96.21      | --             |                |                          |
| Acute and chronic respiratory failure with hypercapnia                      | J96.22      | --             |                |                          |
| Hemoptysis                                                                 | R04.2       | R04.2          |                |                          |
| Dyspnea                                                                    | R06.0       | R06.0          |                |                          |
| Dyspnea, unspecified                                                        | R06.00      | R06.0          |                |                          |
| Other forms of dyspnea                                                      | R06.09      | R06.0          |                |                          |
| Nasal congestion                                                           | R09.81      |                | Code does not exist |                          |
| Severe sepsis with septic shock                                            | R65.21      |                | Code does not exist |                          |
| Shock, unspecified                                                         | R57.9       | R57.9          |                |                          |
| Sepsis, unspecified organism                                                | A41.9       | A41.9          |                |                          |
| Shock during or following labor and delivery                                | O75.1       | O75.1          |                |                          |
| High Risk Medical Condition Diagnostic Codes                               |             |                |                |                          |
| **Blood Disorders**                                                         |             |                |                |                          |
| Iron deficiency anemia secondary to blood loss (chronic)                    | D50.0       | D50.0          | D50.0          |                          |
| Other iron deficiency anemias                                              | D50.8       | D50.0          | D50.8          |                          |
| Iron deficiency anemia, unspecified                                         | D50.9       | D50.8          | D50.9          |                          |
| Vitamin B12 deficiency anemia                                              | D51         | D50.9          | D51            |                          |
| Folate deficiency anemia                                                    | D52         | D51.0-D51.9    | D52            |                          |
| Other nutritional anemias                                                  | D53         | D52.0-D52.9    | D53            |                          |
| Other hereditary hemolytic anemias                                         | D58         | D53.0-D53.9    | D58            |                          |
| Acquired hemolytic anemia                                                  | D59         | D58.0-D58.9    | D59            |                          |
| Other aplastic anemias and other bone marrow failure syndromes             | D61         | D59.0-D59.9    | D61            |                          |
| Anemia in neoplastic disease                                               | D63.0       | D61.0-D61.9    | D63.0          |                          |
| **SUPPLEMENTAL METHODS: DATA DICTIONARY** |
|------------------------------------------|
| Anemia in chronic kidney disease          | D63.1 | D63  | D63 |
| Anemia in other chronic diseases classified elsewhere | D63.8 | D63  | D63.8 |
| Hereditary sideroblastic anemia           | D64.0 | D63  | D64.0 |
| Secondary sideroblastic anemia due to disease | D64.1 | D64.0 | D64.1 |
| Secondary sideroblastic anemia due to drugs and toxins | D64.2 | D64.1 | D64.2 |
| Other sideroblastic anemias               | D64.3 | D64.2 | D64.3 |
| Anemia due to antineoplastic chemotherapy | D64.81| D64.3 | D64.81|
| Other specified anemias                   | D64.89| D64.8 | D648 |
| Anemia, unspecified                       | D64.9 | D64.8 | D64.9 |
| Other coagulation defects                 | D68   | D64.9 | D68  |
| Purpura and other hemorrhagic conditions  | D69   | D68.0-D69.9 | D69 |
| Neutropenia                               | D70   | D69.0-D69.9 | D70 |
| Functional disorders of polymorphonuclear neutrophils | D71 | D70 | D71 |
| Other disorders of white blood cells      | D72   | D71 | D72 |
| Diseases of spleen                        | D73   | D72.0-D72.9 | D73 |
| Methemoglobinemia                         | D74   | D73.0-D73.9 | D74 |
| Other and unspecified diseases of blood and blood-forming organs | D75 | D74.0-D74.9 | D75 |
| Other disorders of blood and blood-forming organs in diseases classified elsewhere | D77 | D77 | D77 |

**Diabetes**

- Diabetes mellitus due to underlying condition: E08  Code does not exist  Code does not exist
- Drug or chemical induced diabetes mellitus: E09  E09  Code does not exist
- Type 1 diabetes mellitus: E10  E10  E10
- Type 2 diabetes mellitus: E11  E11  E11
- Other specified diabetes mellitus: E13  E13  E13
- Nondiabetic hypoglycemic coma: E15

**Heart Disease**
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition (Description)                                                                 | ICD-10 Code(s)          |
|-----------------------------------------------------------------------------------------|-------------------------|
| Candidal endocarditis                                                                   | B37.6                   |
| Disseminated intravascular coagulation (defibrination syndrome)                         | D65                     |
| Hypertensive retinopathy                                                                | H35.03, H35.0           |
| Rheumatic fever with heart involvement                                                  | I01, I01.0-I01.9       |
| Rheumatic mitral valve disease                                                          | I05, I05.0-I05.9        |
| Rheumatic aortic valve diseases                                                         | I06, I06.0-I06.9        |
| Other rheumatic heart diseases                                                          | I09, I09.0-I09.9        |
| Hypertensive heart disease                                                              | I11, I11.0-I11.9        |
| Hypertensive chronic kidney disease                                                     | I12, I12.0-I12.9        |
| Hypertensive heart and chronic kidney disease                                          | I13, I13.0-I13.9        |
| Angina pectoris                                                                         | I20, I20.0-I20.9        |
| ST elevation (STEMI) and non-ST elevation (NSTEMI) myocardial infarction               | I21, I21.0-I21.9        |
| Other acute ischemic heart diseases                                                     | I24, I24.0-I24.9        |
| Old myocardial infarction                                                               | I25.2                   |
| Atherosclerosis of coronary artery bypass graft(s) and coronary artery of transplanted heart with angina pectoris | I25.7, Code does not exist |
| Pulmonary embolism                                                                      | I26, I26.0, I26.9       |
| Other pulmonary heart diseases                                                         | I27, I27.0-I27.9        |
| Other diseases of pulmonary vessels                                                     | I28, I28.0-I28.9        |
| Acute pericarditis                                                                      | I30, I30.0-I30.9        |
| Other diseases of pericardium                                                          | I31, I31.0-I31.9        |
| Acute and subacute endocarditis                                                        | I33, I33.0, I33.9       |
| Nonrheumatic mitral valve disorders                                                     | I34, I34.0-I34.9        |
| Nonrheumatic aortic valve disorders                                                    | I35, I35.0-I35.9        |
| Nonrheumatic tricuspid valve disorders                                                 | I36, I36.0-I36.9        |
| Nonrheumatic pulmonary valve disorders                                                | I37, I37.0-I37.9        |
| Endocarditis, valve unspecified                                                        | I38, I38               |
| Endocarditis and heart valve disorders in diseases classified elsewhere                | I39, I39.0-I39.8        |
| Acute myocarditis | I40 | I40.0-I40.9 | I40 |
|-------------------|-----|-------------|-----|
| Myocarditis in diseases classified elsewhere | I41 | I41.0-I41.8 | I41 |
| Cardiomyopathy | I42 | I42.0-I42.9 | I42 |
| Cardiac arrest | I46 | I46.0-I46.9 | I46 |
| Paroxysmal tachycardia | I47 | I47.0-I47.9 | I47 |
| Atrial fibrillation and flutter | I48 | I48.0-I48.9 | I48 |
| Other cardiac arrhythmias | I49 | I49.0-I49.9 | I49 |
| Heart failure | I50 | I50.0-I50.9 | I50 |
| Complications and ill-defined descriptions of heart disease | I51 | I51 | I51 |
| Other heart disorders in diseases classified elsewhere | I52 | I52 | I52 |
| Atherosclerosis | I70 | I70 | I70 |
| Aortic aneurysm and dissection | I71 | I71 | I71 |
| Other aneurysm | I72 | I72 | I72 |
| Other peripheral vascular diseases | I73 | I73 | I73 |
| Arterial embolism and thrombosis | I74 | I74 | I74 |
| Atheroembolism | I75 | I70.9 | Code does not exist |
| Other disorders of arteries and arterioles | I77 | I77 | I77 |
| Polyarteritis nodosa | M30.0 | M30.0 | M30.0 |
| Other necrotizing vasculopathies | M31 | M31.0-M31.9 | M31 |
| Congenital malformations of cardiac septa | Q21 | Q21.00-Q21.9 | Q21 |
| Congenital malformations of pulmonary and tricuspid valves | Q22 | Q22 | Q22 |
| Congenital malformations of aortic and mitral valves | Q23 | Q23 | Q23 |
| Other congenital malformations of heart | Q24 | Q24 | Q24 |
| Congenital malformations of great arteries | Q25 | Q25 | Q25 |
| Congenital malformations of great veins | Q26 | Q26 | Q26 |
| Other congenital malformations of peripheral vascular system | Q27 | Q27 | Q27 |
| Complications of cardiac and vascular prosthetic devices, implants and grafts | T82 | T82 | T82 |
| Presence of cardiac and vascular implants and grafts | Z95 | Z95 | Z95 |
|---------------------------------------------------|-----|-----|-----|
| **Cancer**                                        |     |     |     |
| Malignant neoplasm of lip                         | C00 | C00 | C00 |
| Malignant neoplasm of base of tongue              | C01 | C01 | C01 |
| Malignant neoplasm of other and unspecified parts of tongue | C02 | C02 | C02 |
| Malignant neoplasm of parotid gland               | C07 | C07 | C07 |
| Malignant neoplasm of other and unspecified major salivary glands | C08 | C08 | C08 |
| Malignant neoplasm of gum                         | C03 | C03 | C03 |
| Malignant neoplasm of floor of mouth              | C04 | C04 | C04 |
| Malignant neoplasm of palate                       | C05 | C05 | C05 |
| Malignant neoplasm of other and unspecified parts of mouth | C06 | C06 | C06 |
| Malignant neoplasm of tonsil                       | C09 | C09 | C09 |
| Malignant neoplasm of oropharynx                  | C10 | C10 | C10 |
| Malignant neoplasm of nasopharynx                 | C11 | C11 | C11 |
| Malignant neoplasm of pyriform sinus              | C12 | C12 | C12 |
| Malignant neoplasm of hypopharynx                 | C13 | C13 | C13 |
| Malignant neoplasm of other and ill-defined sites in the lip, oral cavity and pharynx | C14 | C14 | C14 |
| Malignant neoplasm of esophagus                   | C15 | C15 | C15 |
| Malignant neoplasm of stomach                     | C16 | C16 | C16 |
| Malignant neoplasm of small intestine             | C17 | C17 | C17 |
| Malignant neoplasm of colon                       | C18 | C18 | C18 |
| Malignant neoplasm of rectosigmoid junction       | C19 | C19 | C19 |
| Malignant neoplasm of rectum                      | C20 | C20 | C20 |
| Malignant neoplasm of anus and anal canal          | C21 | C21 | C21 |
| Malignant neoplasm of liver and intrahepatic bile ducts | C22 | C22 | C22 |
| Malignant neoplasm of gallbladder                 | C23 | C23 | C23 |
| Malignant neoplasm of other and unspecified parts of biliary tract | C24 | C24 | C24 |
|---------------------------------------------------------------|-----|-----|-----|
| Malignant neoplasm of pancreas                                | C25 | C25 | C25 |
| Malignant neoplasm of retroperitoneum and peritoneum          | C48 | C48 | C48 |
| Malignant neoplasm of other and ill-defined digestive organs  | C26 | C26 | C26 |
| Malignant neoplasm of nasal cavity and middle ear             | C30 | C30 | C30 |
| Malignant neoplasm of accessory sinuses                       | C31 | C31 | C31 |
| Malignant neoplasm of larynx                                  | C32 | C32 | C32 |
| Malignant neoplasm of trachea                                 | C33 | C33 | C33 |
| Malignant neoplasm of bronchus and lung                        | C34 | C34 | C34 |
| Malignant neoplasm of heart, mediastinum and pleura           | C38 | C38 | C38 |
| Malignant neoplasm of thymus                                  | C37 | C37 | C37 |
| Malignant neoplasm of other and ill-defined sites in the respiratory system and intrathoracic organs | C39 | C39 | C39 |
| Malignant neoplasm of bone and articular cartilage of limbs   | C40 | C40 | C40 |
| Malignant neoplasm of bone and articular cartilage of other and unspecified sites | C41 | C41 | C41 |
| Other and unspecified malignant neoplasm of skin              | C44 | C44 | C44 |
| Malignant neoplasm of other connective and soft tissue        | C49 | C49 | C49 |
| Malignant Melanoma of Skin                                    | C43 | C43 | C43 |
| Kaposi's Sarcoma                                               | C46 | C46 | C46 |
| Mesothelioma                                                   | C45 | C45 | C45 |
| Malignant neoplasm of uterus, part unspecified                 | C55 | C55 | C55 |
| Malignant neoplasm of cervix uteri                            | C53 | C53 | C53 |
| Malignant neoplasm of placenta                                | C58 | C58 | C58 |
| Malignant neoplasm of corpus uteri                            | C54 | C54 | C54 |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                      | Code | Code | Code |
|---------------------------------------------------------------|------|------|------|
| Malignant neoplasm of ovary                                   | C56  | C56  | C56  |
| Malignant neoplasm of vulva                                   | C51  | C51  | C51  |
| Malignant neoplasm of vagina                                  | C52  | C52  | C52  |
| Malignant neoplasm of breast                                  | C50  | C50  | C50  |
| Malignant neoplasm of prostate                                | C61  | C61  | C61  |
| Malignant neoplasm of testis                                  | C62  | C62  | C62  |
| Malignant neoplasm of penis                                   | C60  | C60  | C60  |
| Malignant neoplasm of bladder                                 | C67  | C67  | C67  |
| Malignant neoplasm of kidney, except renal pelvis             | C64  | C64  | C64  |
| Malignant neoplasm of eye and adnexa                          | C69  | C69  | C69  |
| Malignant neoplasm of brain                                   | C71  | C71  | C71  |
| Malignant neoplasm of spinal cord, cranial nerves and other parts of central nervous system | C72 | C72 | C72 |
| Malignant neoplasm of thyroid gland                           | C73  | C73  | C73  |
| Malignant neoplasm of adrenal gland                           | C74  | C74  | C74  |
| Malignant neoplasm of other endocrine glands and related structures | C75 | C75 | C75 |
| Malignant neoplasm of other and ill-defined sites             | C76  | C76  | C76  |
| Secondary and unspecified malignant neoplasm of lymph nodes   | C77  | C77  | C77  |
| Secondary malignant neoplasm of respiratory and digestive organs | C78 | C78 | C78 |
| Secondary malignant neoplasm of other and unspecified sites   | C79  | C79  | C79  |
| Malignant neoplasm without specification of site              | C80  | C80  | C80  |
| Hodgkin lymphoma                                               | C81  | C81  | C81  |
| Non-follicular lymphoma                                        | C83  | C83  | C83  |
| Multiple myeloma and malignant plasma cell neoplasms          | C90  | C90  | C90  |
| Lymphoid leukemia                                              | C91  | C91  | C91  |
| Myeloid leukemia                                               | C92  | C92  | C92  |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                      | Code 1 | Code 2 | Code 3 |
|-------------------------------------------------|--------|--------|--------|
| Monocytic leukemia                              | C93    | C93    | C93    |
| Other leukemias of specified cell type          | C94    | C94    | C94    |
| Leukemia of unspecified cell type              | C95    | C95    | C95    |
| Malignant neuroendocrine tumors                 | C7A    | Code does not exist | Code does not exist |
| Carcinoma in situ of middle ear and respiratory system | D02    | D02    | D02    |
| Neoplasm of uncertain behavior of oral cavity and digestive organs | D37    | D37    | D37    |
| Neoplasm of uncertain behavior of middle ear and respiratory and intrathoracic organs | D38    | D38    | D38    |
| Neoplasm of uncertain behavior of female genital organs | D39    | D39    | D39    |
| Neoplasm of uncertain behavior of testis        | D40.0  | D40.0  | D40.0  |
| Neoplasm of uncertain behavior of prostate      | D40.0  | D40.0  | D40.0  |
| Neoplasm of uncertain behavior of other specified male genital organs | D40.8  | D40.7  | D40.7  |
| Neoplasm of uncertain behavior of male genital organ, unspecified | D40.9  | D40.9  | D40.9  |
| Neoplasm of uncertain behavior of kidney        | D41.0  | D41.0  | D41.0  |
| Neoplasm of uncertain behavior of renal pelvis  | D41.1  | D41.1  | D41.1  |
| Neoplasm of uncertain behavior of ureter        | D41.2  | D41.2  | D41.2  |
| Neoplasm of uncertain behavior of urethra       | D41.3  | D41.3  | D41.3  |
| Neoplasm of uncertain behavior of bladder       | D41.4  | D41.4  | D41.4  |
| Neoplasm of uncertain behavior of other specified urinary organs | D41.8  | D41.7  | D41.7  |
| Neoplasm of uncertain behavior of unspecified urinary organ | D41.9  | D41.9  | D41.9  |
| Neoplasm of uncertain behavior of cerebral meninges | D42.0  | D42.0  | D42.0  |
| Neoplasm of uncertain behavior of spinal meninges | D42.1  | D42.1  | D42.1  |
| Neoplasm of uncertain behavior of meninges, unspecified | D42.9  | D42.9  | D42.9  |
| Neoplasm of uncertain behavior of brain, supratentorial | D43.0 | D43.0 | D43.0 |
|-----------------------------------------------------|-------|-------|-------|
| Neoplasm of uncertain behavior of brain, infratentorial | D43.1 | D43.1 | D43.1 |
| Neoplasm of uncertain behavior of brain, unspecified | D43.2 | D43.2 | D43.2 |
| Neoplasm of uncertain behavior of cranial nerves | D43.3 | D43.3 | D43.3 |
| Neoplasm of uncertain behavior of spinal cord | D43.4 | D43.4 | D43.4 |
| Neoplasm of uncertain behavior of other specified parts of central nervous system | D43.8 | D43.7 | D43.7 |
| Neoplasm of uncertain behavior of central nervous system, unspecified | D43.9 | D43.9 | D43.9 |
| Neoplasm of uncertain behavior of adrenal gland | D44.1 | D44.1 | D44.1 |
| Neoplasm of uncertain behavior of thyroid gland | D44.0 | D44.0 | D44.0 |
| Neoplasm of uncertain behavior of parathyroid gland | D44.2 | D44.2 | D44.2 |
| Neoplasm of uncertain behavior of pituitary gland | D44.3 | D44.3 | D44.3 |
| Neoplasm of uncertain behavior of craniopharyngeal duct | D44.4 | D44.4 | D44.4 |
| Neoplasm of uncertain behavior of pineal gland | D44.5 | D44.5 | D44.5 |
| Neoplasm of uncertain behavior of carotid body | D44.6 | D44.6 | D44.6 |
| Neoplasm of uncertain behavior of aortic body and other paraganglia | D44.7 | D44.7 | D44.7 |
| Neoplasm of uncertain behavior of unspecified endocrine gland | D44.9 | D44.9 | D44.9 |
| Neoplasm of uncertain behavior of breast | D48.6 | D48.6 | D48.6 |
| Neoplasm of uncertain behavior of bone and articular cartilage | D48.0 | D48.0 | D48.0 |
### Suplmental Methods: Data Dictionary

| Neoplasm of uncertain behavior of connective and other soft tissue | D48.1 | D48.1 | D48.1 |
| Neoplasm of uncertain behavior of peripheral nerves and autonomic nervous system | D48.2 | D48.2 | D48.2 |
| Neoplasm of uncertain behavior of retroperitoneum | D48.3 | D48.3 | D48.3 |
| Neoplasm of uncertain behavior of peritoneum | D48.4 | D48.4 | D48.4 |
| Neoplasm of uncertain behavior of skin | D48.5 | D48.5 | D48.5 |
| Neoplasm of uncertain behavior of other specified sites | D48.7 | D48.7 | D48.7 |
| Neoplasm of uncertain behavior, unspecified | D48.9 | D48.9 | D48.9 |
| Encounter for antineoplastic chemotherapy | Z51.11 | Z51.11 | Z51.11 |
| Encounter for antineoplastic immunotherapy | Z51.12 | Z51.12 | Code does not exist |

### Immune

| Human immunodeficiency virus [HIV] disease | B20 | B20 | B24 |
| Retrovirus infections, not elsewhere classified | B33.3 | B33.3 | B33.3 |
| Pneumocystosis | B59 | B59 | B59 |
| Enterobiasis | B80 | B80 | B80 |
| Other intestinal helminthiases, not elsewhere classified | B81 | B81 | B81 |
| Unspecified intestinal parasitism | B82 | B82 | B82 |
| Onchocerciasis without eye disease | B73.1 | B73 | B73 |
| Diseases of spleen | D73 | D73 | D73 |
| Other specified myoneural disorders | G70.8 | G70.8 | G70.8 |
| Systemic lupus erythematosus, organ or system involvement unspecified | M32.10 | M32.1 | M32.1 |
| Other systemic involvement of connective tissue | M35 | M35 | M35 |
| Rheumatoid arthritis with rheumatoid factor | M05 | M05 | M05 |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code | Code | Code |
|---------------------------------------------------------------------------|------|------|------|
| Other rheumatoid arthritis                                               | M06  | M06  | M06  |
| Abnormal findings on cytological and histological examination of urine   | R82.8| R82.8| R82.8|
| Abnormal histological findings in specimens from respiratory organs and thorax | R84.7| R84.7| R84.7|
| Abnormal histological findings in specimens from digestive organs and abdominal cavity | R85.7| R85.7| R85.7|
| Abnormal histological findings in specimens from male genital organs     | R86.7| R86.7| R86.7|
| Abnormal histological findings in specimens from female genital organs   | R87.7| R87.7| R87.7|
| Abnormal histological findings in specimens from other organs, systems and tissues | R89.7| R89.7| R89.7|
| Poisoning by, adverse effect of and underdosing of primarily systemic and hematological agents, not elsewhere classified | T45  | T45.1| T45  |
| Asymptomatic human immunodeficiency virus [HIV] infection status          | Z21  | Z21  | Z21  |
| Transplanted organ and tissue status                                     | Z94  | Z94  | Z94  |

### Renal

| Condition                                                                 | Code | Code | Code |
|---------------------------------------------------------------------------|------|------|------|
| Anemia in chronic kidney disease                                          | D63.1| Code does not exist| Code does not exist|
| Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease | I12.0| I12.0| I12  |
| Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease | I13.11| Code does not exist| I13  |
| Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease | I13.2| I13.2| Code does not exist|
| Hepatorenal syndrome                                                      | K76.7|      |      |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Diagnosis                                      | Code 1  | Code 2  | Code 3  |
|------------------------------------------------|---------|---------|---------|
| Nephrotic syndrome                             | N04     | N04     | N04     |
| Chronic nephritic syndrome                     | N03     | N03     | N03     |
| Unspecified nephritic syndrome                 | N05     | N05     | N05     |
| Acute kidney failure                           | N17     | N17     | N17     |
| Chronic kidney disease (CKD)                   | N18     | N18     | N18     |
| Unspecified kidney failure                     | N19     | N19     | N19     |
| Renal sclerosis, unspecified                   | N26.9   | Code does not exist | N26.9 |
| Renal osteodystrophy                           | N25.0   | N25.0   | N25.0   |
| Nephrogenic diabetes insipidus                 | N25.1   | N25.1   | N25.1   |
| Small kidney, unilateral                       | N27.0   | N27.0   | N27.0   |
| Small kidney, bilateral                        | N27.1   | N27.1   | N27.1   |
| Small kidney, unspecified                      | N27.9   | N27.9   | N27.9   |
| Other specified disorders of kidney and ureter | N28.89  | Code does not exist | N2888  |
| Cystic kidney disease                          | Q61     | Q61     | Q61     |
| Complications of other internal prosthetic devices, implants and grafts | T85     | T85     | T85     |
| Encounter for care involving renal dialysis    | Z49     | Z49     | Z49     |
| Patient's noncompliance with renal dialysis    | Z91.15  | Code does not exist | Code does not exist |

| Liver                                          |         |         |         |
|------------------------------------------------|---------|---------|---------|
| Alcoholic liver disease                        | K70     | K70     | K70     |
| Acute and subacute hepatic failure without coma | K72.00  |         |         |
| Hepatic failure, unspecified without coma      | K72.90  |         |         |
| Hepatic failure, unspecified with coma         | K72.91  |         |         |
| Chronic hepatitis, not elsewhere classified    | K73     | K73     | K73     |
| Fibrosis and cirrhosis of liver                | K74     | K74     | K74     |
| Phlebitis of portal vein                      | K75.1   | K75.1   | K75.1   |
| Nonspecific reactive hepatitis                 | K75.2   | K75.2   | K75.2   |
| Granulomatous hepatitis, not elsewhere classified | K75.3   | K75.3   | K75.3   |
| Autoimmune hepatitis                           | K75.4   | K75.4   | K75.4   |
| Other specified inflammatory liver diseases    | K75.8   | K75.8   | K75.8   |
| Inflammatory liver disease, unspecified        | K75.9   | K75.9   | K75.9   |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code  | Code  | Code  |
|--------------------------------------------------------------------------|-------|-------|-------|
| Central hemorrhagic necrosis of liver                                    | K76.2 |       |       |
| Infarction of liver                                                      | K76.3 |       |       |
| **Asthma**                                                               |       |       |       |
| Chronic obstructive pulmonary disease with acute lower respiratory infection | J44.0 |       |       |
| Chronic obstructive pulmonary disease with acute exacerbation            | J44.1 |       |       |
| Asthma                                                                   | J45   | J45   | J45   |
| **Other Lung**                                                          |       |       |       |
| Respiratory tuberculosis                                                 | A15   | A15   | A15   |
| Tuberculosis of nervous system                                           | A17   | A17   | A17   |
| Tuberculosis of other organs                                            | A18   | A18   | A18   |
| Miliary tuberculosis                                                     | A19   | A19   | A19   |
| Infection due to other mycobacteria                                     | A31   | A31   | A31   |
| Sarcoidosis                                                             | D86   | D86   | D86   |
| Cystic fibrosis                                                         | E84   | E84   | E84   |
| Bronchitis, not specified as acute or chronic                           | J40   | J40   | J40   |
| Simple and mucopurulent chronic bronchitis                              | J41   | J41   | J41   |
| Unspecified chronic bronchitis                                          | J42   | J42   | J42   |
| Emphysema                                                               | J43   | J43   | J43   |
| Bronchiectasis                                                          | J47   | J47   | J47   |
| Coalworker's pneumoconiosis                                             | J60   | J60   | J60   |
| Pneumoconiosis due to asbestos and other mineral fibers                 | J61   | J61   | J61   |
| Pneumoconiosis due to talc dust                                         | J62.0 | J62.0 | J62.0 |
| Pneumoconiosis due to other dust containing silica                      | J62.8 | J62.8 | J62.8 |
| Pneumoconiosis due to other specified inorganic dusts                   | J63.6 | J63.8 | J63.8 |
| Unspecified pneumoconiosis                                              | J64   | J64   | J64   |
| Hypersensitivity pneumonitis due to organic dust                        | J67   | J67   | J67   |
| Respiratory conditions due to inhalation of chemicals, gases, fumes and vapors | J68   | J68   | J68   |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                                                 | Code       | Code       | Code       |
|----------------------------------------------------------------------------|------------|------------|------------|
| Pneumonitis due to inhalation of food and vomit                           | J69.0      | J69.0      | J69.0      |
| Pneumonitis due to inhalation of oils and essences                        | J69.1      | J69.1      | J69.1      |
| Pneumonitis due to inhalation of other solids and liquids                 | J69.8      | J69.8      | J69.8      |
| Respiratory conditions due to unspecified external agent                  | J70.9      | J70.9      | J70.9      |
| Abscess of lung and mediastinum                                           | J85        | J85        | J85        |
| Pneumothorax and air leak                                                 | J93        | J93        | J93        |
| Other respiratory disorders                                               | J98        | J98        | J98        |
| Systemic sclerosis [scleroderma]                                          | M34        | M34        | M34        |
| Other systemic involvement of connective tissue                          | M35        | M35        | M35        |
| Other congenital malformations of respiratory system                      | Q34        | Q34        | Q34        |
| Pleurisy                                                                  | R09.1      | R09.1      | R09.1      |

### Obesity

| Condition                                                                 | Code       | Code does not exist | Code does not exist |
|----------------------------------------------------------------------------|------------|---------------------|---------------------|
| Overweight and obesity                                                    | E66        | E66                 | E66                 |
| Obesity complicating pregnancy, unspecified trimester                      | O99.210    | Code does not exist | Code does not exist |
| Obesity complicating pregnancy, first trimester                            | O99.211    | Code does not exist | Code does not exist |
| Obesity complicating pregnancy, second trimester                           | O99.212    | Code does not exist | Code does not exist |
| Obesity complicating pregnancy, third trimester                            | O99.213    | Code does not exist | Code does not exist |
| Obesity complicating childbirth                                            | O99.214    | Code does not exist | Code does not exist |
| Obesity complicating the puerperium                                        | O99.215    | Code does not exist | Code does not exist |
| Bariatric surgery status complicating pregnancy, unspecified trimester     | O99.840    | Code does not exist | Code does not exist |
| Bariatric surgery status complicating pregnancy, first trimester           | O99.841    | Code does not exist | Code does not exist |
| Bariatric surgery status complicating pregnancy, second trimester          | O99.842    | Code does not exist | Code does not exist |
| Bariatric surgery status complicating pregnancy, third trimester           | O99.843    | Code does not exist | Code does not exist |
**SUPPLEMENTAL METHODS: DATA DICTIONARY**

| Condition                                                                 | Code 1  | Code 2  | Code 3  |
|---------------------------------------------------------------------------|---------|---------|---------|
| Bariatric surgery status complicating childbirth                          | O99.844 | Code does not exist | Code does not exist |
| Bariatric surgery status complicating the puerperium                      | O99.845 | Code does not exist | Code does not exist |
| Other Metabolic                                                           |         |         |         |
| Other hypothyroidism                                                      | E03     | E03     | E03     |
| Other nontoxic goiter                                                    | E04     | E04     | E04     |
| Thyrotoxicosis [hyperthyroidism]                                          | E05     | E05     | E05     |
| Thyroiditis                                                               | E06     | E06     | E06     |
| Other disorders of thyroid                                                | E07     | E07     | E07     |
| Other disorders of pancreatic internal secretion                          | E16     | E16     | E16     |
| Hyperfunction of pituitary gland                                         | E22     | E22     | E22     |
| Hypofunction and other disorders of the pituitary gland                   | E23     | E23     | E23     |
| Diseases of thymus                                                        | E32     | E32     | E32     |
| Other disorders of adrenal gland                                          | E27     | E27     | E27     |
| Kwashiorkor                                                               | E40     | E40     | E40     |
| Nutritional marasmus                                                      | E41     | E41     | E41     |
| Marasmic kwashiorkor                                                      | E42     | E42     | E42     |
| Unspecified severe protein-calorie malnutrition                           | E43     | E43     | E43     |
| Protein-calorie malnutrition of moderate and mild degree                  | E44     | E44     | E44     |
| Retarded development following protein-calorie malnutrition              | E45     | E45     | E45     |
| Unspecified protein-calorie malnutrition                                 | E46     | E46     | E46     |
| Vitamin A deficiency                                                     | E50     | E50     | E50     |
| Thiamine deficiency                                                      | E51     | E51     | E51     |
| Niacin deficiency [pellagra]                                              | E52     | E52     | E52     |
| Deficiency of other B group vitamins                                      | E53     | E53     | E53     |
| Ascorbic acid deficiency                                                 | E54     | E54     | E54     |
| Vitamin D deficiency                                                     | E55     | E55     | E55     |
| Other vitamin deficiencies                                               | E56     | E56     | E56     |
## SUPPLEMENTAL METHODS: DATA DICTIONARY

| Disorder                                                                 | Code | Code | Code |
|--------------------------------------------------------------------------|------|------|------|
| Disorders of aromatic amino-acid metabolism                              | E70  | E70  | E70  |
| Disorders of branched-chain amino-acid metabolism and fatty-acid metabolism | E71  | E71  | E71  |
| Other disorders of amino-acid metabolism                                 | E72  | E72  | E72  |
| Other disorders of carbohydrate metabolism                               | E74  | E74  | E74  |
| Disorders of lipoprotein metabolism and other lipidemias                 | E78  | E78  | E78  |
| Other and unspecified metabolic disorders                                 | E88  | E88  | E88  |
| Gout                                                                     | M10  | M10  | M10  |
| Disorders of mineral metabolism                                          | E83  | E83  | E83  |
| Tuberculosis of nervous system                                           | A17  | A17  | A17  |
| Atypical virus infections of central nervous system                       | A81  | A81  | A81  |
| Sequelae of central nervous system tuberculosis                          | B90.0| B90.0| B90.0|
| Vascular dementia                                                         | F01  | F01  | F01  |
| Dementia in other diseases classified elsewhere                           | F02  | F02  | F02  |
| Unspecified dementia                                                      | F03  | F03  | F03  |
| Personality and behavioral disorders due to known physiological condition | F07  | F07  | F07  |
| Moderate intellectual disabilities                                       | F71  | F71  | F71  |
| Severe intellectual disabilities                                         | F72  | F72  | F72  |
| Profound intellectual disabilities                                       | F73  | F73  | F73  |
| Disorders of sphingolipid metabolism and other lipid storage disorders    | E75  | E75  | E75  |
| Parkinson's disease                                                       | G20  | G20  | G20  |
| Other extrapyramidal and movement disorders                              | G25  | G25  | G25  |
| Extrapyramidal and movement disorders in diseases classified elsewhere    | G26  | G26  | G26  |
| Hereditary ataxia                                                        | G11  | G11  | G11  |
| Spondylosis                                                              | M47  | M47  | M47  |
| Hereditary and idiopathic neuropathy                                      | G60  | G60  | G60  |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                      | Code 1  | Code 2  | Code 3  |
|------------------------------------------------|---------|---------|---------|
| Multiple sclerosis                              | G35     | G35     | G35     |
| Other acute disseminated demyelination          | G36     | G36     | G36     |
| Inflammatory polyneuropathy                     | G61     | G61     | G61     |
| Other and unspecified polyneuropathies          | G62     | G62     | G62     |
| Hemiplegia and hemiparesis                      | G81     | G81     | G81     |
| Cerebral palsy                                  | G80     | G80     | G80     |
| Paraplegia (paraparesis) and quadriplegia (quadriparesis) | G82 | G82 | G82 |
| Epilepsy and recurrent seizures                 | G40     | G40     | G40     |
| Other disorders of brain                        | G93     | G93     | G93     |
| Other disorders of central nervous system        | G96     | G96     | G96     |
| Rheumatic chorea                                | I02     | I02     | I02     |
| Nontraumatic subarachnoid hemorrhage            | I60     | I60     | I60     |
| Nontraumatic intracerebral hemorrhage           | I61     | I61     | I61     |
| Other and unspecified nontraumatic intracranial hemorrhage | I62 | I62 | I62 |
| Occlusion and stenosis of precerebral arteries, not resulting in cerebral infarction | I65 | I65 | I65 |
| Occlusion and stenosis of cerebral arteries, not resulting in cerebral infarction | I66 | I66 | I66 |
| Cerebral ischemia                               | I67.82  | Code does not exist | G45 |
| Cerebrovascular disease, unspecified            | I67.9   | I67.9   | I67.9   |
| Sequelae of cerebrovascular disease            | I69     | I69     | I69     |
| Myotonic chondrodystrophy                       | G71.13  | G71.1   | Code does not exist |
| Complications, not elsewhere classified         | R56     | R56     | R56     |
| Transient global amnesia                        | G45.4   |         |         |
| Somnolence                                      | R40.0   |         |         |
| Transient alteration of awareness               | R40.4   |         |         |
| Altered mental status, unspecified              | R41.82  |         |         |
| Auditory hallucinations                         | R44.0   |         |         |
| Hypertensive encephalopathy                     | I67.4   |         |         |
| Salmonella meningitis                           | A02.21  |         |         |
| Meningococcal infection                         | A39     |         |         |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Description                                                      | ICD-10 Code | ICD-10-AM | ICD-10-CM | Notes |
|------------------------------------------------------------------|-------------|-----------|-----------|-------|
| **Enteroviral meningitis**                                       | A87.0       |           |           |       |
| **Adenoviral meningitis**                                        | A87.1       |           |           |       |
| **Candidal meningitis**                                          | B37.5       |           |           |       |
| **Coccidioidomycosis meningitis**                                | B38.4       |           |           |       |
| **Bacterial meningitis, not elsewhere classified**               | G00         |           |           |       |
| **Meningitis in bacterial diseases classified elsewhere**        | G01         |           |           |       |
| **Meningitis in other infectious and parasitic diseases classified elsewhere** | G02     |           |           |       |
| **Meningitis due to other and unspecified causes**              | G03         |           |           |       |
| **Encephalitis, myelitis, and encephalomyelitis in diseases classified elsewhere** | G05    |           |           |       |
| **Acute transverse myelitis in demyelinating disease of central nervous system** | G37.3   |           |           |       |
| **Unspecified coma**                                             | R40.20      |           |           |       |
| **Persistent vegetative state**                                  | R40.3       |           |           |       |
| **Persistent migraine aura with cerebral infarction**           | G43.6       |           |           |       |
| **Cerebral infarction**                                          | I63         |           |           |       |
| **Septic arterial embolism**                                     | I76         |           |           |       |

**Muscular**

| Description                                                      | ICD-10 Code | ICD-10-AM | ICD-10-CM | Notes |
|------------------------------------------------------------------|-------------|-----------|-----------|-------|
| **Myopathy**                                                     | G72.81      |           |           |       |
| **Myositis**                                                     | M60         |           |           |       |
| **Rhabdomyolysis**                                               | M62.82      |           |           |       |

### Pregnancy Complication Diagnostic Codes

| Description                                                      | ICD-10 Code | ICD-10-AM | ICD-10-CM |
|------------------------------------------------------------------|-------------|-----------|-----------|
| Chlamydial lymphogranuloma (venereum)                            | A55         | A55       | A55       |
| Anogenital herpesviral (herpes simplex) infections               | A60         | A60       | A60       |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Condition                                      | Code | Code | Code |
|------------------------------------------------|------|------|------|
| Chlamydia psittaci infections                  | A70  | A70  | A70  |
| Rabies                                         | A82  | A82  | A82  |
| Mosquito-borne viral encephalitis              | A83  | A83  | A83  |
| Tick-borne viral encephalitis                  | A84  | A84  | A84  |
| Other viral encephalitis, not elsewhere classified | A85  | A85  | A85  |
| Unspecified viral encephalitis                 | A86  | A86  | A86  |
| Dengue fever (classical dengue)                | A90  | A90  | A90  |
| Dengue hemorrhagic fever                       | A91  | A91  | A91  |
| Other mosquito-borne viral fevers              | A92  | A92  | A92  |
| Yellow fever                                   | A95  | A95  | A95  |
| Arenaviral hemorrhagic fever                   | A96  | A96  | A96  |
| Other viral hemorrhagic fevers, not elsewhere classified | A98  | A98  | A98  |
| Varicella meningitis                           | B01.0 | B01.0 | B01.0 |
| Varicella encephalitis and encephalomyelitis   | B01.11 | B01.1 | B011 |
| Varicella myelitis                              | B01.12 | B01.1 | Code does not exist |
| Varicella pneumonia                             | B01.2 | B01.2 | B01.2 |
| Varicella keratitis                             | B01.81 | B01.8 | B018, B019 |
| Other varicella complications                  | B01.89 | B01.8 | Code does not exist |
| Other herpes zoster eye disease                 | B02.39 | B02.3 | B023 |
| Acute hepatitis A                               | B15  | B15  | B15  |
| Acute hepatitis B                               | B16  | B16  | B16  |
| Other acute viral hepatitis                    | B17  | B17  | B17  |
| Chronic viral hepatitis                        | B18  | B18  | B18  |
| Unspecified viral hepatitis                    | B19  | B19  | B19  |
| Cytomegaloviral disease                        | B25  | B25  | B25  |
| Infectious mononucleosis                       | B27  | B27  | B27  |
| Coxsackievirus as the cause of disease classified elsewhere | B97.11 | Code does not exist | B97.11 |
| Hemoglobinuria due to hemolysis from other external causes | D59.6 | D59.6 | D59.6 |
### SUPPLEMENTAL METHODS: DATA DICTIONARY

| Diagnosis                                                      | Code 1 | Code 2               | Code 3 |
|----------------------------------------------------------------|--------|----------------------|--------|
| Amnestic disorder due to known physiological condition        | F04    | F04.00-F04.9         | F04    |
| Delirium due to known physiological condition                 | F05    | F05                  | F05    |
| Other mental disorders due to known physiological condition   | F06    | F06                  | F06    |
| Alcohol related disorders                                      | F10    | F10                  | F10    |
| Opioid related disorders                                      | F11    | F11                  | F11    |
| Cannabis related disorders                                     | F12    | F12                  | F12    |
| Sedative, hypnotic, or anxiolytic related disorders           | F13    | F13                  | F13    |
| Cocaine related disorders                                     | F14    | F14                  | F14    |
| Other stimulant related disorders                              | F15    | F15                  | F15    |
| Hallucinogen related disorders                                 | F16    | F16                  | F16    |
| Inhalant related disorders                                     | F18    | F18                  | F18    |
| Other psychoactive substance related disorders                | F19    | F19                  | F19    |
| Schizophrenia                                                  | F20    | F20                  | F20    |
| Unspecified psychosis not due to a substance or known physiological condition | F29    | F29                  | F29    |
| Manic episode                                                  | F30    | F30                  | F30    |
| Bipolar disorder                                               | F31    | F31                  | F31    |
| Major depressive disorder, single episode                      | F32    | F32                  | F32    |
| Major depressive disorder, recurrent                           | F33    | F33                  | F33    |
| Persistent mood (affective) disorders                          | F34    | F34                  | F34    |
| Reaction to severe stress, and adjustment disorders            | F43    | F43                  | F43    |
| Other specified nonpsychotic mental disorders                 | F48.8  | F48.8                | F48.8  |
| Nonpsychotic mental disorder, unspecified                      | F48.9  | F48.9                | F48.9  |
| Puerperal psychosis                                            | F53    | F53                  | F53    |
| Specific personality disorders                                 | F60    | F60                  | F60    |
| Other specified disorders of adult personality and behavior    | F68.8  | F68.8                | F68.8  |
| Condition                                                   | Code   | Code   | Code   |
|-------------------------------------------------------------|--------|--------|--------|
| Unspecified disorder of adult personality and behavior      | F69    | F69    | F69    |
| Autistic disorder                                           | F84.0  | F84.0  | F84.0  |
| Other childhood disintegrative disorder                      | F84.3  | F84.3  | F84.3  |
| Other pervasive developmental disorders                      | F84.8  | F84.8  | F84.8  |
| Pervasive developmental disorder, unspecified               | F84.9  | F84.9  | F84.9  |
| Portal vein thrombosis                                       | I81    | I81    | I81    |
| Other venous embolism and thrombosis                         | I82    | I82    | I82    |
| Other disorders of veins                                     | I87    | I87    | I87    |
| Hypotension                                                 | I95    | I95    | I95    |
| Postinfective and reactive arthropathies                     | M02    | M02    | M02    |
| Recurrent pregnancy loss                                     | N96    | N96    | N96    |
| Pre-existing hypertension complicating pregnancy, childbirth and the puerperium | O10     | O10.0-O10.9 | O10 |
| Pre-existing hypertension with pre-eclampsia                 | O11    | O11    | O11    |
| Gestational (pregnancy-induced) edema and proteinuria without hypertension | O12     | O12    | O12    |
| Gestational (pregnancy-induced) hypertension without significant proteinuria | O13     | O13    | O13    |
| Pre-eclampsia                                               | O14    | O14    | O14    |
| Eclampsia                                                   | O15    | O15    | O15    |
| Unspecified maternal hypertension                            | O16    | O16    | O16    |
| Threatened abortion                                          | O20.0  | O20.0  | O20.0  |
| Other hemorrhage in early pregnancy                          | O20.8  | O20.8  | O20.8  |
| Hemorrhage in early pregnancy, unspecified                  | O20.9  | O20.9  | O20.9  |
| Excessive vomiting in pregnancy                             | O21    | O21    | O21    |
| Diabetes mellitus in pregnancy, childbirth, and the puerperium | O24     | O24    | O24    |
| Maternal care for other conditions predominantly related to pregnancy | O26     | O26    | O26201, O26202, O26203 |
| Multiple gestation                                           | O30    | O30    | O30    |
| Complications specific to multiple gestation                 | O31    | O31    | O31    |
| Maternal care for malpresentation of fetus | O32 | O32 | O32 |
| Maternal care for disproportion | O33 | O33 | O33 |
| Maternal care for abnormality of pelvic organs | O34 | O34 | O34 |
| Maternal care for (suspected) damage to fetus by drugs | O35.5 | O35.5 | O35.5, O35501, O35503, O35509 |
| Maternal care for known or suspected poor fetal growth | O36.5 | O36.5 | O36.5 |
| Polyhydramnios | O40 | O40 | O40 |
| Other disorders of amniotic fluid and membranes | O41 | O41 | O41 |
| Premature rupture of membranes | O42 | O42 | O42 |
| Placental disorders | O43 | O43 | O43 |
| Placenta previa | O44 | O44 | O44101, O44103, O44109 |
| Premature separation of placenta (abruptio placentae) | O45 | O45 | O45 |
| Prolonged pregnancy | O48.1 | O48 | O48 |
| Preterm labor | O60 | O60 | O60 |
| Failed induction of labor | O61 | O61 | O61 |
| Abnormalities of forces of labor | O62 | O62 | O62 |
| Long labor | O63 | O63 | O63 |
| Obstructed labor due to malposition and malpresentation of fetus | O64 | O64 | O64 |
| Obstructed labor due to maternal pelvic abnormality | O65 | O65 | O65 |
| Other obstructed labor | O66 | O66 | O66 |
| Labor and delivery complicated by intrapartum hemorrhage, not elsewhere classified | O67 | O67 | O67 |
| Labor and delivery complicated by abnormality of fetal acid-base balance | O68 | O68 | O68 |
| Labor and delivery complicated by umbilical cord complications | O69 | O69 | O69 |
| Puerperal sepsis | O85 | O85 | O85 |
| Description                                           | ICD-10 Code | ICD-10-AM | ICD-10-CM | Notes                  |
|-------------------------------------------------------|-------------|------------|------------|------------------------|
| Postpartum thyroiditis                                | O90.5       | O90.5      | O90.5      |                        |
| Tuberculosis complicating pregnancy                   | O98.01      | O98.0      | O98001-O98004, O98009 |            |
| Tuberculosis complicating childbirth                  | O98.02      | O98.0      | Code does not exist |          |
| Tuberculosis complicating the puerperium               | O98.03      | O98.0      | O98001-O98004, O98009 |            |
| Syphilis complicating pregnancy                       | O98.11      | O98.1      | O98101, O98102, O98103, O98104, O98109 |         |
| Gonorrhea complicating pregnancy                      | O98.21      | O98.2      | O98201, O98202, O98203, O98204, O98209 |      |
| Gonorrhea complicating childbirth                     | O98.22      | O98.2      | O98201, O98202, O98203, O98204, O98209 |      |
| Gonorrhea complicating the puerperium                 | O98.23      | O98.2      | O98201, O98202, O98203, O98204, O98209 |      |
| Human immunodeficiency virus (HIV) disease complicating pregnancy | O98.71      | O98.7      | O98701, O98702, O98703, O98704, O98709 |          |
| Drug use complicating pregnancy, childbirth, and the puerperium | O99.32      | Code does not exist | Code does not exist |          |
| Tobacco use disorder complicating pregnancy, childbirth, and the puerperium | O99.33      | Code does not exist | O99.33 |          |
| Diseases of the nervous system complicating pregnancy, childbirth, and the puerperium | O99.35      | O99.3      | O99.35 |            |
| Diseases of the circulatory system complicating pregnancy, childbirth, and the puerperium | O99.4       | O99.4      | O99401-O99404, O99409 |          |
| Pleurodynia                                           | R07.81      | Code does not exist | R07.81 |          |
| Hemoglobinuria                                         | R82.3       | R82.3      | Code does not exist |            |
| Hospital Complication Diagnostic Codes                      | Codes                                                                 | Codes                                                                 |
|-------------------------------------------------------------|----------------------------------------------------------------------|----------------------------------------------------------------------|
| **Asthma Exacerbation**                                    | J44.0, J44.1, J45.21, J45.22, J45.901, J45.902                      | J44.0, J44.1                                                          |
| **Acute renal failure**                                    | I13.11, I13.2, K76.7, N17                                            | I13.2, K76.7, N17.0-N17.9                                           |
| **Liver failure**                                           | K72.00, K76.3, K76.2                                                | K76.3, K76.2                                                         |
| **Heart failure**                                           | I50.21, I50.23, I50.31, I50.33, I50.41, I50.43                      | Codes do not exist                                                    |
| **Arterial or venous embolism**                            | I74, I76, I82                                                        | I74, I82                                                             |
| **Carditis**                                                | A39.50, B37.6, I01.0, I01.1, I01.2, I03, I03, I04, I51.4            | B37.6, I01.0, I01.1, I01.2, I03, I03, I04, I51.4                    |
| **Cardiac Arrest**                                         | I46.9                                                               | I46.9                                                               |
| **Altered mental state**                                   | F05, F06.0, F06.1, F06.2, F06.30, F06.4, F06.8, G45.4, R40.0, R40.4, R41.82, R44.0 | F05, F06.0, F06.1, F06.2, F06.30, F06.4, F06.8, G45.4, R40.0, R44.0 |
| **Encephalitis**                                           | G93.4, I67.4, K72.90, K72.91                                         | G93.4, I67.4                                                        |
| **Meningitis**                                             | A02.21, A39, A87.0, A87.1, B37.5, B38.4, G00, G01, G02, G03         | A39, A87.0, A87.1, B37.5, B38.4, G00, G01, G02, G03                  |
| **Anoxic brain damage**                                    | G93.1                                                               | G93.1                                                               |
| **Encephalitis or myelitis**                               | A39.81, G05, G37.3                                                  | G05, G37.3                                                          |
| **Coma**                                                    | R40.20, R40.3                                                       | R40.2                                                               |
| **Status epilepticus**                                     | G40.A01, G40.A09, G40.A11, G40.A19, G40.301                         | Codes do not exist                                                   |
| **Polyneuropathy**                                         | G62.81                                                              | Code does not exist                                                  |
| **Rhabdomyolysis**                                         | M62.82                                                              | M62.82                                                              |
| **Myositis**                                                | M60                                                                 | M60                                                                 |
| **Myopathy**                                               | G72.81                                                              | Code does not exist                                                  |
| **Cerebral infarction**                                    | G43.6, I63.019, I63.119, I63.139, I63.20, I63.219, I63.22, I63.239, I63.30, I63.40, I63.50, I63.59 | Codes do not exist                                                   |
| **Cerebral hemorrhage**                                    | I60.9, I61.9, I62                                                  | I60.9, I61.9, I62                                                   |

*ICD-10-AM G63.0 is polyneuropathy with infectious origin*

*ICD-10-AM I63 is cerebral infarction – but not as specific as these ICD-10 codes*
| Condition                  | ICD-10 Code(s)       | Description  |
|---------------------------|----------------------|--------------|
| Cerebral edema            | G93.6, G93.6         |              |
| Ketaoacidosis             | E08.1, E10.1, E13.1 | E10.11, E10.12, E10.15, E10.16, E11.11, E11.12, E11.15, E11.16, E13.11, E13.12, E13.15, E13.16, E14.11, E14.15, E14.16 |
| Hyperosmolarity           | E08.0, E11.0, E13.0 | E11.01, E11.02, E13.01, E13.02, E14.01, E14.02 |
| Diabetic coma             | E08.11, E08.641, E09.11, E09.641, E10.11, E11.01, E11.641, E13.11, E13.641, E15 | E10.12, E10.14, E10.16, E11.12, E11.14, E11.16, E13.12, E13.14, E13.16, E14.02, E14.12, E14.14, E14.16, E15 |
| Thyroid storm             | E05.01, E05.11, E05.21, E05.31, E05.41, E05.81, E05.91 | E05.5 |
| Defibrination syndrome    | D65                  | D65          |
