



# Work Plan: Data Characterization Query Package V3.00

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**DRAFT FOR BETA-TESTING**  
**November 5, 2015**

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## I. Purpose and Scope

The purpose of this document is to describe PCORnet’s Data Characterization Query Package V3.00. This query package consists of 77 queries against the following PCORnet Common Data Model (CDM) V3.00 tables: DEMOGRAPHIC, ENROLLMENT, ENCOUNTER, DIAGNOSIS, PROCEDURES, VITAL, and HARVEST. Output tables will be produced by running SAS programs against local DataMarts in PCORnet Common Data Model V3.00 with SAS data types. Table shells (section V) are for illustrative purposes only, and individual DataMart output may differ.

## II. Prerequisites

DataMart Administrators should run the CDM Diagnostic Query V3.00 prior to running this query to ensure conformance to the PCORnet Common Data Model (CDM) V3.0 SAS table structure, variable names, and data types, and to verify that the DEMOGRAPHIC, ENROLLMENT, ENCOUNTER, DIAGNOSIS, PROCEDURES, VITAL, and HARVEST tables are present and populated.

## III. Low Cell Count Threshold

Users may establish a low cell count threshold which establishes the minimum number of observations required to protect against possible identification of subject data. The default value is zero (0). Any cell count that is below the threshold will be displayed as BT (below threshold). For categorical queries, the number that is suppressed will be added to the “NULL or missing” category to prevent imputation of the suppressed cell count if only one category falls below the threshold. For cross-tab queries, suppressed numbers will be added to the category in which both variables are equal to “NULL or missing”. Examples of both scenarios are shown below. The low cell count threshold is applied to most queries, as shown in Section IV.

| RACE                                 | RECORD_N WITH THRESHOLD=0 | RECORD_N WITH THRESHOLD=11 |
|--------------------------------------|---------------------------|----------------------------|
| N                                    | 100                       | 100                        |
| R                                    | 9                         | BT                         |
| Y                                    | 325                       | 325                        |
| NI                                   | 400                       | 400                        |
| UN                                   | 50                        | 50                         |
| OT                                   | 75                        | 75                         |
| NULL or missing                      | 80                        | 89                         |
| Values outside of CDM specifications | 5                         | 5                          |

| <b>DX_TYPE</b>  | <b>DX_SOURCE</b>                     | <b>RECORD_N WITH THRESHOLD=0</b> | <b>RECORD_N WITH THRESHOLD=11</b> |
|-----------------|--------------------------------------|----------------------------------|-----------------------------------|
| 09              | AD                                   | 150                              | 150                               |
| 09              | DI                                   | 10                               | BT                                |
| 09              | FI                                   | 92                               | 92                                |
| 09              | IN                                   | 36                               | 36                                |
| 09              | NI                                   | 9                                | BT                                |
| 09              | UN                                   | 27                               | 27                                |
| 09              | OT                                   | 78                               | 78                                |
| 09              | NULL or missing                      | 30                               | 30                                |
| 09              | Values outside of CDM specifications | 5                                | 5                                 |
| NULL or missing | NULL or missing                      | 0                                | 19                                |

## IV. Output Tables

| <b>PCORnet Table(s)</b> | <b>Output Table</b>          | <b>Output Table Description</b>                        | <b>Optional low cell count suppression?</b> |
|-------------------------|------------------------------|--|---|
| DEMOGRAPHIC             | dem_13_n                     | Count PATID  | No  |
| DEMOGRAPHIC             | dem_13_ageyrst1              | Descriptive statistics for age                         | No  |
| DEMOGRAPHIC             | dem_13_ageyrst2              | Age group frequency                                    | Yes   |
| DEMOGRAPHIC             | dem_13_hispdist              | HISPANIC frequency                                     | Yes   |
| DEMOGRAPHIC             | dem_13_racedist              | RACE frequency   | Yes   |
| DEMOGRAPHIC             | dem_13_sexdist               | SEX frequency  | Yes   |
| ENCOUNTER               | enc_13_n                     | Counts PATID, ENCOUNTERID, and PROVIDERID              | No  |
| ENCOUNTER               | enc_13_n_visit               | Counts distinct ADMIT_DT, PATID, ENCOUNTERID, ENC_TYPE | No  |
| ENCOUNTER               | enc_13_admsrc                | ADMITTING_SOURCE frequency                             | Yes   |
| ENCOUNTER               | enc_13_encntype_admsrc       | ENC_TYPE by ADMITTING_SOURCE crosstab                  | Yes   |
| ENCOUNTER               | enc_13_adate_y               | ADMIT_DATE year frequency                              | Yes   |
| ENCOUNTER               | enc_13_adate_ym              | ADMIT_DATE year month frequency                        | Yes   |
| ENCOUNTER               | enc_13_encntype_adate_y<br>m | ENC_TYPE and ADMIT_DATE year month crosstab            | Yes   |
| ENCOUNTER               | enc_13_ddate_y               | DISCHARGE_DATE year frequency                          | Yes   |
| ENCOUNTER               | enc_13_ddate_ym              | DISCHARGE_DATE year month frequency                    | Yes   |
| ENCOUNTER               | enc_13_encntype_ddate_y<br>m | ENC_TYPE and DISCHARGE_DATE year month crosstab        | Yes   |
| ENCOUNTER               | enc_13_disdisp               | DISCHARGE_DISPOSITION frequency                        | Yes   |
| ENCOUNTER               | enc_13_encntype_disdisp      | ENC_TYPE and DISCHARGE_DISPOSITION crosstab            | Yes   |
| ENCOUNTER               | enc_13_disstat               | DISCHARGE_STATUS frequency                             | Yes   |
| ENCOUNTER               | enc_13_encntype_disstat      | ENCOUNTER_TYPE and DISCHARGE_STATUS crosstab           | Yes   |
| ENCOUNTER               | enc_13_drg                   | DRG frequency  | Yes   |
| ENCOUNTER               | enc_13_drg_type              | DRG_type frequency                                     | Yes   |
| ENCOUNTER               | enc_13_encntype_drg          | ENC_TYPE and DRG_TYPE crosstab                         | Yes   |
| ENCOUNTER               | enc_13_encntype              | ENC_TYPE frequency                                     | Yes   |

| <b>PCORnet Table(s)</b> | <b>Output Table</b>          | <b>Output Table Description</b>   | <b>Optional low cell count suppression?</b> |
|-------------------------|------------------------------|---|---|
| ENCOUNTER               | enc_l3_dash1                 | Patients with encounters in the past 1, 2, 3, 4, or 5 years since the earliest ADMIT_DATE                   | Yes   |
| ENCOUNTER               | enc_l3_dash2                 | Patients with IP, ED, EI, or AV encounters in the past 1, 2, 3, 4, or 5 years since the earliest ADMIT_DATE | Yes   |
| DIAGNOSIS               | dia_l3_n                     | Counts PATID, ENCOUNTERID, and DIAGNOSISID  | No  |
| DIAGNOSIS               | dia_l3_dx                    | DX frequency  | Yes   |
| DIAGNOSIS               | dia_l3_dx_dxttype            | DX and DX_TYPE crosstab   | Yes   |
| DIAGNOSIS               | dia_l3_dxsource              | DX_SOURCE frequency   | Yes   |
| DIAGNOSIS               | dia_l3_dxttype_dxsource      | DX_TYPE and DX_SOURCE crosstab  | Yes   |
| DIAGNOSIS               | dia_l3_PDX                   | PDX frequency   | Yes   |
| DIAGNOSIS               | dia_l3_PDX_encytype          | PDX and ENC_TYPE crosstab   | Yes   |
| DIAGNOSIS               | dia_l3_adate_y               | ADMIT_DATE year frequency   | Yes   |
| DIAGNOSIS               | dia_l3_adate_ym              | ADMIT_DATE year month frequency   | Yes   |
| DIAGNOSIS               | dia_l3_encytype              | ENC_TYPE frequency  | Yes   |
| DIAGNOSIS               | dia_l3_dxttype_encytype      | DX_TYPE and ENC_TYPE crosstab   | Yes   |
| DIAGNOSIS               | dia_l3_encytype_adate_y<br>m | ENC_TYPE and ADMIT_DATE year month crosstab   | Yes   |
| DIAGNOSIS               | dia_l3_dash1                 | Patients with diagnoses in the past 1, 2, 3, 4, or 5 years or since the earliest ADMIT_DATE.                | Yes   |
| PROCEDURES              | pro_l3_n                     | Counts PATID, ENCOUNTERID, and PROCEDURESID   | No  |
| PROCEDURES              | pro_l3_px                    | PX frequency  | Yes   |
| PROCEDURES              | pro_l3_adate_y               | ADMIT_DATE year frequency   | Yes   |
| PROCEDURES              | pro_l3_adate_ym              | ADMIT_DATE year month frequency   | Yes   |
| PROCEDURES              | pro_l3_pxdate_y              | PX_DATE year frequency  | Yes   |
| PROCEDURES              | pro_l3_px_encytype           | PX by ENC_TYPE crosstab   | Yes   |
| PROCEDURES              | pro_l3_encytype              | ENC_TYPE crosstab   | Yes   |
| PROCEDURES              | pro_l3_pxtype_encytype       | PX_TYPE and ENC_TYPE crosstab   | Yes   |
| PROCEDURES              | pro_l3_encytype_adate_y<br>m | ENC_TYPE and ADMIT_DATE year month crosstab   | Yes   |
| PROCEDURES              | pro_l3_px_pxtype             | PX and PX_TYPE crosstab   | Yes   |
| PROCEDURES              | pro_l3_pxsources             | PX_SOURCE frequency   | Yes   |
| ENROLLMENT              | enr_l3_n                     | Counts PATID, ENR_START_DATE, and ENROLLMENTID (combination of PATID, ENR_START_DATE, and ENR_BASIS)        | No  |
| ENROLLMENT              | enr_l3_dist_start            | Descriptive statistics for distinct ENR_START_DATE  | No  |
| ENROLLMENT              | enr_l3_dist_end              | Descriptive statistics for distinct ENR_END_DATE  | No  |
| ENROLLMENT              | enr_l3_dist_enrmonth         | Frequency of distinct number of enrollment months   | Yes   |
| ENROLLMENT              | enr_l3_dist_enryear          | Frequency of distinct number of enrollment years  | Yes   |
| ENROLLMENT              | enr_l3_enr_ym                | Frequency by ENR_START_DATE   | Yes   |
| ENROLLMENT              | enr_l3_basisdist             | Frequency by ENR_BASIS  | Yes   |
| ENROLLMENT              | enr_l3_per_patid             | Descriptive statistics for number of enrollment periods per PATID   | No  |
| VITAL                   | vit_l3_n                     | Counts PATID, ENCOUNTERID, and VITALID  | No  |
| VITAL                   | vit_l3_mdate_y               | MEASURE_DATE year frequency   | Yes   |
| VITAL                   | vit_l3_mdate_ym              | MEASURE_DATE year month frequency   | Yes   |
| VITAL                   | vit_l3_vital_source          | VITAL_SOURCE frequency  | Yes   |

| <b>PCORnet Table(s)</b>                             | <b>Output Table</b>     | <b>Output Table Description</b>   | <b>Optional low cell count suppression?</b> |
|---|-------------------------|---|---|
| VITAL   | vit_13_HT               | HT frequency  | Yes   |
| VITAL   | vit_13_ht_dist          | Descriptive statistics for HT   | No  |
| VITAL   | vit_13_WT               | WT frequency  | Yes   |
| VITAL   | vit_13_wt_dist          | Descriptive statistics for WT   | No  |
| VITAL   | vit_13_Diastolic        | DIASTOLIC frequency   | Yes   |
| VITAL   | vit_13_Systolic         | SYSTOLIC frequency  | Yes   |
| VITAL   | vit_13_BMI              | BMI frequency   | Yes   |
| VITAL   | vit_13_BP_position_type | BP POSITION_TYPE frequency  | Yes   |
| VITAL   | vit_13_smoking          | SMOKING frequency   | Yes   |
| VITAL   | vit_13_tobacco          | TOBACCO frequency   | Yes   |
| VITAL   | vit_13_tobacco_type     | TOBACCO_TYPE frequency  | Yes   |
| VITAL   | vit_13_dash1            | Patients with vital records in the past 1, 2, 3, 4 or 5 years since the earliest MEASURE_DATE.  | Yes   |
| ENCOUNTER, DIAGNOSIS, PROCEDURES, VITAL, ENROLLMENT | xtbl_13_range_ym        | Min and max year month for ENCOUNTER.ADMIT_DATE , DIAGNOSIS.ADMIT_DATE, PROCEDURES.ADMIT_DATE, MEASURE_DATE, ENR_START_DATE, and ENR_END_DATE | No  |
| HARVEST   | xtbl_13_metadata        | HARVEST table information, query package, response date, low cell count thresholds, operating system, and SAS version and packages            | No  |
| DIAGNOSIS, ENCOUNTER                                | xtbl_13_dash1           | Patients with at least 1 DX and 1 vital MEASURE_DATE in past 1, 2, 3, 4 or 5 years since the earliest diagnosis ADMIT_DATE.                   | Yes   |

## V. Demographic Table Shells

dem\_l3\_n

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET     | TAG   | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|-------------|-------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | DEMOGRAPHIC | PATID |       |            |        |

dem\_l3\_ageyrst1

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEAN            |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

dem\_l3\_ageyrst2

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | AGE_GROUP       | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <0 yrs          |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0-1 yrs         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 2-4 yrs         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 5-9 yrs         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 10-14 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 15-18 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 19-21 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 22-44 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 45-64 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 65-74 yrs       |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 75-110 yrs      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >110 yrs        |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

dem\_l3\_hispdist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | HISPANIC                             | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | N                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | R                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Y                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

dem\_l3\_racedist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | RACE                                 | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 03                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 04                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 05                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 06                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 07                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

dem\_l3\_sexdist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | SEX                                  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | A                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | F                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | M                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |



## VI. Encounter Table Shells

enc\_l3\_n

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET   | TAG         | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|-----------|-------------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | ENCOUNTER | ENCOUNTERID |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | ENCOUNTER | PATID       |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | ENCOUNTER | PROVIDERID  |       |            |        |

**enc\_l3\_n\_visit** (This query counts visits, which are a concatenation of PATID + PROVIDER\_ID + ENC\_TYPE + ADMIT\_DT. ALL\_N counts all records with non-missing values for all 4 fields).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET   | TAG   | ALL_N | DISTINCT_N |
|------------|---------------|---------------|-----------|-------|-------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | ENCOUNTER | visit |       |            |

enc\_l3\_admsrc

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMITTING_SOURCE                     | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AF                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AL                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | ED                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HO                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | RH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | RS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | SN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

enc\_l3\_encype\_admsrc

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENCTYPE | ADMITTING_SOURCE                     | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|---------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | AF                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | AL                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | AV                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | ED                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | HH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | HO                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | HS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | IP                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | NH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | RH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | RS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | SN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | Values outside of CDM specifications |          |            |

enc\_l3\_adate\_y

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N | RECORD_PCT | DISTINCT_PATID_N |
|------------|---------------|---------------|-----------------|----------|------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |                  |

enc\_l3\_adate\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

enc\_l3\_encype\_adate\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENCTYPE | ADMIT_DATE      | RECORD_N |
|------------|---------------|---------------|---------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | AV      | NULL or missing |          |

enc\_l3\_ddate\_y

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DISCHARGE_DATE  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

**enc\_l3\_ddate\_ym**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DISCHARGE_DATE  | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

**enc\_l3\_entype\_ddate\_ym**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE | DISCHARGE_DATE  | RECORD_N |
|------------|---------------|---------------|--------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | 2004_01         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | 2004_02         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NULL or missing |          |

**enc\_l3\_disdisp**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DISCHARGE_DISPOSITION                | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | A                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | E                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**enc\_l3\_entype\_disdisp**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE | DISCHARGE_DISPOSITION                | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | A                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | E                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | Values outside of CDM specifications |          |            |

enc\_l3\_disstat

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DISCHARGE_STATUS                     | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AF                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AL                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AM                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AW                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | EX                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HO                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | RH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | RS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | SH                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | SN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

enc\_l3\_etype\_disstat

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE | DISCHARGE_STATUS | RECORD_PCT |
|------------|---------------|---------------|--------|------------------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | AF               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | AL               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | AM               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | AW               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | EX               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | HH               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | HO               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | HS               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | IP               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NH               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | RH               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | RS               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | SH               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | SN               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NI               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | UN               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | OT               |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NULL or missing  |            |

**enc\_l3\_drg**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DRG                                  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 001                                  |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 150                                  |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

Note: Values outside of CDM specifications signifies an incorrect data type (ie, DRG is not CHAR 3)

**enc\_l3\_drg\_type**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DRG_TYPE                             | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**enc\_l3\_entype\_drg**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE | DRG                                  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | 001                                  |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | 150                                  |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | AV     | Values outside of CDM specifications |          |            |

Note: For DRG, "Values outside of CDM specifications" signifies an incorrect data type (ie, DRG is not CHAR 3)

**enc\_l3\_entype**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE                               | RECORD_N | RECORD_PCT | DISTINCT_VISIT_N | DISTINCT_PATID_N |
|------------|---------------|---------------|--------------------------------------|----------|------------|------------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | ED                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | EI                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | IS                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | OA                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |                  |                  |

Note: Visits are a concatenation of PATID + PROVIDER\_ID + ENC\_TYPE + ADMIT\_DT

**enc\_l3\_dash1** (This query counts the number of patients with any encounter during the designated period of time prior to the maximum ADMIT\_DATE. If the maximum ADMIT\_DATE is in the future the current date is used instead).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | Period  | DISTINCT_PATID_N |
|------------|---------------|---------------|---------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1 yr    |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 2 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 3 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 4 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 5 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | All yrs |                  |

**enc\_l3\_dash2** (This query counts the number of patients with any IP, EI, ED or AV encounter during the designated period of time prior to the maximum ADMIT\_DATE. If the maximum ADMIT\_DATE is in the future the current date is used instead).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PERIOD  | DISTINCT_PATID_N |
|------------|---------------|---------------|---------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1 yr    |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 2 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 3 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 4 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 5 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | All yrs |                  |

## VII. Diagnosis Table Shells

dia\_l3\_n

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET   | TAG         | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|-----------|-------------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | DIAGNOSIS | ENCOUNTERID |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | DIAGNOSIS | PATID       |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | DIAGNOSIS | DIAGNOSISID |       |            |        |

dia\_l3\_dx

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DX              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 840             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 953.5           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

dia\_l3\_dx\_dxtype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DX              | DX_TYPE                              | RECORD_N |
|------------|---------------|---------------|-----------------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 008.45          | 09                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | 10                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | 11                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | SM                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | Values outside of CDM specifications |          |

dia\_l3\_dxsource

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DX_SOURCE                            | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AD                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | DI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | FI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

dia\_l3\_dxtype\_dxsource

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DX_TYPE | DX_SOURCE                            | RECORD_N |
|------------|---------------|---------------|---------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | AD                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | DI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | FI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | IN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | Values outside of CDM specifications |          |

dia\_l3\_PDX

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PDX                                  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | P                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | S                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | X                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |



dia\_l3\_PDX\_encype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PDX | ENCTYPE                           | RECORD_N | DISTINCT_ENCID_N |
|------------|---------------|---------------|-----|-----------------------------------|----------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | P   | AV                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | ED                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | EI                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | IP                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | IS                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | OA                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | NI                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | UN                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | OT                                |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | NULL or missing                   |          |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | P   | Values outside CDM specifications |          |                  |

dia\_l3\_adate\_y

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N | RECORD_PCT | DISTINCT_ENCID_N | DISTINCT_PATID_N |
|------------|---------------|---------------|-----------------|----------|------------|------------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |                  |                  |

dia\_l3\_adate\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

dia\_l3\_encype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENCTYPE                              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | ED                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | EI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OA                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**dia\_l3\_dxtype\_encytype**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DX_TYPE | ENCTYPE                              | RECORD_N |
|------------|---------------|---------------|---------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | AV                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | ED                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | EI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | IP                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | IS                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | OA                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | Values outside of CDM specifications |          |

**dia\_l3\_encytype\_adate\_ym**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENCTYPE                              | ADMIT_DATE | DISTINCT_ENCID_N | RECORD_N |
|------------|---------------|---------------|--------------------------------------|------------|------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | ED                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | EI                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | IS                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | OA                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      | 2015_07    |                  |          |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications | 2015_07    |                  |          |

**dia\_l3\_dash1** (This query counts the number of patients with any diagnosis record with a populated DX code during the designated period of time prior to the maximum ADMIT\_DATE. If the maximum ADMIT\_DATE is in the future the current date is substituted).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PERIOD  | DISTINCT_PATID_N |
|------------|---------------|---------------|---------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1 yr    |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 2 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 3 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 4 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 5 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | All yrs |                  |

## VIII. Procedures Table Shells

**pro\_l3\_n**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET    | TAG          | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|------------|--------------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | PROCEDURES | ENCOUNTERID  |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | PROCEDURES | PATID        |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | PROCEDURES | PROCEDURESID |       |            |        |

**pro\_l3\_px**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0067T           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

**pro\_l3\_adate\_y**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N | RECORD_PCT | DISTINCT_ENCID_N | DISTINCT_PATID_N |
|------------|---------------|---------------|-----------------|----------|------------|------------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |                  |                  |

**pro\_l3\_adate\_ym**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ADMIT_DATE      | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

**pro\_l3\_pxdate\_y**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX_DATE         | RECORD_N | RECORD_PCT | DISTINCT_ENCID_N | DISTINCT_PATID_N |
|------------|---------------|---------------|-----------------|----------|------------|------------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |                  |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |                  |                  |

pro\_l3\_px\_encytype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX              | ENCTYPE                              | RECORD_N |
|------------|---------------|---------------|-----------------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | AV                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | ED                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | EI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | IP                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | IS                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | OA                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | Values outside of CDM specifications |          |

pro\_l3\_encytype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENCTYPE                              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | ED                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | EI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IP                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | IS                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OA                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

pro\_l3\_pxtype\_encytype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX_TYPE | ENCTYPE                              | RECORD_N |
|------------|---------------|---------------|---------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | AV                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | ED                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | EI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | IP                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | IS                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | OA                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 09      | Values outside of CDM specifications |          |

pro\_l3\_entye\_adate\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENTYPE          | ADMIT_DATE | DIST_ENCID_N | RECORD_N |
|------------|---------------|---------------|-----------------|------------|--------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | AV              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | ED              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | EI              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | IP              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | IS              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | OA              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NI              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | UN              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | OT              | 2015_07    |              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | 2015_07    |              |          |

pro\_l3\_px\_pxtype

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX              | PX_TYPE                              | RECORD_N |
|------------|---------------|---------------|-----------------|--------------------------------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 00.11           | 09                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | 10                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | 11                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | C2                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | C3                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | C4                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | H3                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | HC                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | LC                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | ND                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | RE                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | NI                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | UN                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | OT                                   |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | NULL or missing                      |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing | Values outside of CDM specifications |          |

pro\_l3\_pxsource

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PX_SOURCE                            | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | BI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | CL                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OD                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

## IX. Enrollment Table Shells

**enr\_l3\_n** (ENROLLID is a concatenation of PATID + ENR\_START\_DATE + ENR\_BASIS)

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET    | TAG            | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|------------|----------------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | ENROLLMENT | PATID          |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | ENROLLMENT | ENR_START_DATE |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | ENROLLMENT | ENROLLID       |       |            |        |

**enr\_l3\_dist\_start**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P1              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P5              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P25             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P75             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P95             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P99             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

**enr\_l3\_dist\_end**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P1              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P5              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P25             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P75             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P95             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P99             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

**enr\_l3\_dist\_enrmonth**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENROLL_M        | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <0              |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 1               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 2               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 3               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 4               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

enr\_l3\_dist\_enryear

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENROLL_Y        | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 2               |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

enr\_l3\_enr\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | MONTH           | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

enr\_l3\_basisdist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | ENR_BASIS                            | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | A                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | E                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | G                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | I                                    |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

enr\_l3\_per\_patid

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P1              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P5              |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P25             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P75             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P95             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | P99             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

## X. Vital Table Shells

vit\_l3\_n

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET | TAG         | ALL_N | DISTINCT_N | NULL_N |
|------------|---------------|---------------|---------|-------------|-------|------------|--------|
| D1TEST     | 28OCT2015     | DC V3.00      | VITAL   | ENCOUNTERID |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | VITAL   | PATID       |       |            |        |
| D1TEST     | 28OCT2015     | DC V3.00      | VITAL   | VITALID     |       |            |        |

vit\_l3\_mdate\_y

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | MEASURE_DATE    | RECORD_N | RECORD_PCT | DISTINCT_PATID_N |
|------------|---------------|---------------|-----------------|----------|------------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015            |          |            |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |                  |

vit\_l3\_mdate\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | MEASURE_DATE    | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_07         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | 2015_08         |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

vit\_l3\_vital\_source

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | VITAL_SOURCE                         | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | HC                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | HD                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | PD                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | PR                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |



vit\_l3\_HT

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | HT_GROUP        | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <0              |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0-10            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 11-20           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 21-45           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 46-52           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 53-58           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 59-64           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 65-70           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 71-76           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 77-82           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 83-88           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 89-94           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >=95            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

vit\_l3\_ht\_dist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEAN            |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

vit\_l3\_WT

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | WT_GROUP        | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <0              |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0-1             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 2-6             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 7-12            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 13-20           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 21-35           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 36-50           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 51-75           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 76-100          |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 101-125         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 126-150         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 151-175         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 176-200         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 201-225         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 226-250         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 251-275         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 276-300         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 301-350         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >350            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

vit\_l3\_wt\_dist

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | STAT            | RECORD_N |
|------------|---------------|---------------|-----------------|----------|
| D1TEST     | 28OCT2015     | DC V3.00      | MIN             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEAN            |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MEDIAN          |          |
| D1TEST     | 28OCT2015     | DC V3.00      | MAX             |          |
| D1TEST     | 28OCT2015     | DC V3.00      | N               |          |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |

**vit\_l3\_diastolic**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DIASTOLIC_GROUP | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <40             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 40-60           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 61-75           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 76-80           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 81-90           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 91-100          |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 101-110         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 111-120         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >120            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

**vit\_l3\_systolic**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | SYSTOLIC_GROUP  | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <40             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 41-50           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 51-60           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 61-70           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 71-80           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 81-90           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 91-100          |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 101-110         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 111-120         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 121-130         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 131-140         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 141-150         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 151-160         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 161-170         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 171-180         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 181-190         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 191-200         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 201-210         |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >210            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

**vit\_I3\_BMI**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | BMI_GROUP       | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|-----------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | <0              |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 0-1             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 2-5             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 6-10            |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 11-15           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 16-20           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 21-25           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 26-30           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 31-35           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 36-40           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 41-45           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 46-50           |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | >50             |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing |          |            |

**vit\_I3\_BP\_position\_type**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | BP_POSITION                          | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 03                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**vit\_l3\_smoking**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | SMOKING                              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 03                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 04                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 05                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 06                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 07                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 08                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**vit\_l3\_tobacco**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | TOBACCO                              | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 03                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 04                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 06                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**vit\_l3\_tobacco\_type**

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | TOBACCO_TYPE                         | RECORD_N | RECORD_PCT |
|------------|---------------|---------------|--------------------------------------|----------|------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 01                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 02                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 03                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 04                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | 05                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NI                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | UN                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | OT                                   |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | NULL or missing                      |          |            |
| D1TEST     | 28OCT2015     | DC V3.00      | Values outside of CDM specifications |          |            |

**vit\_l3\_dash1** (This query counts the number of patients with any vital record with a populated MEASURE\_DATE during the designated period of time prior to the maximum MEASURE\_DATE. If the maximum MEASURE\_DATE is in the future the current date is substituted).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PERIOD  | DISTINCT_PATID_N |
|------------|---------------|---------------|---------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1 yr    |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 2 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 3 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 4 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 5 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | All yrs |                  |

## XI. Cross-table Table Shells

xtbl\_l3\_range\_ym

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | DATASET    | TAG            | MIN | MAX |
|------------|---------------|---------------|------------|----------------|-----|-----|
| D1TEST     | 28OCT2015     | DC V3.00      | ENCOUNTER  | ADMIT_DATE     |     |     |
| D1TEST     | 28OCT2015     | DC V3.00      | DIAGNOSIS  | ADMIT_DATE     |     |     |
| D1TEST     | 28OCT2015     | DC V3.00      | PROCEDURES | ADMIT_DATE     |     |     |
| D1TEST     | 28OCT2015     | DC V3.00      | VITAL      | MEASURE_DATE   |     |     |
| D1TEST     | 28OCT2015     | DC V3.00      | ENROLLMENT | ENR_START_DATE |     |     |
| D1TEST     | 28OCT2015     | DC V3.00      | ENROLLMENT | ENR_END_DATE   |     |     |

xtbl\_l3\_metadata

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | TAG                      | VALUE |
|------------|---------------|---------------|--------------------------|-------|
| D1TEST     | 28OCT2015     | DC V3.00      | NETWORKID                |       |
| D1TEST     | 28OCT2015     | DC V3.00      | NETWORK_NAME             |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DATAMARTID               |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DATAMART_NAME            |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DATAMART_PLATFORM        |       |
| D1TEST     | 28OCT2015     | DC V3.00      | CDM_VERSION              |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DATAMART_CLAIMS          |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DATAMART_EHR             |       |
| D1TEST     | 28OCT2015     | DC V3.00      | BIRTH_DATE_MGMT          |       |
| D1TEST     | 28OCT2015     | DC V3.00      | ENR_START_DATE_MGMT      |       |
| D1TEST     | 28OCT2015     | DC V3.00      | ENR_END_DATE_MGMT        |       |
| D1TEST     | 28OCT2015     | DC V3.00      | ADMIT_DATE_MGMT          |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DISCHARGE_DATE_MGMT      |       |
| D1TEST     | 28OCT2015     | DC V3.00      | PX_DATE_MGMT             |       |
| D1TEST     | 28OCT2015     | DC V3.00      | RX_ORDER_DATE_MGMT       |       |
| D1TEST     | 28OCT2015     | DC V3.00      | RX_START_DATE_MGMT       |       |
| D1TEST     | 28OCT2015     | DC V3.00      | RX_END_DATE_MGMT         |       |
| D1TEST     | 28OCT2015     | DC V3.00      | DISPENSE_DATE_MGMT       |       |
| D1TEST     | 28OCT2015     | DC V3.00      | LAB_ORDER_DATE_MGMT      |       |
| D1TEST     | 28OCT2015     | DC V3.00      | SPECIMEN_DATE_MGMT       |       |
| D1TEST     | 28OCT2015     | DC V3.00      | RESULT_DATE_MGMT         |       |
| D1TEST     | 28OCT2015     | DC V3.00      | MEASURE_DATE_MGMT        |       |
| D1TEST     | 28OCT2015     | DC V3.00      | ONSET_DATE_MGMT          |       |
| D1TEST     | 28OCT2015     | DC V3.00      | REPORT_DATE_MGMT         |       |
| D1TEST     | 28OCT2015     | DC V3.00      | RESOLVE_DATE_MGMT        |       |
| D1TEST     | 28OCT2015     | DC V3.00      | PRO_DATE_MGMT            |       |
| D1TEST     | 28OCT2015     | DC V3.00      | REFRESH_DEMOGRAPHIC_DATE |       |
| D1TEST     | 28OCT2015     | DC V3.00      | REFRESH_ENROLLMENT_DATE  |       |
| D1TEST     | 28OCT2015     | DC V3.00      | REFRESH_ENCOUNTER_DATE   |       |

|        |           |          |                            |  |
|--------|-----------|----------|----------------------------|--|
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_DIAGNOSIS_DATE     |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_PROCEDURES_DATE    |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_VITAL_DATE         |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_DISPENSING_DATE    |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_LAB_RESULT_CM_DATE |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_CONDITION_DATE     |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_PRO_CM_DATE        |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_PRESCRIBING_DATE   |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_PCORNET_TRIAL_DATE |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_DEATH_DATE         |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_DEATH_CAUSE_DATE   |  |
| D1TEST | 28OCT2015 | DC V3.00 | REFRESH_MAX                |  |
| D1TEST | 28OCT2015 | DC V3.00 | LOW_CELL_CNT               |  |
| D1TEST | 28OCT2015 | DC V3.00 | OPERATING_SYSTEM           |  |
| D1TEST | 28OCT2015 | DC V3.00 | QUERY_PACKAGE              |  |
| D1TEST | 28OCT2015 | DC V3.00 | RESPONSE_DATE              |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_VERSION                |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_BASE                   |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_GRAPH                  |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_STAT                   |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_ETC                    |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_AF                     |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_IML                    |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_CONNECT                |  |
| D1TEST | 28OCT2015 | DC V3.00 | SAS_ACCESS                 |  |

**xtbl\_i3\_dash1** (This query counts the number of patients with any Vital record with a populated MEASURE\_DATE and a Diagnosis record with a populated DX and ADMIT\_DATE during the designated period of time prior to the maximum ADMIT\_DATE. If the maximum ADMIT\_DATE is in the future the current date is substituted).

| DATAMARTID | RESPONSE_DATE | QUERY_PACKAGE | PERIOD  | DISTINCT_PATID_N |
|------------|---------------|---------------|---------|------------------|
| D1TEST     | 28OCT2015     | DC V3.00      | 1 yr    |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 2 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 3 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 4 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | 5 yrs   |                  |
| D1TEST     | 28OCT2015     | DC V3.00      | All yrs |                  |



## XII. Technical Instructions

- 1) Open DC\_QUERY\_PKG\_V300.zip and extract the contents (RUN\_QUERIES.SAS and DATA\_CHARACTERIZATION\_QUERY.SAS). Save these files in the same directory on your network. The directory should be reserved for query processing and should not be the same directory that contains your PCORnet CDM v3.00 data.
- 2) Using your SAS Editor, open RUN\_QUERIES.SAS.
- 3) Modify the directory paths as follows:
  - a. After `%let dpath=`, provide the directory path where your PCORnet CDM v3.00 SAS datasets are located.
  - b. After `%let qpath=`, provide the directory path where the RUN\_QUERIES.SAS and DATA\_CHARACTERIZATION\_QUERY.SAS are located.
  - c. After `%let threshold=`, provide the low cell count threshold value for the DataMart.
  - d. For reasons of compatibility and standardization, directory paths must meet the following criteria:
    - DO use forward slashes (e.g. /) which are always compatible on both UNIX and WINDOWS
    - DO use end of path separators (e.g. /xyz/ and not \xyz) which are assumed by many programs
    - DO use beginning of path separators (e.g. /xyz) on UNIX
    - DO NOT use beginning of path separators on WINDOWS (e.g. P:/xyz not /P:/xyz)
    - DO NOT surround directory paths with quotes (e.g. /xyz/ not "/xyz/")
  - e. The directory paths as written expect the CDM data to be in SAS datasets. The `dpath` variable in this program is used to set the `pcordata` libname, which points to the directory in which these datasets can be found. In order to run the queries on PCORnet CDM data stored in database tables, you will need to use the appropriate SAS/ACCESS options on a LIBNAME statement so that the program knows where to find the data tables. This will require a few small edits to the program. The examples below show connection information for an Oracle database. Connecting to other database systems may require different connection information.
  - f. In the RUN\_QUERIES.SAS program, edit the `dpath` variable on Line 26 to include the appropriate database connection information. Be sure to use the `%str()` function to mask the embedded equal signs. For example: `%let dpath = %str(oracle user="myuserid" orapw=myspasswd path=mydbname schema=myschema);`
  - g. In the DATA\_CHARACTERIZATION\_QUERY.SAS program, edit the libname `pcordata` statement on Line 24 to remove the quotation marks, as: `libname pcordata &dpath;`
- 4) Save and submit the RUN\_QUERIES program. The program will call DATA\_CHARACTERIZATION\_QUERY.SAS and process all of the queries. As it processes each query, the program will print the results of the query to a PDF file. Additionally, the program will create permanent SAS datasets for each output table. At the end of the program, all of the permanent SAS datasets will be imported into a SAS transport file. All files will be saved to the QPATH directory. The SAS transport file and PDF filenames will contain the user's DATAMARTID from the HARVEST table and the response date (e.g. D1TEST\_20151101.XPT; D1TEST\_20151101.PDF).
- 5) Review the data output and make any necessary updates.
- 6) Return the final PDF and XPT files to the PCORnet DRN OC via the DRN Query Tool.