**Instructions and Attestation**

*This Check List is designed to facilitate the completion of items required for each data curation submission. Carefully review the Work Plan and Check List and sign the attestation prior to submitting a Data Curation response. Changes in Cycle 18 are highlighted in yellow. Submissions which do not conform to these requirements will not be approved.*

**Preparing for Data Curation**

1. Revise the ETL programs as needed to adhere to the current PCORnet® [CDM v7.0 specifications](https://pcornet.imeetcentral.com/p/aQAAAAAFKt_8) and [PCORnet Data Checks v18](https://pcornet.imeetcentral.com/p/aQAAAAAFK6Sz). For fields with undefined field lengths (e.g. PATID), harmonize lengths across all tables and use the minimum length needed to store the data in order to save storage space and reduce query processing time. Field lengths for non-RAW fields should not exceed 256 characters unless this is necessary. Do not delete data that could be analytically useful to improve performance on Investigative Data Checks.
2. Run the [CDM Diagnostic Query v7.00](https://pcornet.imeetcentral.com/pcornetnew/folder/WzIwLDE5MzAyMzYxXQ) to ensure table-level and field-level conformance to PCORnet® CDM v7.00, including harmonization of field lengths, before proceeding. Failure to conform to the PCORnet® CDM v7.00 structure will result in exceptions to required data checks which will necessitate a re-running of the DC query.
3. If your data is stored in SAS datasets, consider using the [Create Indexes v2.1](https://pcornet.imeetcentral.com/p/aQAAAAAE5Pob) program to improve run times.
4. Verify the accuracy of **all** fields in the HARVEST table including that CDM\_VERSION is 070. These data are used extensively by the Coordinating Center to characterize and analyze DataMart-level attributes. The DataMart and Network IDs and Names are listed in the [HARVEST Reference Table.](https://pcornet.imeetcentral.com/p/aQAAAAAFKsik) Failure to populate these fields accurately will require a re-submission. Confirm that the REFRESH\_DATES are the most recent date on which data were extracted, transformed and loaded into the CDM. Failure to populate the REFRESH\_DATES will result in an exception to Required Data Check 1.18. Failure to correctly populate the DATAMART\_EHR and DATAMART\_CLAIMS variables will cause inaccurate results for Data Check 1.02.
5. Run the self-service [CDM Value Set Conformance Query v7.00](https://pcornet.imeetcentral.com/pcornetnew/folder/WzIwLDE5MzAyMzYyXQ) to identify and resolve value set conformance errors prior to running the data curation query. This query examines the values populated in the 157 fields (23 tables) which have defined value sets (i.e., those listed in the parseable file’s Fields tab where the Valueset column is not “No”), including 18 fields which are required to be populated (i.e. the fields which have defined value sets and are also listed in the parseable file’s Constraints sheets as “required, not null”). The query allows users to designate which table(s) to check and produces a PDF file reporting field-level evaluation results and SAS datasets and CSV files of the non-conforming records if any are present.
6. Verify that all records conform to the PCORnet® CDM specifications for the following fields: ENCOUNTER.FACILITY\_LOCATION, LDS\_ADDRESS\_HISTORY.ADDRESS\_ZIP5 and LDS\_ADDRESS\_HISTORY.ADDRESS\_ZIP9. Invalid values will result in an exception to Required Data Check 1.17, but they will not be detected by the Value Set Conformance Query since these fields do not have defined value sets.
7. Create a static copy of the SAS version of your DataMart.
8. Decide on which option to use for running the Data Curation query package (modular or non-modular). The query has the capability of splitting the output into 2 parts. In order to use this functionality, the query must be run modularly. See the diagrams below for further instruction on how to set up the SAS programs for either approach. For additional details, see Section IX: Query Workflow Diagrams of the Work Plan.





**Actions to take after running the Potential Code Errors Query**

1. Review the log file for warnings and errors. Refer to the [Query Package Issues Tracker](https://pcornet.imeetcentral.com/p/aQAAAAAFKdL2) to see if the log message is a known issue. You must remediate any errors and/or email [drnoc@pcornet.org](mailto:drnoc@pcornet.org) to determine if warnings are acceptable.
2. Review of the Potential Code Errors report. These results are used for Required Data Check 1.13 and Investigative Data Check 1.16.

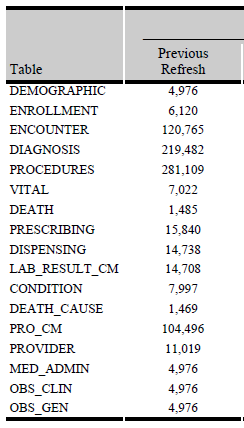
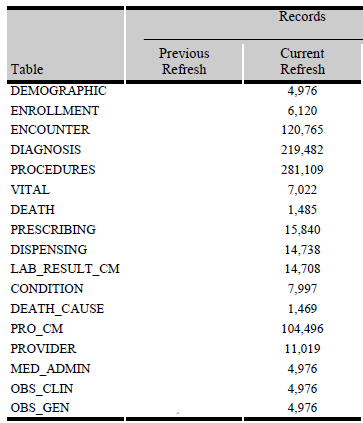
**Actions to take after running the Data Curation Queries**

1. Review the log file(s) for warnings and errors and remediate them as described previously.
2. Review key data curation query output tables to ensure that they accurately represent your source data.

* ***Basic metadata*:** DATAMART\_ALL and XTBL\_L3\_METADATA
* ***Code type frequencies****:* DIA\_L3\_DXTYPE, COND\_L3\_TYPE, IMMUNE\_L3\_CODETYPE, MEDADM\_L3\_TYPE, OBSCLIN\_L3\_TYPE, OBSGEN\_L3\_TYPE, PROCM\_L3\_TYPE, PRO\_L3\_PXTYPE.
* ***Highest volume codes*:** DIA\_L3\_DX, DISP\_L3\_NDC, EXTMED\_L3\_RXCUI, IMMUNE\_CODE\_CODETYPE, LAB\_L3\_LOINC, MEDADM\_L3\_CODE\_TYPE, OBSCLIN\_L3\_CODE\_TYPE, PRES\_L3\_RXCUI, PRO\_L3\_PX, IMMUNE\_CODE\_CODETYPE, PROCM\_L3\_LOINC
* ***Dates and times:*** Review XTBL\_L3\_DATES and XTBL\_L3\_TIMES to ensure that the values are valid and plausible. Invalid values will be displayed as “\*\*\*” or “---” or be counted in the INVALD\_N column. In XTBL\_L3\_DATES, the IMPL\_N column displays the number of records that have dates prior to 1800 for CDM tables which do not have lookback restrictions (DEATH, DEATH\_CAUSE, DEMOGRAPHIC, EXTERNAL\_MEDS, HASH\_TOKEN, LAB\_HISTORY, LDS\_ADDRESS\_HSTORY, and PROVIDER).

**Actions to take after running the Empirical Data Curation Report**

1. Review the log file for warnings and errors and remediate them as described previously.
2. Review the entire Empirical Data Curation (EDC) report. Verify that all tables and charts that are relevant for your DataMart are present and that all information is accurate.
3. Address the following items in the EDC report.
   1. **Date obfuscation:** Exceptions to the CRN Statement of Work expectations regarding date obfuscation are highlighted in orange on Page 1 and in Table IF.
   2. **CDM Version**: Exceptions to the value set for the HARVEST.CDM\_VERSION field are highlighted in redon Page 1 and must be corrected before returning results.
   3. **Data Check exception summary**: Exceptions to required data checks are highlighted in red and must be corrected before returning results. Exceptions to investigative data checks are highlighted in blue and must be investigated and explained in the ETL ADD. To understand how each data check is calculated, use the information provided in the EDC report, the Empirical Data Curation specifications, the Data Curation Specifications for the source table(s), and the reference datasets as described in sections VII and X of the Work Plan.
   4. **Data Persistence Checks**: For Data Check 4.01, 4.02 and 4.03, confirm that the data in the Previous Refresh column matches the ‘Current Refresh’ in the previous refresh’s EDC report Table VA, Table VB and Table VC as illustrated below. Discrepancies will result in the need for resubmission.



Previous EDC Report Table VA

Current EDC Report Table VA

**Actions to take prior to submitting results**

1. Ensure that the additional approval criteria are met. The Cycle 18 Additional Approval Criteria and Exemption Request Form is located on [iMeet](https://pcornet.imeetcentral.com/pcornetnew/folder/WzIwLDE0NTM2MDM5XQ/) and included in the query package. If you can’t meet the approval criteria, include a completed form with your submission. The DRN OC will review the request and inform you if the exemption is approved. Please do NOT include a blank form if you meet the approval criteria.
2. Update all sections of the ETL ADD survey (link distributed via email) with information about the current DataMart refresh. The ETL ADD must include the name and email of the person who assessed the implications of changes between refreshes and Investigative Data Check exceptions and approved the submission. **A submission is NOT considered complete without an accompanying ETL ADD response**.
3. Sign and date this document and return it with the other query documents as instructed in the Work Plan.

*Datamart ID \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*Refresh* #: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*I confirm that I have followed the instructions and met the requirements defined in the Work Plan and Check List.*

*Name*

*Date*