Configuring the Aliados Health Relevant QIP ECDS Reports

(2023 Edition for

eCW Health Centers)

Version 1

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# Introduction

## Project Overview

Partnership HealthPlan is moving towards a model where health centers securely submit detailed patient data, which is then combined with administrative and other data sources Partnership possesses to more accurately evaluate the HEDIS measures reported to the State of California. This is referred to as Electronic Medical Record Data Exchange (ECDS) and Partnership is piloting with a number of measures that are designated by HEDS as electronic measures. In 2023, there are two groups of measures that correspond to two Relevant reports that will be used to submit two data files to Partnership. These are:

1. Depression Related Measures (five measures)
2. Unhealthy Alcohol Use Screening and Follow Up (one measure, with two aspects)

Aliados Health developed a set of ECDS Quality Measures in Relevant that can be used to track the electronic measures based on data from the health center EHR. In contrast, the data submission reports are designed to supplement data that Partnership already has from claims, outside providers, etc. The Relevant data reports themselves cannot be used to define the denominator or numerator of the Quality Measures.

Partnership will pay an incentive to health centers that submit a set of test files and a set of final files for the 2023 calendar year. The deadlines and other details are described in the Supporting Documents below.

## Supporting Documents

This project was developed in collaboration with Partnership HealthPlan of California. Therefore, the basic documents come from Partnership. As of the writing of these instructions, the link to the introduction presentation slides and recording are on the Partnership Perinatal QIP webpage[[1]](#footnote-1). This presentation was recorded on September 11, 2023.

The are important Partnership documents and templates available through the eReports Portal (for PCP QIP). Health centers are strongly encouraged to download these materials to get a better understanding of the project and how to submit the data. These materials include:

1. The measure requirements (i.e., the standards and specifications)
2. The Value Set lists (for your information)
3. Two reporting templates (data will be copied to these and sent securely to Partnership)
4. A document containing SQL code examples for both eCW and NextGen. Even though Aliados Health-affiliated health centers can adapt this SQL for their own reports, the SQL code specific to Relevant described below is better suited for this project.

Since the two 2023 measures were included among the four measures reported in 2022, some of the information presented about this project in 2022 is still relevant.

On the Aliados Health Website (under Initiatives \ Heath Informatics \ Data Analytics and Governance \ Program \ Data Workgroup and Report Documentation \ Additional Resources and Companion Documents \ Partnership ECDS Reporting[[2]](#footnote-2) ), there are two sets of slides and webinars:

1. The first set (both files marked 3/2022) is a project overview and description of the ECDS measures themselves. This presentation is named “Partnership Electronic Clinical Data Systems (ECDS) Measures.”
2. The second set (both files marked 7/2022) describes the ECDS reports and is more relevant to the instructions described in sections below. This presentation is named “New ECDS Measures: Focus on Reports.”
3. The third set describes the Relevant Quality Measures associated with the depression and alcohol screening measures (both files marked 8/2022). The Quality Measures are not used for the ECDS data submission.

## Measurement Period

To keep things simple and straightforward, the two reports will use the same measurement period for both the test file and the final file: 1/1/2023 to 12/31/2023. The report SQL contains parameters, so the user will be prompted to enter a measurement period date range. The reports automatically make calculations for look-back periods.

The measurement period is defined on the report by the parameters {{start\_date}} and {{end\_date}}.

## Partnership Patients

Data submission must include Partnership Managed Care patients only. The same approach to identifying these patients should be used in the SQL code of all the reports. The universe of Partnership patients (along with other aspects of the denominator) is identified in the “universe” TEMPORARY TABLE of the report SQL code.

The SQL default code for the reports identifies Partnership patients based on an insurance group ID for Partnership Managed Care. This is written as primary\_insurance\_group\_id = 66 in the WHERE clause of the universe TEMPORARY TABLE. If your health center is going to use this default, identify the unique insurance group ID for Partnership Managed Care patients and replace the default group ID[[3]](#footnote-3).

If a Partnership Managed Care insurance group has not been defined in your EHR (or Relevant), another option is to use individual insurance identification numbers associated with Partnership Managed Care from the field patients.primary\_insurance\_id

If your health center has integrated monthly Partnership patient lists into Relevant, another option is to add SQL code to JOIN these patients (or add a statement to the WHERE clause, etc., depending how they appear in your instance). With this approach, also remove the default SQL code in the WHERE statement for primary\_insurance\_group\_id and the visit date range of the universe TEMPORARY TABLE.

Because the list of patients enrolled in MediCal Managed Care (through Partnership) changes regularly, the term “anchor date” refers to the list of enrolled patients at a particular time. The test files are due on October 15, 2023, so use an anchor date of October 1, 2023. The final files due in January 2024, should use an anchor date of December 1, 2023 (which is the same as the other QIP reports).

## Submitting the Files

There are two dates for data submissions. The measurement period for both submissions (entered into the parameters) is 1/1/2023 to 12/31/2023.

The first submission is a “test” file that Partnership will use to assess their own data integration systems. They may even provide feedback to health centers that can be used to modify the Relevant report. This file is due (via sFTP) by October 15, 2023. The second submission is the “final” report and is due (via sFTP) by January 14, 2024.

Make sure the data copied into the files follow the column formatting that is described in row 2 of the template. It should be possible to do this using the Paste Special function in Excel because the template columns are already formatted by default. NOTE that sometimes the CIN automatically converts to scientific notation when it contains numbers along with the letter E. Scan the list before submitting it to make sure no CIN in the column Member\_Key appears in scientific notation.

If you run the report in Relevant and export the data to Excel, save the original file in case they ask for it in the future during an audit.

## Naming the Submission Templates

Once the report has been validated, it should be run, exported and saved. The report data should be copied to the appropriate template without further manipulation. There are two templates provided by Partnership corresponding to the two Relevant reports. These are new in 2023, so do not use the old (2022) templates even though the column names and column order are the same.

The blank submission templates have initially been given general names. When a service provider has entered data and is ready to submit a template, it should be re-named according to the standard described below. Utilizing a unique and descriptive report name enables Partnership to ingest the report into their data analysis system.

The following instructions come from the Partnership SQL template document. The introduction presentation (see the section Supporting Documents above) from September 2023 describes how the files should be sent to Partnership.

The file name should follow the convention MEASUREID\_SITENAME\_DATE where:

* + **MEASUREID** corresponds to the measure abbreviation and is one of the following:

|  |  |
| --- | --- |
| MEASUREID | Measure name |
| ASF | Unhealthy Alcohol Use Screening and Follow-Up |
| DEP | Five depression measures (submitted as one file) |

* + **SITENAME** is the name of the health center. The health center should choose a brief and easily recognizable name or abbreviation and use it consistently with all data submissions
  + **DATE** is the submission date in the format YYYYMMDD with no dashes, periods or slashes

Examples: ASF\_SHASTA\_20220930

DEP\_PETALUMA\_20230115

## Appendices

The next sections of this document describe the Aliados Health ECDS reports and what is needed to adapt the code to the health center’s instance of Relevant. The appendices contain a basic draft of the SQL code that can be copied to DataGrip or Relevant and customized there. Alternatively, health centers can copy the code directly from the reports section of the Aliados Health Instance of Relevant.

In the reports section of the Aliados Health instance of Relevant, there is a Report Set called the PHP ECDS Data Submission that contains the reports that can be copied to the health center instance. These reports should not be actually run on the Aliados Health instance of Relevant (they will either show zero rows or an error will appear). Once the report is copied to the health center instance, the “Exposes PHI” checkbox should be checked “on” before it is published.

Health center programmers are encouraged to send feedback on the SQL code (comments on the approach, logic, expressions, etc.) to Ben Fouts (bfouts@aliadoshealth.org) so that the code can be improved during the validation process. Changes will be discussed on the Aliados Health Slack Population health channel and the report SQL code on the Aliados Health Instance updated, if necessary. Therefore, reports on the Aliados Health Instance reports are the best and most updated source of SQL code.

## General Comments on the SQL Code

The references to SQL code in this document (including the appendices) have been tested for health centers using Relevant and the eCW Electronic Health Record. Because the Relevant Data Elements have the same names among health centers using eCW, NextGen and Epic, most of the SQL code should work for health centers using any of these platforms. However, the suggestions for designing new Transformers below use examples from eCW tables. The depression report also has a place where a field is not available in the Relevant Data Model and must be extracted from the raw eCW table.

The report SQL code will need to be inspected and adapted to each health center’s instance. The health center should thoroughly validate the data before submission.

The outline of the SQL code is generally the same for all of the reports. Temporary tables are used to define the universe and different aspects of the measure, which are all brought together in the final results query. The basic flow of the temporary tables begins with the patient universe and moves on to other aspects of the measure displayed in the columns. Then exclusions are evaluated and displayed in the required columns. The results query that displays the report columns in the same order and format as the reporting template is the final section of the code.

Where the descriptive codes needed by the report follow exactly the HEDIS Value Set codes, a JOIN is made directly to the HEDIS Value Set table in Relevant (the table name is hedis\_value\_set\_codes, which exists on both the Staging and Production Databases). On the depression report, the first TEMPORARY TABLE contains office visit codes specified by Partnership.

There are grey comments/notes embedded in the SQL that help explain the objective of the temporary tables or specific aspects of the code. The descriptions of each report below also direct the programmer to locations in the code that must be customized or otherwise scrutinized. It is unlikely that either of the reports will run immediately after copying the code to Relevant.

# Description of ECDS Measure Report: Depression Related Measures (DMS-E, DSF-E, DRR-E, PND-E, PDS-E)

Some health centers might already have this report in their instance of Relevant because it was part of a Partnership pilot program last year. If the data on that report has been thoroughly validated, the health center may continue to use it. All of the columns and data definitions are the same in 2023 as they were in 2022, except for the definition of office visits (see section below).

The SQL code in Appendix A has been rewritten for the new Relevant Schema, but uses the same logical approaches as the 2022 version. It should therefore be fairly standardized among health centers and not require very much additional manipulation. However, there are two places in the code that require customization (see the sections TEMPORARY TABLE initial\_denom\_codes\_temp and TEMPORARY TABLE depression\_screenings\_temp below).

Programmers should be sure that all of the necessary fields on the identified Data Elements are being populated. For example, the estimated due date for a pregnant patient should be mapped to the field rdm.pregnancies.estimated\_due\_date.

Here are additional comments and instructions for some of the temporary tables in the code:

TEMPORARY TABLE office\_cpt\_codes\_temp

The list of HEDIS office codes recognized by Partnership has changed slightly from last year. Therefore, if your health center is using the report version from last year, simply replace this entire temporary table SQL code from Appendix A.

TEMPORARY TABLE initial\_denom\_codes\_temp

See notes in the Introduction above (section “Partnership Patients”) on identifying patients with Partnership insurance. The default in the code is to identify Partnership patients through their current primary insurance group. If you agree with this approach, replace the dummy primary\_insurance\_group\_id (i.e., 66) with the appropriate one as it appears in Relevant.

There are two fields in the SELECT statement of this temporary table that do not exist in the Relevant Data Model and so they must be extracted from the raw EHR tables. These are the fields with the aliases “cptmod” and “displayindex.”

Since the example code in Appendix A was originally developed for health centers using eCW, the eCW table edi\_inv\_cpt is displayed because it contains the correct data. The joins in the FROM statement for edi\_invoice and edi\_inv\_cpt are necessary to display these fields.

Example code for health center transitioning to Epic has not yet been developed as of the writing of these instructions. However, here are some basic ideas. First, change the joins edi\_invoice and edi\_inv\_cpt to LEFT JOIN and use the visit master index to join the eCW visit ID to the rdm.visits.id field. It seems like the table clarity\_tdl\_tran has a field modifier\_one that is the cpt modifier code. This table, however, does not appear to have a display index number. This number is used to sort the CPT codes in the TEMPORARY TABLE cpt\_columns\_temp so that the primary CPT code is displayed in the final output field cpt1 (and the secondary CPT code in the final output field cpt2, etc.). The table clarity\_tdl\_tran should be also be added with a LEFT join so that if the measurement period the report is run overlaps eCW (or NextGen) claims and Epic claims, the cptmod will show the code (if it exists) from the appropriate source. The displayindex might need to come from another source or be removed from the subsequent code all-together.

TEMPORARY TABLE preg\_mp\_temp

The report displays the Last Menstrual Period (LMP) and the Estimated Due Date (EDD) and uses these fields to calculate gestational age. These fields should be added to the standard Transformer relevant\_pregnancy and the standard Data Element named Pregnancies (these fields have recently been added to the Relevant Data Model). Example SQL for these fields is displayed in Appendix A.

Note that since this change is being made on the non-standardized Staging database, the programmer may need to customize the SQL code according to data location or unique approaches.

These two fields should also be added to the standard Data Element named Pregnancies. Appendix A also contains suggested SQL for the Data Element.

TEMPORARY TABLE future\_delivery\_temp

It is possible that there could be more than one pregnancy overlapping the measurement period, as identified in the TEMPORARY TABLE preg\_mp\_temp. In cases where the patient did not deliver before the end of the measurement period and where the Estimated Due Date (EDD) is after the end of the measurement period, the TEMPORARY TABLE future\_delivery\_temp will choose the pregnancy with an EDD closest to the end of the measurement period.

TEMPORARY TABLE past\_delivery\_temp

It is possible that there could be more than one pregnancy overlapping the measurement period, as identified in the TEMPORARY TABLE preg\_mp\_temp. In cases where there is at least one known delivery date during the measurement period, the TEMPORARY TABLE past\_delivery\_temp will choose the earliest delvery date.

Note that it is possible that a single patient can have a delivery in the measurement period (and thus a date in the column "Actual (past) date of delivery within 12 months") and a future due date period (and thus a date in the column "Estimated date of delivery (future)").

TEMPORARY TABLE preg\_columns\_temp

Note that the report will not display a delivery date unless the delivery date was entered into the EHR. Therefore, patients who did not deliver (i.e., pregnancy ended for some reason before delivery) or patients missing this information will have visits where the patient was apparently pregnant (column Pregnant at time of Visit = “Yes”) but with no EDD (column “Estimated date of delivery (future)”) and no delivery date (column “Actual (past) date of delivery within 12 months”).

TEMPORARY TABLE depression\_screenings\_temp

This table gathers the results of all of the screening instruments your health center uses. The PHQ-2 and PHQ-9 are almost universal among health centers, but the programmer should ensure that all other instrument results are also gathered by the code. Each individual instrument is added to the table with a UNION expression.

A list of HEDIS-approved instruments appears in the Partnership specifications document after the section “Additional Background Information.” This list contains the instrument’s official LOINC code that should be displayed in the column loinc\_code\_screen. The instrument abbreviation from the specifications document goes into the report column tool\_name. The result of the depression screen (either 'Positive' or 'Negative') goes into the report column interp\_result, which depends on the numerical score of the screen (column screen\_score). The calculation used to obtain a result from a score in the report should correspond to the calculation for a positive finding in the table of the specifications document (and should also correspond to how the health center EHR interprets the score).

The SQL code contains SELECT queries for the PHQ-2 and PHQ-9. There is also a greyed-out (in other words, “noted”) SELECT query for the Edinburgh Depression Screen (based on a new Transformer/Data Element, if your health center uses the Edinburgh) and a greyed-out SELECT query for any other screening instrument your health center might have. These can be activated if your health center uses additional depression screens other than the PHQ-2 and PHQ-9. Otherwise, the greyed-out SQL can remain noted or be deleted from the code. Add as many UNION queries as necessary to get all of the depression instruments used. Data for instruments other than the Edinburgh can be extracted directly from Structured Data in the TEMPORARY TABLE or a custom Transformer created (there would be no corresponding Data Element for additional instruments).

The depression screening temporary table is the second place in the code that requires data not present in the Data Elements of the standard Relevant Data Model. Therefore, the SQL in this section relies on the PHQ2 and PHQ9 Transformers instead of the Data Elements. These Transformers must be configured so that they display:

1. The visit ID of the encounter where the instrument was used
2. The numerical score of the instrument result
3. The interpretation of the instrument result, expressed as 'Positive' or 'Negative' according to HEDIS definitions (see the Partnership specifications document). If this data is not entered by the provider or if the score interpretation is different than HEDIS standards, the interpretation can be coded with a CASE WHEN statement in the temporary table instead.

Below are some additional ideas and tips about configuring the Transformers and code for the depression screening temporary table.

1. The report displays the actual numerical score of the PHQ-2 and PHQ-9 instruments. Depending how your Transformers are configured, you may already display the PHQ-2 and PHQ-9 scores. The sample report SQL in the appendix (see TEMPORARY TABLE depression\_screenings\_temp) references two tables that were configured at one of the health centers[[4]](#footnote-4). Note that the Transformer commonly named relevant\_depression\_screens may or may not display the raw score and may or may not contain/distinguish between PHQ-2 and PHQ-9 instruments. The numerical screening score is not needed for the Quality Measure (and is therefore not added to any Data Element).
2. Identify other depression screening instruments used by your health center. There is a list of acceptable instruments in the Partnership measure standards document. You may need to communicate with the medical officer or behavioral health department lead at your health center for help. The report “RCHC List All Structured Data Items” (for eCW users) can be used to find items in structured data (most commonly HPI) where depression screening scores are entered. This report also shows category, symptom and detail ID numbers which are unique to the health center. The presentation with the title “New ECDS Measures: Focus on Reports” mentioned in the section Supporting Documents (above, at the beginning of this document) discusses an approach to finding these screens in structured data.
   1. The most common non-PHQ screening instrument is the Edinburgh Depression Screen, which is used with prenatal and postnatal patients (two of the related depression Quality Measures focus on these populations). There is a new Data Element (Edinburgh Depression Screens) that can be configured and enabled if your health center uses this instrument. Example SQL code for the Transformer/Data Element Pair is displayed in Appendix A.
   2. Health centers may use additional depression screening instruments. Currently, there are no other standard Transformers/Data Elements for these instruments. However, they can be added to the TEMPORARY TABLE depression\_screenings\_temp in the report using UNION statements and SQL to pull them directly from structured data. There is an example in Appendix A.

Results Query

Note that the data for three output columns associated with individual visits are likely not present in the EHR. These columns are:

* Site ID number
* Provider Site Name

According to the Partnership specifications document, the “Site ID number” is the NPI number assigned to site where care was provided. This may have to added to the code with a CASE WHEN expression depending on the Relevant Location where the service was performed.

The Provider Site Name should conform to the recognized name of the site by Partnership and the site ID assigned by Partnership. For example, in the monthly enrollment lists or QIP denominator lists in eReports, there is a field called PCP (sometimes changed to location or php\_location when displayed on Relevant tables).

In the file from Partnership, this PCP field can look something like this:

* HEALTH CENTER PETALUMA [14857 0043]
* CAMPUS SRCH CARITAS [24455 0009]

With these examples, the Site Name would be “HEALTH CENTER PETALUMA” or “SRCH CARITAS CAMPUS.” Again, knowing the Relevant Location where the service was provided, a CASE WHEN expression can be used to display the standard Site Name and Provider Key.

# Description of ECDS Measure Report: Unhealthy Alcohol Use Screening and Follow Up (ASF-E)

This report is entirely based on the standard Relevant Data Mode, and so a higher degree of standardization here means that the programmer does not need to customize the SQL code as much. However, this report requires two new Transformer-Data Element pairs.

Similar to the other screening/follow-up measures (like depression screening/follow-up or tobacco screening/follow-up), this measure focuses on unhealthy alcohol use screenings for all patients in the denominator and then, for patients with a positive screen, evaluates whether a follow-up activity was performed. The presentation with the title “New ECDS Measures: Focus on Reports” mentioned in the section Supporting Documents (above) contains a flow-chart for this measure.

Since this is a relatively new measure among Aliados Health-affiliated health centers, unhealthy alcohol use screens and alcohol follow-up (i.e., counseling in some form) must be identified in the EHR (normally in structured data, if they are already being entered) and extracted by the new Transformer/Data Element pair.

The Partnership ECDS measure specifications document defines three different instruments that can be used for alcohol screening. These are:

* + Audit-C
  + Audit
  + Single Question Screen. Note that this screen must adhere to specific language in the document or be approved by Partnership.

A health center can have one or any combination of these screens. The first step is to work with a clinical or behavioral health contact at your health center to help identify the alcohol use screens being used. Then, identify the screens in your structured data . Each screening type should have its own Transformer/Data Element pair.

The instruments used by the report and their reference in the code is displayed below:

|  |  |  |
| --- | --- | --- |
| Instrument Name | Suggested Transformer Name | Data Element Name |
| Audit-C | relevant\_audit\_c\_screens | AUDIT C Screens |
| Audit | relevant\_audit\_screens | AUDIT Screens |
| Single Question Screen | relevant\_single\_q\_alc\_screens | Single Question Alcohol use Screens |

Appendix B contains example SQL for the Audit-C Transformer/Data Element pair. If your health center uses the Audit screen and/or single question alcohol use screen, the Transformer/Data Element pair will have similar SQL code. The programmer will need to customize the SQL with the unique internal ID numbers and location of data.

Appendix B contains example SQL for the alcohol counseling Transformer/Data Element pair.

|  |  |
| --- | --- |
| Suggested Transformer Name | Data Element Name |
| relevant\_alcohol\_counseling | Alcohol Counseling Or Other Followups |

TEMPORARY TABLE universe\_temp\_raw

See notes in the Introduction above on identifying patients with Partnership Insurance

The visits are not restricted to medical visits or any other particular kind of visit because we want as many instances of alcohol screenings and counselings as possible.

TEMPORARY TABLE alc\_followup\_struct\_raw\_temp

Partnership will identify alcohol follow-up counseling from structured data through SNOMED codes displayed in the output column Counseling\_SNOMED. The EHR systems used by Aliados Health-affiliated health centers do not automatically associate structured data items with SNOMED codes, so the SNOMED code must be added in the SQL. In the section “Additional Background Information” of the Partnership measure specifications document (see section “Supporting Documents” above) is a table with some recommended SNOMED codes for counseling. The sample SQL in Appendix D uses the SNOMED code 413473000 (corresponding to “Counseling about alcohol consumption”), but any of the codes in the table can be used if one better describes the exact kind of counseling at your health center.

Results Query

Two groups of records are added together using UNION statements. They are:

* + 1. Individual visits in the measurement period where there was an alcohol screen and/or an alcohol counseling activity. These records feature the visit date in the column Date\_of\_Service and other visit-associated information.
    2. Denominator patients with exclusions. These are not associated with a visit date in the column Date\_of\_Service but have dates and codes in the exclusion columns (those with names that begin with “Exclusions\_”).

Note that the data for three output columns associated with individual visits are likely not present in the EHR. These columns are:

* Site ID number
* Site Name
* Provider Key

According to the Partnership specifications document, the “Site ID number” is the NPI number assigned to site where care was provided. This may have to added to the code with a CASE WHEN expression depending on the Relevant Location where the service was performed.

The Site Name and Provider Key should conform to the recognized name of the site by Partnership and the site ID assigned by Partnership. For example, in the monthly enrollment lists or QIP denominator lists in eReports, there is a field called PCP (sometimes changed to location or php\_location when displayed on Relevant tables).

In the file from Partnership, this PCP field can look something like this:

* HEALTH CENTER PETALUMA [14857 0043]
* CAMPUS SRCH CARITAS [24455 0009]

With these examples, the Site Name would be “HEALTH CENTER PETALUMA” or “SRCH CARITAS CAMPUS” and the Provider Key would be “14857-0043” or “24455-0009.”

Note that the Provider Key should display the number in hyphenated format. Again, knowing the Relevant Location where the service was provided, a CASE WHEN expression can be used to display the standard Site Name and Provider Key.

# Appendix A: SQL Code for the Report “ECDS: Depression Related Measures (DMS-E, DSF-E, DRR-E, PND-E, PDS-E)” and Related Transformers/Data Elements

## Note to Health Centers Using the ECDS Report SQL From Last Year

If your health center has not begun the Transition to OCHIN Epic, you may continue to use the validated ECDS depression report from last year instead of constructing a new one with the SQL in the section “Report SQL” below. Just follow these three steps:

1. The depression report requires a value set change from last year. In the Report SQL section below, replace the entire section for the TEMPORARY TABLE office\_cpt\_codes\_temp which is in mostly green font beginning on page 24.
2. Ensure that the column names and formatting are the same as the 2023 reporting template (by default, they should be).
3. Add code to display the appropriate Site Name as described in the Results Query section of page 15 above

## For Health Centers Establishing New Reports (Or General Data Explanation)

Configure Transformers/Data Elements

Check if your instance of Relevant has the Transformers relevant\_phq2 and relevant\_phq9 and how they are configured. There could be variations in the name and variations in the SQL code between health centers. In the report SQL code below, relevant\_phq2 and relevant\_phq9 each display one total score for one instrument on one date for one patient.

NEW Transformer/Data Element Pair for Edinburgh Depression Screens

Configure only if your health center uses the Edinburgh Depression Screen. Note that the ID numbers for catid, itemid, and detailed will be unique at each health center. One option to find these ID numbers is the report “RCHC List All Structured Data Items.”

**Transformer**: Build relevant\_edinburgh\_screen

**DROP TABLE IF EXISTS** relevant\_edinburgh\_screen;  
**CREATE TABLE** relevant\_edinburgh\_screen **AS  
SELECT DISTINCT** enc.**patientid AS** patient\_id,

enc.**encounterid AS** visit\_id,

enc.**date** :: **DATE AS** performed\_on,  
 structhpi.**value** :: **INT AS** score,  
 **CASE WHEN** structhpi.**value** :: **INT** >= 10 **THEN TRUE** **ELSE FALSE END AS** result  
**FROM** enc  
 **INNER JOIN** structhpi **ON** structhpi.**encounterid** = enc.**encounterid** **AND** (structhpi.**catid** = 170663 **AND** structhpi.**itemid** = 10575 **AND** structhpi.**detailid** = 1549  
 **OR** structhpi.**catid** = 375124 **AND** structhpi.**itemid** = 22423 **AND** structhpi.**detailid** = 2310

**OR** structhpi.**catid** = 250273 **AND** structhpi.**itemid** = 18785 **AND** structhpi.**detailid** = 1516)  
**WHERE** enc.**deleteflag** = 0  
 **AND** enc.**status** = **'CHK'  
 AND** structhpi.**value** ~ **'^\d+$'**

**Data Element**: Edinburgh Depression Screens

**SELECT DISTINCT** **patient\_id**,  
 **performed\_on**,  
 **score**,  
 **result   
FROM** relevant\_edinburgh\_screens

NEW Fields for Existing Pregnancy Transformer/Data Element Pair

**Transformer**: Build relevant\_pregnancy

This is a relatively complicated Transformer that features more than one TEMPORARY TABLE. The final subquery creates the table relevant\_pregnancy. Two fields (last\_menstrual\_period and estimated\_due\_date) should be added to the final subquery. At some health centers, these fields are already available from the existing code. Check the SQL code in the FROM statement for the following references (note there may be slight variations):

**FROM** obf\_pregnancy preg  
 **LEFT JOIN** obf\_edd\_details **AS** lmp  
 **ON** lmp.**pregid** = preg.**pregid AND** lmp.**conf\_lmp\_date** ~ **'^\d+\/\d+\/\d+$'   
 AND** lmp.**delstat** = 0  
 **LEFT JOIN** obf\_edd\_details **AS** final\_edd  
 **ON** final\_edd.**pregid** = preg.**pregid   
 AND** final\_edd.**final\_edd\_date** ~ **'^\d+\/\d+\/\d+$'   
 AND** final\_edd.**delstat** = 0

This code JOINS the alias tables “lmp” and “final\_edd.” If they exist, they can be added to the SELECT statement as the final two columns:

**SELECT DISTINCT . . .** *COALESCE*(*COALESCE*(final\_edd.**final\_edd\_date**, init\_edd.**init\_edd\_date**) :: **DATE** - 280,  
 lmp.**conf\_lmp\_date** :: **DATE**) **AS** last\_menstrual\_period,  
 *COALESCE*(*COALESCE*(final\_edd.**final\_edd\_date**, init\_edd.**init\_edd\_date**) :: **DATE**,  
 lmp.**conf\_lmp\_date** :: **DATE** + 280) **AS** estimated\_due\_date

**Data Element:** Pregnancies

Add the two new fields to the Data Element. An example of the final code is below.

**SELECT DISTINCT  
 id**,  
 **patient\_id**,  
 **started\_on**,  
 **ended\_on**,  
 **prenatal\_treatment\_initial\_trimester**,  
 **prenatal\_treatment\_initiated\_at\_health\_center**,  
 **last\_menstrual\_period**,  
 **estimated\_due\_date  
FROM** relevant\_pregnancy

## Report SQL

**Name:** ECDS: Depression Related Measures (DMS-E, DSF-E, DRR-E, PND-E, PDS-E)

**Description**: This report displays data for the ECDS Depression Related Measures (DMS-E, DSF-E, DRR-E, PND-E, PDS-E) that could be submitted to Partnership HealthPlan of California (2023 Edition)

**Parameters**: {{start\_date}} and {{end\_date}}

**Report SQL Code**:

*/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
Report Name: ECDS: Depression Related Measures (DMS-E, DSF-E, DRR-E, PND-E, PDS-E)  
  
Code Edited By: Ben Fouts for Aliados Health  
  
Description: This report displays data for submission to Partnership HealthPlan. It should not be used to  
 directly evaluate a Quality Measure or for case management purposes  
  
RCHC Started: June 2022 (based on code from the Partnership SQL specifications document)  
  
Version Date: September 28, 2023  
  
Revision History: 2023 Version 1  
 2022 Version 2a: in the Results Query, changed the source of the field named estimated\_date\_of\_delivery  
 2022 Version 2b: order of screening results columns changed to match template  
 2023 Version 1: updated for new Relevant schema. Temp table office\_cpt\_codes\_temp updated with 2023 values  
  
\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  
  
-- This version is for health centers who have not yet transitioned to Epic  
-- There are two places where data must be extracted from tables other than in the Relevant Data Model  
-- See 2023 instructions from Aliados Health. These locations are in the TEMPORARY TABLE initial\_denom\_codes\_temp  
-- and the TEMPORARY TABLE depression\_screenings\_temp  
  
--Define Office and Follow-up Visit CPT codes defined by Partnership  
--These are the default codes and your health center may have additional local codes (see PHP instructions)***DROP TABLE IF EXISTS** office\_cpt\_codes\_temp;  
**CREATE** **TEMPORARY TABLE** office\_cpt\_codes\_temp **AS  
SELECT** *\****FROM** (  
 **VALUES** (**'90791'**,**'CPT'**), (**'90792'**,**'CPT'**), (**'90832'**,**'CPT'**), (**'90833'**,**'CPT'**), (**'90834'**,**'CPT'**), (**'90836'**,**'CPT'**),  
 (**'90837'**,**'CPT'**), (**'90838'**,**'CPT'**), (**'90839'**,**'CPT'**), (**'90845'**,**'CPT'**), (**'90846'**,**'CPT'**), (**'90847'**,**'CPT'**),  
 (**'90849'**,**'CPT'**), (**'90853'**,**'CPT'**), (**'90865'**,**'CPT'**), (**'90867'**,**'CPT'**), (**'90868'**,**'CPT'**), (**'90869'**,**'CPT'**),  
 (**'90870'**,**'CPT'**), (**'90875'**,**'CPT'**), (**'90876'**,**'CPT'**), (**'90880'**,**'CPT'**), (**'90887'**,**'CPT'**), (**'96116'**,**'CPT'**),  
 (**'96121'**,**'CPT'**), (**'96130'**,**'CPT'**), (**'96131'**,**'CPT'**), (**'96132'**,**'CPT'**), (**'96133'**,**'CPT'**), (**'96136'**,**'CPT'**),  
 (**'96137'**,**'CPT'**), (**'96138'**,**'CPT'**), (**'96139'**,**'CPT'**), (**'96146'**,**'CPT'**), (**'96151'**,**'CPT'**), (**'96156'**,**'CPT'**),  
 (**'96170'**,**'CPT'**), (**'96171'**,**'CPT'**), (**'97799'**,**'CPT'**), (**'99484'**,**'CPT'**), (**'99492'**,**'CPT'**), (**'99493'**,**'CPT'**),  
 (**'G0155'**,**'HCPCS'**), (**'G0176'**,**'HCPCS'**), (**'G0177'**,**'HCPCS'**), (**'G0409'**,**'HCPCS'**), (**'G0410'**,**'HCPCS'**), (**'G0411'**,**'HCPCS'**),  
 (**'G0511'**,**'HCPCS'**), (**'G0512'**,**'HCPCS'**), (**'H0002'**,**'HCPCS'**), (**'H0004'**,**'HCPCS'**), (**'H0031'**,**'HCPCS'**), (**'H0034'**,**'HCPCS'**),  
 (**'H0035'**,**'HCPCS'**), (**'H0036'**,**'HCPCS'**), (**'H0037'**,**'HCPCS'**), (**'H0039'**,**'HCPCS'**), (**'H0040'**,**'HCPCS'**), (**'H2000'**,**'HCPCS'**),  
 (**'H2001'**,**'HCPCS'**), (**'H2010'**,**'HCPCS'**), (**'H2011'**,**'HCPCS'**), (**'H2012'**,**'HCPCS'**), (**'H2013'**,**'HCPCS'**), (**'H2014'**,**'HCPCS'**),  
 (**'H2015'**,**'HCPCS'**), (**'H2016'**,**'HCPCS'**), (**'H2017'**,**'HCPCS'**), (**'H2018'**,**'HCPCS'**), (**'H2019'**,**'HCPCS'**), (**'H2020'**,**'HCPCS'**),  
 (**'S0201'**,**'HCPCS'**), (**'S9480'**,**'HCPCS'**), (**'S9484'**,**'HCPCS'**), (**'S9485'**,**'HCPCS'**), (**'Z6300'**,**'HCPCS'**), (**'Z6302'**,**'HCPCS'**),  
 (**'Z6304'**,**'HCPCS'**), (**'Z6306'**,**'HCPCS'**), (**'Z6308'**,**'HCPCS'**), (**'99366'**,**'CPT'**), (**'99492'**,**'CPT'**), (**'99493'**,**'CPT'**),  
 (**'99494'**,**'CPT'**), (**'G0512'**,**'HCPCS'**), (**'T1016'**,**'HCPCS'**), (**'T1017'**,**'HCPCS'**), (**'T2022'**,**'HCPCS'**), (**'T2023'**,**'HCPCS'**),  
 (**'98960'**,**'CPT'**), (**'98961'**,**'CPT'**), (**'98962'**,**'CPT'**), (**'98966'**,**'CPT'**), (**'98967'**,**'CPT'**), (**'98968'**,**'CPT'**),  
 (**'98969'**,**'CPT'**), (**'98970'**,**'CPT'**), (**'98971'**,**'CPT'**), (**'98972'**,**'CPT'**), (**'99078'**,**'CPT'**), (**'99201'**,**'CPT'**),  
 (**'99202'**,**'CPT'**), (**'99203'**,**'CPT'**), (**'99204'**,**'CPT'**), (**'99205'**,**'CPT'**), (**'99211'**,**'CPT'**), (**'99212'**,**'CPT'**),  
 (**'99213'**,**'CPT'**), (**'99214'**,**'CPT'**), (**'99215'**,**'CPT'**), (**'99217'**,**'CPT'**), (**'99218'**,**'CPT'**), (**'99219'**,**'CPT'**),  
 (**'99220'**,**'CPT'**), (**'99241'**,**'CPT'**), (**'99242'**,**'CPT'**), (**'99243'**,**'CPT'**), (**'99244'**,**'CPT'**), (**'99245'**,**'CPT'**),  
 (**'99341'**,**'CPT'**), (**'99342'**,**'CPT'**), (**'99343'**,**'CPT'**), (**'99344'**,**'CPT'**), (**'99345'**,**'CPT'**), (**'99347'**,**'CPT'**),  
 (**'99348'**,**'CPT'**), (**'99349'**,**'CPT'**), (**'99350'**,**'CPT'**), (**'99381'**,**'CPT'**), (**'99382'**,**'CPT'**), (**'99383'**,**'CPT'**),  
 (**'99384'**,**'CPT'**), (**'99385'**,**'CPT'**), (**'99386'**,**'CPT'**), (**'99387'**,**'CPT'**), (**'99391'**,**'CPT'**), (**'99392'**,**'CPT'**),  
 (**'99393'**,**'CPT'**), (**'99394'**,**'CPT'**), (**'99395'**,**'CPT'**), (**'99396'**,**'CPT'**), (**'99397'**,**'CPT'**), (**'99401'**,**'CPT'**),  
 (**'99402'**,**'CPT'**), (**'99403'**,**'CPT'**), (**'99404'**,**'CPT'**), (**'99411'**,**'CPT'**), (**'99412'**,**'CPT'**), (**'99421'**,**'CPT'**),  
 (**'99422'**,**'CPT'**), (**'99423'**,**'CPT'**), (**'99441'**,**'CPT'**), (**'99442'**,**'CPT'**), (**'99443'**,**'CPT'**), (**'99444'**,**'CPT'**),  
 (**'99457'**,**'CPT'**), (**'99483'**,**'CPT'**), (**'G0071'**,**'HCPCS'**), (**'G0463'**,**'HCPCS'**), (**'G2010'**,**'HCPCS'**), (**'G2012'**,**'HCPCS'**),  
 (**'G2061'**,**'HCPCS'**), (**'G2062'**,**'HCPCS'**), (**'G2063'**,**'HCPCS'**), (**'T1015'**,**'HCPCS'**), (**'Z1034'**,**'HCPCS'**), (**'Z1036'**,**'HCPCS'**),  
 (**'59400'**,**'CPT'**), (**'59510'**,**'CPT'**), (**'59618'**,**'CPT'**), (**'59619'**,**'CPT'**), (**'97165'**,**'CPT'**), (**'97166'**,**'CPT'**),  
 (**'97167'**,**'CPT'**), (**'99304'**,**'CPT'**), (**'99305'**,**'CPT'**), (**'99306'**,**'CPT'**), (**'99307'**,**'CPT'**), (**'99308'**,**'CPT'**),  
 (**'99309'**,**'CPT'**), (**'99310'**,**'CPT'**), (**'99315'**,**'CPT'**), (**'99316'**,**'CPT'**), (**'99318'**,**'CPT'**), (**'99324'**,**'CPT'**),  
 (**'99325'**,**'CPT'**), (**'99326'**,**'CPT'**), (**'99327'**,**'CPT'**), (**'99328'**,**'CPT'**), (**'99334'**,**'CPT'**), (**'99335'**,**'CPT'**),  
 (**'99336'**,**'CPT'**), (**'99337'**,**'CPT'**), (**'99339'**,**'CPT'**), (**'99340'**,**'CPT'**), (**'99394'**,**'CPT'**), (**'99395'**,**'CPT'**),  
 (**'99396'**,**'CPT'**), (**'99397'**,**'CPT'**), (**'G0101'**,**'HCPCS'**), (**'G0402'**,**'HCPCS'**), (**'G0438'**,**'HCPCS'**), (**'G0439'**,**'HCPCS'**),  
 (**'G0444'**,**'HCPCS'**), (**'G8431.HD'**,**'HCPCS'**), (**'G8510.HD'**,**'HCPCS'**), (**'H1000'**,**'HCPCS'**), (**'H1002'**,**'HCPCS'**), (**'H1003'**,**'HCPCS'**),  
 (**'TX018'**,**'HCPCS'**), (**'Z1032'**,**'HCPCS'**), (**'Z1032.ZL'**,**'HCPCS'**), (**'Z1038'**,**'HCPCS'**), (**'Z6500'**,**'HCPCS'**)  
 )  
 **AS** value\_set\_values\_values (**code**,**code\_system**);  
  
  
*-- Universe Definition: visits with a:  
-- 1) Claim in the measurement period  
-- 2) Claim has a defined office procedure code (office\_cpt\_codes\_temp.code)  
-- 3) Patient who is 12 years or older  
-- 4) Patient who is enrolled in Partnership Managed Care insurance  
-- Patients in the Universe currently have Partnership HealthPlan insurance -- this is the default,  
-- but can be changed by the programmer to join to internal tables containing current  
-- Partnership patients from the last monthly membership file***DROP TABLE IF EXISTS** initial\_denom\_codes\_temp;  
**CREATE TEMPORARY TABLE** initial\_denom\_codes\_temp **AS  
SELECT DISTINCT** patients.**id AS** patient\_id,  
 patients.**subscriber\_number**,  
 patients.**first\_name AS** memberfirstname,  
 patients.**last\_name AS** memberlastname,  
 patients.**date\_of\_birth** :: **DATE AS** dob,  
 **CASE WHEN** genders.**abbreviation IN**(**'F'**,**'M'**,**'U'**) **THEN** genders.**abbreviation  
 WHEN** genders.**abbreviation** = **'NA'  
 OR** genders.**id IS NULL  
 THEN 'U'  
 ELSE 'O' END AS** Sex,  
 visits.**id AS** enc\_id,  
 visits.**visit\_date** :: **DATE AS** enc\_date,  
 providers.**last\_name** || **', '** || providers.**first\_name AS** visit\_clinician\_full\_name,  
 providers.**npi AS** clinician\_npi\_number,  
 office\_cpt\_codes\_temp.**code AS** visit\_cpt,  
 edi\_inv\_cpt.**mod1 AS** cptmod,  
 office\_cpt\_codes\_temp.**code\_system**,  
 edi\_inv\_cpt.**displayindex  
FROM** rdm.patients  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = patients.**id  
 INNER JOIN** rdm.visit\_billing\_codes **ON** visit\_billing\_codes.**visit\_id** = visits.**id  
 INNER JOIN** rdm.billing\_codes **ON** billing\_codes.**id** = visit\_billing\_codes.**billing\_code\_id  
 LEFT JOIN** rdm.genders **ON** genders.**id** = patients.**gender\_id  
 INNER JOIN** rdm.providers **ON** providers.**id** = visits.**provider\_id***-- For health centers who have not yet transitioned to Epic - add CPT modifier and display index* **INNER JOIN** ecw.edi\_invoice **ON** edi\_invoice.**encounterid** = visits.**id  
 AND** edi\_invoice.**deleteflag** = 0  
 **AND** edi\_invoice.**voidflag** = 0  
 **INNER JOIN** ecw.edi\_inv\_cpt **ON** edi\_inv\_cpt.**invoiceid** = edi\_invoice.**id  
 INNER JOIN** office\_cpt\_codes\_temp **ON** office\_cpt\_codes\_temp.**code** = *LEFT*(edi\_inv\_cpt.**code**, 5)  
**WHERE** *EXTRACT*(**YEAR FROM** *age*({{start\_date}}, patients.date\_of\_birth :: DATE)) >=12  
 **AND** visits.**visit\_date BETWEEN** {{start\_date}} **AND** {{end\_date}}  
 **AND** patients.primary\_insurance\_group\_id = 66; *-- Customize this approach to use the group for  
-- PARTNERSHIP MANAGED CARE or else JOIN to last monthly patient enrollment list  
  
  
--Unduplicated encounter denominator***DROP TABLE IF EXISTS** total\_denominator\_temp;  
**CREATE TEMPORARY TABLE** total\_denominator\_temp **AS  
SELECT DISTINCT  
 patient\_id**,  
 **subscriber\_number**,  
 **memberfirstname**,  
 **memberlastname**,  
 **dob**,  
 **sex**,  
 **enc\_id**,  
 **enc\_date**,  
 **visit\_clinician\_full\_name**,  
 **clinician\_npi\_number  
FROM** initial\_denom\_codes\_temp;  
**CREATE INDEX** index\_total\_denominator\_temp\_on\_enc\_id **ON** total\_denominator\_temp (**enc\_id**);  
**CREATE INDEX** index\_total\_denominator\_temp\_on\_patient\_id **ON** total\_denominator\_temp (**patient\_id**);  
  
  
*--Produce Outpatient Visit CPT/HCPCS columns for the report output***DROP TABLE IF EXISTS** cpt\_columns\_temp;  
**CREATE TEMPORARY TABLE** cpt\_columns\_temp **AS  
WITH** order\_cpt **AS**(  
 **SELECT  
 enc\_id**,  
 **visit\_cpt**,  
 **code\_system**,  
 *ROW\_NUMBER*() **OVER** (**PARTITION BY enc\_id**, **code\_system  
 ORDER BY displayindex**, **visit\_cpt**) **AS row  
 FROM** (**SELECT DISTINCT  
 enc\_id**,  
 **visit\_cpt**,  
 **code\_system**,  
 **displayindex  
 FROM** initial\_denom\_codes\_temp) **AS** undup  
),cpt1 **AS**(  
 **SELECT enc\_id**, **visit\_cpt  
 FROM** order\_cpt  
 **WHERE code\_system** = **'CPT'  
 AND row** = 1  
),cpt2 **AS**(  
 **SELECT enc\_id**, **visit\_cpt  
 FROM** order\_cpt  
 **WHERE code\_system** = **'CPT'  
 AND row** = 2  
),cpt3 **AS**(  
 **SELECT enc\_id**, **visit\_cpt  
 FROM** order\_cpt  
 **WHERE code\_system** = **'CPT'  
 AND row** = 3  
),cpt4 **AS**(  
 **SELECT enc\_id**, **visit\_cpt  
 FROM** order\_cpt  
 **WHERE code\_system** = **'CPT'  
 AND row** = 4  
),cpt1\_mod **AS**(  
 **SELECT** cpt1.**enc\_id**, initial\_denom\_codes\_temp.**cptmod  
 FROM** cpt1  
 **INNER JOIN** initial\_denom\_codes\_temp **ON** initial\_denom\_codes\_temp.**enc\_id** = cpt1.**enc\_id  
 AND** initial\_denom\_codes\_temp.**visit\_cpt** = cpt1.**visit\_cpt  
 WHERE** initial\_denom\_codes\_temp.**cptmod IS NOT NULL**),hcpcs1 **AS**(  
**SELECT enc\_id**, **visit\_cpt  
 FROM** order\_cpt  
 **WHERE code\_system** = **'HCPCS'  
 AND row** = 1  
),hcpcs1\_mod **AS**(  
 **SELECT** hcpcs1.**enc\_id**, initial\_denom\_codes\_temp.**cptmod  
 FROM** hcpcs1  
 **INNER JOIN** initial\_denom\_codes\_temp **ON** initial\_denom\_codes\_temp.**enc\_id** = hcpcs1.**enc\_id  
 AND** initial\_denom\_codes\_temp.**visit\_cpt** = hcpcs1.**visit\_cpt  
 WHERE** initial\_denom\_codes\_temp.**cptmod IS NOT NULL**),enc\_nbr\_distinct **AS** (**SELECT DISTINCT enc\_id FROM** order\_cpt)  
**SELECT** enc\_nbr\_distinct.**enc\_id**,  
 cpt1.**visit\_cpt AS** cpt1,  
 cpt2.**visit\_cpt AS** cpt2,  
 cpt3.**visit\_cpt AS** cpt3,  
 cpt4.**visit\_cpt AS** cpt4,  
 cpt1\_mod.**cptmod**,  
 hcpcs1.**visit\_cpt AS** hcpcs,  
 hcpcs1\_mod.**cptmod AS** hcpcmod  
**FROM** enc\_nbr\_distinct  
 **LEFT JOIN** cpt1 **ON** cpt1.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** cpt2 **ON** cpt2.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** cpt3 **ON** cpt3.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** cpt4 **ON** cpt4.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** cpt1\_mod **ON** cpt1\_mod.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** hcpcs1 **ON** hcpcs1.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
 LEFT JOIN** hcpcs1\_mod **ON** hcpcs1\_mod.**enc\_id** = enc\_nbr\_distinct.**enc\_id  
ORDER BY** enc\_nbr\_distinct.**enc\_id**;  
  
  
*--Pregnancies overlapping measurement period for universe patients***DROP TABLE IF EXISTS** preg\_mp\_temp;  
**CREATE TEMPORARY TABLE** preg\_mp\_temp **AS  
SELECT DISTINCT** total\_denominator\_temp.**patient\_id**,  
 pregnancies.**id AS** preg\_id,  
 pregnancies.**started\_on**,  
 pregnancies.**ended\_on**,  
 pregnancies.**last\_menstrual\_period** :: **DATE AS** lmp\_date,  
 pregnancies.**estimated\_due\_date** :: **DATE AS** edd\_date,  
 pregnancy\_deliveries.**delivered\_on** :: **DATE AS** actual\_date\_of\_delivery,  
 *COALESCE*(pregnancy\_deliveries.**delivered\_on**,pregnancies.**estimated\_due\_date**) :: **DATE AS** sort\_date,  
 **CASE WHEN** *COALESCE*(pregnancy\_deliveries.**delivered\_on**,pregnancies.**estimated\_due\_date**) :: **DATE** <= {{end\_date}}  
 **THEN TRUE ELSE FALSE END AS** delivery\_edd\_before\_endmp  
**FROM** total\_denominator\_temp  
 **INNER JOIN** rdm.pregnancies **ON** pregnancies.**patient\_id** = total\_denominator\_temp.**patient\_id  
 LEFT JOIN** rdm.pregnancy\_deliveries **ON** pregnancy\_deliveries.**id** = pregnancies.**id  
WHERE** (pregnancies.**started\_on**,  
 *COALESCE*(pregnancies.**ended\_on** + 1,{{end\_date}})  
 ) **OVERLAPS** (  
 {{start\_date}},  
 {{end\_date}} :: DATE + 1);  
  
  
*--Choose one future delivery for the column "Estimated date of delivery (future)"***DROP TABLE IF EXISTS** future\_delivery\_temp;  
**CREATE TEMPORARY TABLE** future\_delivery\_temp **AS  
SELECT DISTINCT ON** (**patient\_id**)  
 **patient\_id**,  
 **preg\_id**,  
 **started\_on**,  
 **ended\_on**,  
 **lmp\_date**,  
 **edd\_date**,  
 **actual\_date\_of\_delivery**,  
 **sort\_date  
FROM** preg\_mp\_temp  
**WHERE delivery\_edd\_before\_endmp IS FALSE  
ORDER BY patient\_id**, **sort\_date ASC**;  
  
  
*--Choose one past pregnancy for the column "Actual (past) date of delivery within 12 months"***DROP TABLE IF EXISTS** past\_delivery\_temp;  
**CREATE TEMPORARY TABLE** past\_delivery\_temp **AS  
SELECT DISTINCT ON** (**patient\_id**)  
 **patient\_id**,  
 **preg\_id**,  
 **started\_on**,  
 **ended\_on**,  
 **lmp\_date**,  
 **edd\_date**,  
 **actual\_date\_of\_delivery**,  
 **sort\_date  
FROM** preg\_mp\_temp  
**WHERE delivery\_edd\_before\_endmp IS TRUE  
ORDER BY patient\_id**, **sort\_date DESC**;  
  
  
*--Make weeks/days gestation calculations and display other relevant pregnancy items for the report output***DROP TABLE IF EXISTS** preg\_columns\_temp;  
**CREATE TEMPORARY TABLE** preg\_columns\_temp **AS  
WITH** preg\_dates **AS** (  
 **SELECT** total\_denominator\_temp.**patient\_id**,  
 total\_denominator\_temp.**enc\_date**,  
 total\_denominator\_temp.**enc\_id**,  
 *COALESCE*(past\_delivery\_temp.**lmp\_date**, future\_delivery\_temp.**lmp\_date**) **AS** calc\_lmp\_date,  
 *COALESCE*(past\_delivery\_temp.**edd\_date**, future\_delivery\_temp.**edd\_date**) **AS** calc\_edd\_date,  
 future\_delivery\_temp.**edd\_date AS** future\_edd\_date,  
 past\_delivery\_temp.**actual\_date\_of\_delivery AS** past\_date\_of\_delivery,  
 past\_delivery\_temp.**lmp\_date AS** past\_delivery\_lmp  
 **FROM** total\_denominator\_temp  
 **LEFT JOIN** past\_delivery\_temp **ON** past\_delivery\_temp.**patient\_id** = total\_denominator\_temp.**patient\_id  
 AND** total\_denominator\_temp.**enc\_date BETWEEN** past\_delivery\_temp.**started\_on AND** past\_delivery\_temp.**ended\_on  
 LEFT JOIN** future\_delivery\_temp **ON** future\_delivery\_temp.**patient\_id** = total\_denominator\_temp.**patient\_id  
 AND** total\_denominator\_temp.**enc\_date BETWEEN** future\_delivery\_temp.**started\_on AND** future\_delivery\_temp.**ended\_on  
 WHERE** past\_delivery\_temp.**patient\_id IS NOT NULL  
 OR** future\_delivery\_temp.**patient\_id IS NOT NULL**)  
**SELECT  
 patient\_id**,  
 **enc\_date**,  
 **enc\_id**,  
 future\_edd\_date,  
 past\_date\_of\_delivery,  
 calc\_lmp\_date,  
 calc\_edd\_date,  
 *TRUNC*(*DATE\_PART*(**'day'**, **enc\_date** ::**timestamp** - calc\_lmp\_date :: **timestamp**)/7) || **'W'** ||  
 *DATE\_PART*(**'day'**, **enc\_date** ::**timestamp** - calc\_lmp\_date :: **timestamp**) -  
 (*TRUNC*(*DATE\_PART*(**'day'**, **enc\_date** ::**timestamp** - calc\_lmp\_date :: **timestamp**)/7) \* 7) || **'D'  
 AS** gestation\_weeks\_and\_days\_at\_time\_of\_service,  
 **CASE WHEN NOT** past\_date\_of\_delivery **IS NULL THEN** *TRUNC*(*DATE\_PART*(**'day'**, past\_date\_of\_delivery ::**timestamp** - past\_delivery\_lmp ::**timestamp**)/7) || **'W'** ||  
 *DATE\_PART*(**'day'**, past\_date\_of\_delivery ::**timestamp** - past\_delivery\_lmp ::**timestamp**) -  
 (*TRUNC*(*DATE\_PART*(**'day'**, past\_date\_of\_delivery ::**timestamp** - past\_delivery\_lmp ::**timestamp**)/7) \* 7) || **'D'  
 END AS** weeks\_and\_days\_gestation\_at\_time\_of\_delivery  
**FROM** preg\_dates;  
  
  
*--Identify depression screenings from structured data. Priority order: PHQ-2, PHQ-9, Edinburgh, GDS (or other screens)***DROP TABLE IF EXISTS** depression\_screenings\_temp;  
**CREATE TEMPORARY TABLE** depression\_screenings\_temp **AS  
SELECT** *-- PHQ-2 add from Transformer (if similar exists) or pull directly from structured data* total\_denominator\_temp.**patient\_id**,  
 total\_denominator\_temp.**enc\_id**,  
 **'55758-7' AS** loinc\_code\_screen,  
 **'PHQ2' AS** tool\_name,  
 **total\_score** :: **VARCHAR AS** screen\_score,  
 **CASE WHEN result IS TRUE THEN 'Positive' ELSE 'Negative' END AS** interp\_result,  
 1 **AS** priority  
**FROM** total\_denominator\_temp  
 **INNER JOIN** custom.relevant\_phq2 **ON** relevant\_phq2.**visit\_id** = total\_denominator\_temp.**enc\_id  
UNION  
SELECT** *-- PHQ-9 add from Transformer (if similar exists) or pull directly from structured data* total\_denominator\_temp.**patient\_id**,  
 total\_denominator\_temp.**enc\_id**,  
 **'44261-6' AS** loinc\_code\_screen,  
 **'PHQ9' AS** tool\_name,  
 **score** :: **VARCHAR AS** screen\_score,  
 **CASE WHEN score** :: **INT** >= 10 **THEN 'Positive' ELSE 'Negative' END AS** interp\_result,  
 2 **AS** priority  
**FROM** total\_denominator\_temp  
 **INNER JOIN** custom.relevant\_phq9 **ON** relevant\_phq9.**visit\_id** = total\_denominator\_temp.**enc\_id***/\*  
UNION  
 -- Edinburgh Depression Screen add from Transformer (if similar exists) or pull directly from structured data  
SELECT  
 total\_denominator\_temp.patient\_id,  
 total\_denominator\_temp.enc\_id,  
 '71354-5' AS loinc\_code\_screen,  
 'EPDS' AS tool\_name,  
 score :: VARCHAR AS screen\_score,  
 CASE WHEN result IS TRUE THEN 'Positive' ELSE 'Negative' END AS interp\_result,  
 3 AS priority  
FROM total\_denominator\_temp  
 INNER JOIN custom.relevant\_edinburgh\_screen ON relevant\_edinburgh\_screen.visit\_id = total\_denominator\_temp.enc\_id;  
UNION  
 -- If your health center uses additional kinds of depression screening tools, add them below using UNION sub-queries  
 -- Otherwise, delete this section  
SELECT -- [Add name of tool here for easy reference]  
 total\_denominator\_temp.patient\_id,  
 total\_denominator\_temp.enc\_id,  
 '48544-1' AS loinc\_code\_screen, -- Add LOINC from Partnership ECDS instructions  
 'GDSL' AS tool\_name, -- Add tool name (or abbreviation)  
 total\_score :: VARCHAR AS screen\_score,  
 CASE WHEN total\_score :: INT >= 10 THEN 'Positive'  
 ELSE 'Negative' END AS interp\_result, -- You may have to use a CASE WHEN statement. See Partnership ECDS instructions  
 4 AS priority -- Priority should start and 4 and increase to 5, 6, etc. depending on number of screens  
FROM total\_denominator\_temp  
 INNER JOIN(  
 SELECT DISTINCT  
 enc.patientid AS patient\_id,  
 enc.encounterid AS enc\_id,  
 structhpi.value :: INT AS total\_score  
 FROM enc  
 INNER JOIN structhpi  
 ON structhpi.encounterid = enc.encounterid AND structhpi.catid = 250273 -- ID numbers are from your system  
 AND structhpi.itemid = 18785 AND structhpi.detailid = 1516  
 AND structhpi.value ~ '\d+'  
 WHERE enc.deleteflag = 0  
 AND enc.status = 'CHK'  
 AND structhpi.encounterid IS NOT NULL) AS gdsl\_given ON gdsl\_given.enc\_id = total\_denominator\_temp.enc\_id  
\*/*;  
  
*--Unduplicate depression screening results and add row number***DROP TABLE IF EXISTS** depression\_screen\_priorities\_temp;  
**CREATE TEMPORARY TABLE** depression\_screen\_priorities\_temp **AS  
SELECT  
 enc\_id**,  
 **patient\_id**,  
 **loinc\_code\_screen**,  
 **tool\_name**,  
 **screen\_score**,  
 **interp\_result**,  
 **priority**,  
 *ROW\_NUMBER*() **OVER**(**PARTITION BY enc\_id ORDER BY priority**) **AS row  
FROM**(**SELECT DISTINCT ON** (**enc\_id**, **priority**)  
 **enc\_id**,  
 **patient\_id**,  
 **loinc\_code\_screen**,  
 **tool\_name**,  
 **screen\_score**,  
 **interp\_result**,  
 **priority  
 FROM** depression\_screenings\_temp  
 **ORDER BY enc\_id**, **priority**, **screen\_score DESC**) **AS** depression\_screenings\_temp\_distinct\_on;  
  
  
*--Prepare depression screening results so they can be entered into columns of the report output***DROP TABLE IF EXISTS** depression\_screen\_columns\_temp;  
**CREATE TEMPORARY TABLE** depression\_screen\_columns\_temp **AS  
SELECT DISTINCT** depression\_screen\_priorities\_temp.**patient\_id**,  
 depression\_screen\_priorities\_temp.**enc\_id**,  
 total\_denominator\_temp.**enc\_date**,  
 first\_columns.**loinc\_code\_screen AS** loinc\_tool\_1,  
 first\_columns.**tool\_name AS** name\_tool\_1,  
 first\_columns.**screen\_score AS** score\_tool\_1,  
 first\_columns.**interp\_result AS** result\_tool\_1,  
 second\_columns.**loinc\_code\_screen AS** loinc\_tool\_2,  
 second\_columns.**tool\_name AS** name\_tool\_2,  
 second\_columns.**screen\_score AS** score\_tool\_2,  
 second\_columns.**interp\_result AS** result\_tool\_2  
**FROM** depression\_screen\_priorities\_temp  
 **INNER JOIN** total\_denominator\_temp **ON** total\_denominator\_temp.**enc\_id** = depression\_screen\_priorities\_temp.**enc\_id  
 INNER JOIN** (**SELECT** *\** **FROM** depression\_screen\_priorities\_temp  
 **WHERE row** = 1) **AS** first\_columns **ON** first\_columns.**enc\_id** = depression\_screen\_priorities\_temp.**enc\_id  
 LEFT JOIN** (**SELECT** *\** **FROM** depression\_screen\_priorities\_temp  
 **WHERE row** = 2) **AS** second\_columns **ON** second\_columns.**enc\_id** = depression\_screen\_priorities\_temp.**enc\_id  
ORDER BY** depression\_screen\_priorities\_temp.**enc\_id**;  
  
  
*--Identify a depression or other behavioral health condition code associated with the present visit Assessment***DROP TABLE IF EXISTS** depression\_dx\_column\_temp;  
**CREATE TEMPORARY TABLE** depression\_dx\_column\_temp **AS  
SELECT DISTINCT ON** (total\_denominator\_temp.**enc\_id**)  
 total\_denominator\_temp.**patient\_id**,  
 total\_denominator\_temp.**enc\_id**,  
 diagnosis\_codes.**code AS** icd\_code  
**FROM** total\_denominator\_temp  
 **INNER JOIN** rdm.visit\_diagnosis\_codes **ON** visit\_diagnosis\_codes.**visit\_id** = total\_denominator\_temp.**enc\_id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = visit\_diagnosis\_codes.**diagnosis\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = diagnosis\_codes.**code  
 AND** hedis\_value\_set\_codes.**value\_set\_name** = **'Depression or Other Behavioral Health Condition'  
 AND latest** = **'TRUE'  
ORDER BY** total\_denominator\_temp.**enc\_id**, diagnosis\_codes.**code**;  
  
  
*--Identify exclusion diagnosis codes (including depression) that occurred in the past two years  
--Take the earliest visit date for each code and order all codes by their dates***DROP TABLE IF EXISTS** exclusion\_dx\_temp;  
**CREATE TEMPORARY TABLE** exclusion\_dx\_temp **AS  
SELECT  
 patient\_id**,  
 icd\_code,  
 first\_visit\_date,  
 *ROW\_NUMBER*() **OVER**(**PARTITION BY patient\_id ORDER BY** first\_visit\_date, icd\_code) **AS row  
FROM**(**SELECT** total\_denominator\_temp.**patient\_id**,  
 diagnosis\_codes.**code AS** icd\_code,  
 *MIN*(visits.**visit\_date**) :: **DATE AS** first\_visit\_date  
 **FROM** total\_denominator\_temp  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = total\_denominator\_temp.**patient\_id  
 INNER JOIN** rdm.visit\_diagnosis\_codes **ON** visit\_diagnosis\_codes.**visit\_id** = visits.**id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = visit\_diagnosis\_codes.**diagnosis\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = diagnosis\_codes.**code  
 AND** hedis\_value\_set\_codes.**value\_set\_name IN**(**'Bipolar Disorder'**,**'Other Bipolar Disorder'**,  
 **'Personality Disorder'**,**'Pervasive Developmental Disorder'**,**'Psychotic Disorders'**,  
 **'Depression or Other Behavioral Health Condition'**)  
 **AND latest** = **'TRUE'  
 WHERE** visits.**visit\_date BETWEEN** ({{end\_date}} :: DATE - **INTERVAL '2 YEARS'**) **AND** {{end\_date}}  
 **GROUP BY** total\_denominator\_temp.patient\_id, diagnosis\_codes.code) **AS** raw\_codes;  
  
  
*--Prepare the exclusion diagnosis codes by date of service for the report output***DROP TABLE IF EXISTS** exclusion\_columns\_temp;  
**CREATE TEMPORARY TABLE** exclusion\_columns\_temp **AS  
SELECT** denom.**patient\_id**,  
 exclusions\_1.**icd\_code AS** exclusions\_icddx10\_1,  
 exclusions\_1.**first\_visit\_date AS** exclusions\_icddx10\_1\_dos,  
 exclusions\_2.**icd\_code AS** exclusions\_icddx10\_2,  
 exclusions\_2.**first\_visit\_date AS** exclusions\_icddx10\_2\_dos,  
 exclusions\_3.**icd\_code AS** exclusions\_icddx10\_3,  
 exclusions\_3.**first\_visit\_date AS** exclusions\_icddx10\_3\_dos,  
 exclusions\_4.**icd\_code AS** exclusions\_icddx10\_4,  
 exclusions\_4.**first\_visit\_date AS** exclusions\_icddx10\_4\_dos,  
 exclusions\_5.**icd\_code AS** exclusions\_icddx10\_5,  
 exclusions\_5.**first\_visit\_date AS** exclusions\_icddx10\_5\_dos,  
 exclusions\_6.**icd\_code AS** exclusions\_icddx10\_6,  
 exclusions\_6.**first\_visit\_date AS** exclusions\_icddx10\_6\_dos,  
 exclusions\_7.**icd\_code AS** exclusions\_icddx10\_7,  
 exclusions\_7.**first\_visit\_date AS** exclusions\_icddx10\_7\_dos,  
 exclusions\_8.**icd\_code AS** exclusions\_icddx10\_8,  
 exclusions\_8.**first\_visit\_date AS** exclusions\_icddx10\_8\_dos,  
 exclusions\_9.**icd\_code AS** exclusions\_icddx10\_9,  
 exclusions\_9.**first\_visit\_date AS** exclusions\_icddx10\_9\_dos,  
 exclusions\_10.**icd\_code AS** exclusions\_icddx10\_10,  
 exclusions\_10.**first\_visit\_date AS** exclusions\_icddx10\_10\_dos,  
 exclusions\_11.**icd\_code AS** exclusions\_icddx10\_11,  
 exclusions\_11.**first\_visit\_date AS** exclusions\_icddx10\_11\_dos,  
 exclusions\_12.**icd\_code AS** exclusions\_icddx10\_12,  
 exclusions\_12.**first\_visit\_date AS** exclusions\_icddx10\_12\_dos,  
 exclusions\_13.**icd\_code AS** exclusions\_icddx10\_13,  
 exclusions\_13.**first\_visit\_date AS** exclusions\_icddx10\_13\_dos,  
 exclusions\_14.**icd\_code AS** exclusions\_icddx10\_14,  
 exclusions\_14.**first\_visit\_date AS** exclusions\_icddx10\_14\_dos,  
 exclusions\_15.**icd\_code AS** exclusions\_icddx10\_15,  
 exclusions\_15.**first\_visit\_date AS** exclusions\_icddx10\_15\_dos  
**FROM** (**SELECT DISTINCT patient\_id FROM** exclusion\_dx\_temp) **AS** denom  
 **INNER JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 1) **AS** exclusions\_1  
 **ON** exclusions\_1.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 2) **AS** exclusions\_2  
 **ON** exclusions\_2.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 3) **AS** exclusions\_3  
 **ON** exclusions\_3.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 4) **AS** exclusions\_4  
 **ON** exclusions\_4.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 5) **AS** exclusions\_5  
 **ON** exclusions\_5.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 6) **AS** exclusions\_6  
 **ON** exclusions\_6.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 7) **AS** exclusions\_7  
 **ON** exclusions\_7.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 8) **AS** exclusions\_8  
 **ON** exclusions\_8.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 9) **AS** exclusions\_9  
 **ON** exclusions\_9.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 10) **AS** exclusions\_10  
 **ON** exclusions\_10.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 11) **AS** exclusions\_11  
 **ON** exclusions\_11.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 12) **AS** exclusions\_12  
 **ON** exclusions\_12.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 13) **AS** exclusions\_13  
 **ON** exclusions\_13.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 14) **AS** exclusions\_14  
 **ON** exclusions\_14.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT DISTINCT patient\_id**, **first\_visit\_date**, **icd\_code  
 FROM** exclusion\_dx\_temp  
 **WHERE row** = 15) **AS** exclusions\_15  
 **ON** exclusions\_15.**patient\_id** = denom.**patient\_id  
ORDER BY** denom.**patient\_id**;  
  
  
*--Determine if any of the exclusion diagnosis codes displayed in the exclusion columns have been resolved since  
-- the time of service***DROP TABLE IF EXISTS** exclusion\_dx\_resolved\_temp;  
**CREATE TEMPORARY TABLE** exclusion\_dx\_resolved\_temp **AS  
SELECT** exclusion\_dx\_temp.**patient\_id**,  
 exclusion\_dx\_temp.**icd\_code AS** exclusion\_code,  
 patient\_diagnoses.**end\_date** :: **DATE AS** date\_resolved,  
 exclusion\_dx\_temp.**row AS** exclusion\_row\_orig,  
 *ROW\_NUMBER*() **OVER**(**PARTITION BY** exclusion\_dx\_temp.**patient\_id ORDER BY row**) **AS** resolution\_row  
**FROM** exclusion\_dx\_temp  
 **INNER JOIN** rdm.patient\_diagnoses **ON** patient\_diagnoses.**patient\_id** = exclusion\_dx\_temp.**patient\_id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = patient\_diagnoses.**diagnosis\_code\_id  
WHERE row BETWEEN** 1 **and** 15  
 **AND** patient\_diagnoses.**end\_date** :: **DATE** <= {{end\_date}};  
  
*--Prepare the resolution columns for the report output***DROP TABLE IF EXISTS** exclusion\_resolved\_columns\_temp;  
**CREATE TEMPORARY TABLE** exclusion\_resolved\_columns\_temp **AS  
SELECT** denom.**patient\_id**,  
 excl\_resolve\_1.**exclusion\_code AS** exclusions\_icddx10\_1\_resolution,  
 excl\_resolve\_1.**date\_resolved AS** exclusions\_icddx10\_1\_resolution\_date,  
 excl\_resolve\_2.**exclusion\_code AS** exclusions\_icddx10\_2\_resolution,  
 excl\_resolve\_2.**date\_resolved AS** exclusions\_icddx10\_2\_resolution\_date,  
 excl\_resolve\_3.**exclusion\_code AS** exclusions\_icddx10\_3\_resolution,  
 excl\_resolve\_3.**date\_resolved AS** exclusions\_icddx10\_3\_resolution\_date,  
 excl\_resolve\_4.**exclusion\_code AS** exclusions\_icddx10\_4\_resolution,  
 excl\_resolve\_4.**date\_resolved AS** exclusions\_icddx10\_4\_resolution\_date  
**FROM**(**SELECT DISTINCT patient\_id FROM** exclusion\_dx\_resolved\_temp) **AS** denom  
 **INNER JOIN** (**SELECT patient\_id**, **exclusion\_code**,**date\_resolved  
 FROM** exclusion\_dx\_resolved\_temp  
 **WHERE resolution\_row** = 1) **AS** excl\_resolve\_1  
 **ON** excl\_resolve\_1.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**, **exclusion\_code**,**date\_resolved  
 FROM** exclusion\_dx\_resolved\_temp  
 **WHERE resolution\_row** = 2) **AS** excl\_resolve\_2  
 **ON** excl\_resolve\_2.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**, **exclusion\_code**,**date\_resolved  
 FROM** exclusion\_dx\_resolved\_temp  
 **WHERE resolution\_row** = 3) **AS** excl\_resolve\_3  
 **ON** excl\_resolve\_3.**patient\_id** = denom.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**, **exclusion\_code**,**date\_resolved  
 FROM** exclusion\_dx\_resolved\_temp  
 **WHERE resolution\_row** = 4) **AS** excl\_resolve\_4  
 **ON** excl\_resolve\_4.**patient\_id** = denom.**patient\_id**;  
  
  
*--Report output***SELECT DISTINCT** total\_denominator\_temp.**enc\_date AS** date\_of\_service,  
 **NULL AS** site\_id\_number,  
 **NULL AS** provider\_site\_name,  
 total\_denominator\_temp.**visit\_clinician\_full\_name**,  
 total\_denominator\_temp.**clinician\_npi\_number**,  
 total\_denominator\_temp.**subscriber\_number AS** member\_cin,  
 **NULL AS** membername,  
 total\_denominator\_temp.**memberfirstname**,  
 **NULL AS** membermiddlename,  
 total\_denominator\_temp.**memberlastname**,  
 total\_denominator\_temp.**dob**,  
 total\_denominator\_temp.**sex**,  
 cpt\_columns\_temp.**cpt1**,  
 cpt\_columns\_temp.**cpt2**,  
 cpt\_columns\_temp.**cpt3**,  
 cpt\_columns\_temp.**cpt4**,  
 cpt\_columns\_temp.**cptmod**,  
 cpt\_columns\_temp.**hcpcs**,  
 cpt\_columns\_temp.**hcpcmod**,  
 **CASE WHEN** preg\_columns\_temp.**enc\_id IS NULL  
 THEN 'No' ELSE 'Yes' END AS** pregnant\_at\_time\_of\_visit,  
 preg\_columns\_temp.**calc\_edd\_date AS** estimated\_date\_of\_delivery,  
 preg\_columns\_temp.**past\_date\_of\_delivery AS** actual\_date\_of\_delivery,  
 preg\_columns\_temp.**gestation\_weeks\_and\_days\_at\_time\_of\_service**,  
 **CASE WHEN NOT** del\_date\_postpart.**past\_date\_of\_delivery IS NULL  
 AND** del\_date\_postpart.**past\_date\_of\_delivery** <= total\_denominator\_temp.**enc\_date  
 THEN** *TRUNC*(*DATE\_PART*(**'day'**, total\_denominator\_temp.**enc\_date** ::**timestamp** - del\_date\_postpart.**past\_date\_of\_delivery** :: **timestamp**)/7) || **'W'** ||  
 *DATE\_PART*(**'day'**, total\_denominator\_temp.**enc\_date** ::**timestamp** - del\_date\_postpart.**past\_date\_of\_delivery** :: **timestamp**) -  
 (*TRUNC*(*DATE\_PART*(**'day'**, total\_denominator\_temp.**enc\_date** ::**timestamp** - del\_date\_postpart.**past\_date\_of\_delivery** :: **timestamp**)/7) \* 7) || **'D'  
 END AS** weeks\_and\_days\_postpartum,  
 preg\_columns\_temp.**weeks\_and\_days\_gestation\_at\_time\_of\_delivery**,  
 depression\_screen\_columns\_temp.**loinc\_tool\_1 AS** loinc\_code\_1,  
 depression\_screen\_columns\_temp.**name\_tool\_1 AS** depression\_screening\_tool\_name\_1,  
 depression\_screen\_columns\_temp.**score\_tool\_1 AS** score\_screening\_tool\_1,  
 depression\_screen\_columns\_temp.**result\_tool\_1 AS** result\_of\_screening\_1,  
 depression\_screen\_columns\_temp.**loinc\_tool\_2 AS** loinc\_code\_2,  
 depression\_screen\_columns\_temp.**name\_tool\_2 AS** depression\_screening\_tool\_name\_2,  
 depression\_screen\_columns\_temp.**score\_tool\_2 AS** score\_screening\_tool\_2,  
 depression\_screen\_columns\_temp.**result\_tool\_2 AS** result\_of\_screening\_2,  
 depression\_dx\_column\_temp.**icd\_code AS** icddx10,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_1**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_1\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_2**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_2\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_3**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_3\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_4**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_4\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_5**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_5\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_6**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_6\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_7**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_7\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_8**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_8\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_9**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_9\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_10**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_10\_dos**,  
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 exclusion\_columns\_temp.**exclusions\_icddx10\_12\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_13**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_13\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_14**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_14\_dos**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_15**,  
 exclusion\_columns\_temp.**exclusions\_icddx10\_15\_dos**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_1\_resolution**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_1\_resolution\_date**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_2\_resolution**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_2\_resolution\_date**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_3\_resolution**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_3\_resolution\_date**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_4\_resolution**,  
 exclusion\_resolved\_columns\_temp.**exclusions\_icddx10\_4\_resolution\_date  
FROM** total\_denominator\_temp  
 **LEFT JOIN** cpt\_columns\_temp **ON** cpt\_columns\_temp.**enc\_id** = total\_denominator\_temp.**enc\_id  
 LEFT JOIN** preg\_columns\_temp **ON** preg\_columns\_temp.**enc\_id** = total\_denominator\_temp.**enc\_id  
 LEFT JOIN** preg\_columns\_temp **AS** del\_date\_postpart **ON** del\_date\_postpart.**patient\_id** = total\_denominator\_temp.**patient\_id  
 AND** del\_date\_postpart.**past\_date\_of\_delivery IS NOT NULL  
 LEFT JOIN** depression\_screen\_columns\_temp **ON** depression\_screen\_columns\_temp.**enc\_id** = total\_denominator\_temp.**enc\_id  
 LEFT JOIN** depression\_dx\_column\_temp **ON** depression\_dx\_column\_temp.**enc\_id** = total\_denominator\_temp.**enc\_id  
 LEFT JOIN** exclusion\_columns\_temp **ON** exclusion\_columns\_temp.**patient\_id** = total\_denominator\_temp.**patient\_id  
 LEFT JOIN** exclusion\_resolved\_columns\_temp **ON** exclusion\_resolved\_columns\_temp.**patient\_id** = total\_denominator\_temp.**patient\_id  
ORDER BY** total\_denominator\_temp.**memberlastname**, total\_denominator\_temp.**memberfirstname**,  
 total\_denominator\_temp.**dob**, total\_denominator\_temp.**enc\_date**

# Appendix B: SQL Code for the Report “ECDS: Unhealthy Alcohol Use Screening and Follow Up (ASF-E)” and Related Transformers/Data Elements

## Note to Health Centers Using the ECDS Report SQL From Last Year

If your health center has not begun the Transition to OCHIN Epic, you may continue to use the validated ECDS report from last year instead of constructing a new one with the SQL in the section “Report SQL” below. Just follow these two steps:

1. Ensure that the column names and formatting are the same as the 2023 reporting template (by default, they should be).
2. Add code to display the appropriate Site Name and Provider Key as described in the Results Query section of page 18 above

## For Health Centers Establishing New Reports (Or General Data Explanation)

NEW Transformer/Data Element Pair(s) for Alcohol Screens

Configure depending on which screen(s) are used at your health center. There are three possible screens and three possible Transformer/Data Element pairs. Note that the ID numbers for catid, itemid, and detailed will be unique at each health center. One option to find these ID numbers is the report “RCHC List All Structured Data Items” (available on the Aliados Health Aggregate for eCW health centers).

The sample code for the Transformer/Data Element pair below is for the Audit C screen. The Audit screen and the single-question screen should take a similar approach. See the above section for this measure for a table with Transformer and Data Element names for the three screens. In the code below, the screen is located in Social History, but it may be in another structured data location at your health center.

**Transformer**: Build relevant\_audit\_c\_screens

**DROP TABLE IF EXISTS** relevant**\_**audit\_c\_screens;  
**CREATE TABLE** relevant**\_**audit\_c\_screens **AS  
SELECT DISTINCT**  
 enc.**patientid AS** patient\_id,  
 enc.**date** :: **DATE AS** performed\_on,  
 audit\_c\_score.**value AS** score,  
 **CASE WHEN** audit\_c\_interpret.**value** = **'Positive' THEN TRUE ELSE FALSE END AS** positive  
**FROM** enc  
 **INNER JOIN** structsocialhistory **AS** audit\_c\_score **ON** audit\_c\_score.**encounterid** = enc.**encounterid  
 AND** audit\_c\_score.**catid** = 262111  
 **AND** audit\_c\_score.**itemid** = 262128  
 **AND** audit\_c\_score.**detailid** = 1004 *--Use a unique combination of codes to identify the AUDIT-C score* **AND** audit\_c\_score.**value** ~ **'^\d'  
 LEFT JOIN** structsocialhistory **AS** audit\_c\_interpret **ON** audit\_c\_interpret.**encounterid** = enc.**encounterid  
 AND** audit\_c\_interpret.**catid** = 262111  
 **AND** audit\_c\_interpret.**itemid** = 262128  
 **AND** audit\_c\_interpret.**detailid** = 1005 *--Use a unique combination of codes to identify the AUDIT-C interpretation* **AND NOT** audit\_c\_interpret.**value IS NULL  
 AND NOT** audit\_c\_interpret.**value** = **' '  
WHERE** enc.**deleteflag** = 0

**AND** enc.**status** = **'CHK'**;

**Data Element**: AUDIT C Screens

**SELECT DISTINCT  
 patient\_id**,  
 **performed\_on**,  
 **score**,  
 **positive  
FROM** relevant**\_**audit\_c\_screens

NEW Transformer/Data Element Pair for Alcohol Follow-up Counseling

The report output displays alcohol follow-up counseling entered as a CPT code, a HCPCS code, an ICD-10 code, or into structured data. The CPT and HCPCS codes are extracted directly from claims and the ICD-10 codes from visit assessments by the report so no separate Transformers or Data Elements are needed for them. The alcohol follow-up Transformer/Data Element pair identifies alcohol counseling only from structured data. Similar to the alcohol screening Transformer, the location and ID numbers for the counseling item will be unique at each health center.

**Transformer**: Build relevant\_alcohol\_counseling

**DROP TABLE IF EXISTS** relevant\_alcohol\_counseling;  
**CREATE TABLE** relevant\_alcohol\_counseling **AS  
SELECT DISTINCT** enc.**patientid AS** patient\_id,  
 enc.**date** :: **DATE AS** performed\_on  
**FROM** enc  
 **INNER JOIN** structpreventive **ON** structpreventive.**encounterid** = enc.**encounterid  
WHERE** structpreventive.**catid** = 306460  
 **AND** structpreventive.**itemid** = 306462  
 **AND** structpreventive.**detailid** = 1021 *--Use a unique combination of codes to identify the alcohol counseling item* **AND NOT** structpreventive.**value IS NULL  
 AND NOT** structpreventive.**value** = **' '  
 AND NOT** structpreventive.**value ILIKE 'No%'  
 AND** enc.**deleteflag** = 0  
 **AND** enc.**status** = **'CHK'**;

**Data Element**: Alcohol Counseling Or Other Followups

**SELECT  
 patient\_id**,  
 **performed\_on  
FROM** relevant\_alcohol\_counseling

## Report SQL

**Name:** ECDS: Unhealthy Alcohol Use Screening and Follow Up (ASF-E)

**Description**: This report displays data for the ECDS Unhealthy Alcohol Use Screening and Follow Up (ASF-E) measure that could be submitted to Partnership HealthPlan of California (2023 Edition)

**Parameters**: {{start\_date}} and {{end\_date}}

**Report SQL Code**:

*/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  
  
Report Name: ECDS: Unhealthy Alcohol Use Screening and Follow Up (ASF-E)  
  
Code Edited By: Ben Fouts for Aliados Health  
  
Description: This report displays data for submission to Partnership Healthplan. It should not be used to  
 directly evaluate a Quality Measure or for case management purposes  
  
RCHC Started: June 2022 (based on code from the Partnership SQL specifications document)  
  
Version Date: September 28, 2023  
  
Revision History: 2023 Version 1. Revised code to run off of the new schema model*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/  
  
  
-- Universe Definition:  
-- 1) Visit date in the measurement period  
-- 2) Patient age 12 years and older at the start of the measurement period  
-- 3) Patient currently has Partnership HealthPlan insurance, based on primary insurance group.  
-- CUSTOMIZE. This insurance group is the default, but can be changed by the programmer to join to  
-- internal tables containing Partnership patients from monthly membership files during the measurement period***DROP TABLE IF EXISTS** universe\_temp\_raw;  
**CREATE TEMPORARY TABLE** universe\_temp\_raw **AS  
SELECT DISTINCT** patients.**id AS** patient\_id,  
 patients.**mrn**,  
 *LEFT*(patients.**subscriber\_number**,10) **AS** Member\_Key,  
 patients.**first\_name AS** Member\_First\_Name,  
 patients.**middle\_name AS** Member\_Middle\_Name,  
 patients.**last\_name AS** Member\_Last\_Name,  
 patients.**date\_of\_birth** :: **DATE AS** DOB,  
 *EXTRACT*(**YEAR FROM** *age*({{start\_date}}, patients.date\_of\_birth :: DATE)) **AS** Age\_startMP,  
 **CASE WHEN** genders.**name** = **'Female' THEN 'F'  
 WHEN** genders.**name** = **'Male' THEN 'M'  
 WHEN** genders.**name** = **'Unknown' OR** genders.**name** = **'Choose not to disclose' THEN 'U'  
 WHEN** genders.**name IS NULL THEN 'U'  
 ELSE 'O' END AS** Sex,  
 visits.**id AS** encounter\_id,  
 visits.**visit\_date** :: **DATE AS** Date\_of\_Service,  
 locations.**name AS** Site\_Name,  
 providers.**first\_name AS** Clinician\_First\_Name,  
 providers.**middle\_name AS** Clinician\_Middle\_Name,  
 providers.**last\_name AS** Clinician\_Last\_Name,  
 providers.**npi AS** Clinician\_NPI\_Number  
**FROM** rdm.patients  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = patients.**id  
 INNER JOIN** rdm.providers **ON** providers.**id** = visits.**provider\_id  
 LEFT JOIN** rdm.genders **ON** genders.**id** = patients.**gender\_id  
 LEFT JOIN** rdm.locations **ON** locations.**id** = visits.**location\_id  
WHERE** *EXTRACT*(**YEAR FROM** *age*({{start\_date}}, patients.date\_of\_birth :: DATE)) >=12  
 **AND** visits.**visit\_date BETWEEN** {{start\_date}} **AND** {{end\_date}}  
 **AND** patients.primary\_insurance\_group\_id = 55; *-- Customize this approach to use the group for  
-- PARTNERSHIP MANAGED CARE or else JOIN to last monthly patient enrollment list  
  
  
-- List alcohol counseling and other followup in structured data (one code per encounter ID)***DROP TABLE IF EXISTS** alc\_followup\_struct\_raw\_temp;  
**CREATE TEMPORARY TABLE** alc\_followup\_struct\_raw\_temp **AS  
SELECT DISTINCT** universe\_temp\_raw.**patient\_id**,  
 alcohol\_counseling\_or\_other\_followups.**performed\_on**,  
 **'413473000'** :: **VARCHAR AS** snomed\_code *--This is the SNOMED code that most closely describes health center counseling***FROM** rdm.alcohol\_counseling\_or\_other\_followups  
 **INNER JOIN** universe\_temp\_raw **ON** universe\_temp\_raw.**patient\_id** = alcohol\_counseling\_or\_other\_followups.**patient\_id**;  
  
  
*--List alcohol counseling and other followup by Value Set CPT or HCPCS Value Set Codes  
-- (one code per type per encounter ID)***DROP TABLE IF EXISTS** alc\_followup\_claim\_raw\_temp;  
**CREATE TEMPORARY TABLE** alc\_followup\_claim\_raw\_temp **AS  
SELECT DISTINCT ON** (universe\_temp\_raw.**encounter\_id**, hedis\_value\_set\_codes.**code\_system\_name**)  
 universe\_temp\_raw.**encounter\_id**,  
 universe\_temp\_raw.**patient\_id**,  
 hedis\_value\_set\_codes.**code\_system\_name AS** code\_system,  
 billing\_codes.**code AS** claim\_code  
**FROM** universe\_temp\_raw  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = universe\_temp\_raw.**patient\_id  
 INNER JOIN** rdm.visit\_billing\_codes **ON** visit\_billing\_codes.**visit\_id** = visits.**id  
 INNER JOIN** rdm.billing\_codes **ON** billing\_codes.**id** = visit\_billing\_codes.**billing\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = billing\_codes.**code  
WHERE** visits.**visit\_date** :: **DATE BETWEEN** {{start\_date}} **AND** {{end\_date}}  
 **AND** hedis\_value\_set\_codes.value\_set\_name = **'Alcohol Counseling or Other Follow Up Care'  
 AND** hedis\_value\_set\_codes.latest = **'TRUE'  
ORDER BY** universe\_temp\_raw.encounter\_id, hedis\_value\_set\_codes.code\_system\_name, billing\_codes.code;  
  
  
*-- List alcohol counseling and other followup by Value Set ICD-10 Value Set Codes (one code per encounter ID)***DROP TABLE IF EXISTS** alc\_followup\_assess\_raw\_temp;  
**CREATE TEMPORARY TABLE** alc\_followup\_assess\_raw\_temp **AS  
SELECT DISTINCT ON** (universe\_temp\_raw.**encounter\_id**)  
 universe\_temp\_raw.**encounter\_id**,  
 universe\_temp\_raw.**patient\_id**,  
 diagnosis\_codes.**code AS** assess\_code  
**FROM** universe\_temp\_raw  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = universe\_temp\_raw.**patient\_id  
 INNER JOIN** rdm.visit\_diagnosis\_codes **ON** visit\_diagnosis\_codes.**visit\_id** = visits.**id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = visit\_diagnosis\_codes.**diagnosis\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = diagnosis\_codes.**code  
WHERE** visits.**visit\_date** :: **DATE BETWEEN** {{start\_date}} **AND** {{end\_date}}  
 **AND** hedis\_value\_set\_codes.value\_set\_name = **'Alcohol Counseling or Other Follow Up Care'  
 AND** hedis\_value\_set\_codes.latest = **'TRUE'  
ORDER BY** universe\_temp\_raw.encounter\_id, hedis\_value\_set\_codes.code\_system\_name, diagnosis\_codes.code;  
  
  
*-- Identify start date of exclusion diagnoses from the Problem List and Assessments***DROP TABLE IF EXISTS** exclusions\_raw\_temp;  
**CREATE TEMPORARY TABLE** exclusions\_raw\_temp **AS  
SELECT** patient\_id,  
 code\_group,  
 exclude\_code,  
 *MIN*(dx\_date) **AS** first\_dx\_date,  
 *MAX*(ended\_on) **AS** resolution\_date  
**FROM** (  
 **SELECT** universe\_temp\_raw.**patient\_id AS** patient\_id,  
 hedis\_value\_set\_codes.**value\_set\_name AS** code\_group,  
 diagnosis\_codes.**code AS** exclude\_code,  
 patient\_diagnoses.**start\_date AS** dx\_date,  
 **CASE WHEN** patient\_diagnoses.**end\_date** <= {{end\_date}}  
 **THEN** patient\_diagnoses.**end\_date END AS** ended\_on  
 **FROM** universe\_temp\_raw  
 **INNER JOIN** rdm.patient\_diagnoses **ON** patient\_diagnoses.**patient\_id** = universe\_temp\_raw.**patient\_id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = patient\_diagnoses.**diagnosis\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = diagnosis\_codes.**code  
 WHERE** hedis\_value\_set\_codes.**value\_set\_name IN**(**'Alcohol Use Disorder'**, **'Dementia'**)  
 **AND** hedis\_value\_set\_codes.**latest** = **'TRUE'  
 UNION  
 SELECT** universe\_temp\_raw.**patient\_id AS** patient\_id,  
 hedis\_value\_set\_codes.**value\_set\_name AS** code\_group,  
 diagnosis\_codes.**code AS** exclude\_code,  
 visits.**visit\_date** :: **DATE AS** dx\_date,  
 **NULL AS** ended\_on  
 **FROM** universe\_temp\_raw  
 **INNER JOIN** rdm.visits **ON** visits.**patient\_id** = universe\_temp\_raw.**patient\_id  
 INNER JOIN** rdm.visit\_diagnosis\_codes **ON** visit\_diagnosis\_codes.**visit\_id** = visits.**id  
 INNER JOIN** rdm.diagnosis\_codes **ON** diagnosis\_codes.**id** = visit\_diagnosis\_codes.**diagnosis\_code\_id  
 INNER JOIN** custom.hedis\_value\_set\_codes **ON** hedis\_value\_set\_codes.**code\_value** = diagnosis\_codes.**code  
 WHERE** visits.**visit\_date** :: **DATE BETWEEN** {{start\_date}} **AND** {{end\_date}}  
 **AND** hedis\_value\_set\_codes.value\_set\_name **IN**(**'Alcohol Use Disorder'**, **'Dementia'**)  
 **AND** hedis\_value\_set\_codes.latest = **'TRUE'** ) **AS** raw\_exclusions  
**WHERE** dx\_date <= {{end\_date}}  
**GROUP BY** patient\_id, code\_group, exclude\_code;  
  
  
*-- Add row numbers to exclusions so they can be put into output columns***DROP TABLE IF EXISTS** exclusions\_raw\_final;  
**CREATE TEMPORARY TABLE** exclusions\_raw\_final **AS  
SELECT  
 patient\_id**,  
 **code\_group**,  
 **exclude\_code**,  
 **first\_dx\_date**,  
 **resolution\_date**,  
 *ROW\_NUMBER* () **OVER** (  
 **PARTITION BY patient\_id  
 ORDER BY code\_group DESC**, **resolution\_date DESC**, **first\_dx\_date**) **AS** row\_excl  
**FROM** exclusions\_raw\_temp;  
  
  
*-- Results query  
-- First part displays individual visits with unhealthy alcohol screening and/or counseling/followup  
-- Second part (after UNION) displays the exclusions independent of any visit***SELECT** *\** **FROM** (  
**SELECT** universe\_temp\_raw.**Date\_of\_Service**,  
 universe\_temp\_raw.**Site\_Name**,  
 **NULL AS** Site\_ID\_Number, *--CUSTOMIZE to display "NPI number assigned to site where care was provided"* **NULL AS** Provider\_Key, *--CUSTOMIZE to display "A unique identifier for a provider. PCP ID (PHC assigned)"* universe\_temp\_raw.**Clinician\_NPI\_Number**,  
 **NULL AS** Clinician\_Name, *--Optional* universe\_temp\_raw.**Clinician\_First\_Name**,  
 universe\_temp\_raw.**Clinician\_Middle\_Name**,  
 universe\_temp\_raw.**Clinician\_Last\_Name**,  
 universe\_temp\_raw.**Member\_Key**,  
 **NULL AS** Member\_Name, *--Optional* universe\_temp\_raw.**Member\_First\_Name**,  
 universe\_temp\_raw.**Member\_Middle\_Name**,  
 universe\_temp\_raw.**Member\_Last\_Name**,  
 universe\_temp\_raw.**DOB**,  
 universe\_temp\_raw.**Sex**,  
 audit\_score\_temp.Audit\_Test\_Score,  
 audit\_score\_temp.Audit\_Score\_Interpretation,  
 auditc\_score\_temp.AuditC\_Test\_Score,  
 auditc\_score\_temp.AuditC\_Score\_Interpretation,  
 single\_q\_score\_temp.Single\_Q\_Score,  
 single\_q\_score\_temp.Single\_Q\_Interpretation,  
 couns\_cpt\_temp.Counseling\_CPT,  
 couns\_hcpcs\_temp.Counseling\_HCPCS,  
 couns\_icd\_temp.Counseling\_ICD10,  
 couns\_struct\_temp.Counseling\_SNOMED,  
 **NULL AS** Exclusions\_ICDDX10\_1,  
 **NULL AS** Exclusions\_ICDDX10\_1\_DOS,  
 **NULL AS** Exclusions\_ICDDX10\_2,  
 **NULL AS** Exclusions\_ICDDX10\_2\_DOS,  
 **NULL AS** Exclusions\_ICDDX10\_3,  
 **NULL AS** Exclusions\_ICDDX10\_3\_DOS,  
 **NULL AS** Exclusions\_ICDDX10\_4,  
 **NULL AS** Exclusions\_ICDDX10\_4\_DOS,  
 **NULL AS** Exclusions\_ICDDX10\_5,  
 **NULL AS** Exclusions\_ICDDX10\_5\_DOS,  
 **NULL AS** Exclusions\_ICDDX10\_1\_Resolution,  
 **NULL AS** Exclusions\_ICDDX10\_2\_Resolution,  
 **NULL AS** Exclusions\_ICDDX10\_3\_Resolution,  
 **NULL AS** Exclusions\_ICDDX10\_4\_Resolution,  
 **NULL AS** Exclusions\_ICDDX10\_5\_Resolution  
**FROM** universe\_temp\_raw  
 **LEFT JOIN** (**SELECT patient\_id**,  
 **performed\_on**,  
 **score AS** Audit\_Test\_Score,  
 **CASE WHEN positive THEN 'Positive'  
 ELSE 'Negative' END AS** Audit\_Score\_Interpretation  
 **FROM** rdm.audit\_screens) **AS** audit\_score\_temp  
 **ON** audit\_score\_temp.**patient\_id** = universe\_temp\_raw.**patient\_id  
 AND** audit\_score\_temp.**performed\_on** :: **DATE** = universe\_temp\_raw.**Date\_of\_Service** :: **DATE  
 LEFT JOIN** (**SELECT patient\_id**,  
 **performed\_on**,  
 **score AS** AuditC\_Test\_Score,  
 **CASE WHEN positive THEN 'Positive'  
 ELSE 'Negative' END AS** AuditC\_Score\_Interpretation  
 **FROM** rdm.audit\_c\_screens) **AS** auditc\_score\_temp  
 **ON** auditc\_score\_temp.**patient\_id** = universe\_temp\_raw.**patient\_id  
 AND** auditc\_score\_temp.**performed\_on** :: **DATE** = universe\_temp\_raw.**Date\_of\_Service** :: **DATE  
 LEFT JOIN** (**SELECT patient\_id**,  
 **performed\_on**,  
 **score AS** Single\_Q\_Score,  
 **CASE WHEN positive THEN 'Positive'  
 ELSE 'Negative' END AS** Single\_Q\_Interpretation  
 **FROM** rdm.single\_question\_alcohol\_use\_screens) **AS** single\_q\_score\_temp  
 **ON** single\_q\_score\_temp.**patient\_id** = universe\_temp\_raw.**patient\_id  
 AND** single\_q\_score\_temp.**performed\_on** :: **DATE** = universe\_temp\_raw.**Date\_of\_Service** :: **DATE  
 LEFT JOIN** (**SELECT encounter\_id**,  
 **claim\_code AS** Counseling\_CPT  
 **FROM** alc\_followup\_claim\_raw\_temp  
 **WHERE code\_system** = **'CPT'**) **AS** couns\_cpt\_temp  
 **ON** couns\_cpt\_temp.**encounter\_id** = universe\_temp\_raw.**encounter\_id  
 LEFT JOIN** (**SELECT encounter\_id**,  
 **claim\_code AS** Counseling\_HCPCS  
 **FROM** alc\_followup\_claim\_raw\_temp  
 **WHERE code\_system** = **'HCPCS'**) **AS** couns\_hcpcs\_temp  
 **ON** couns\_hcpcs\_temp.**encounter\_id** = universe\_temp\_raw.**encounter\_id  
 LEFT JOIN** (**SELECT encounter\_id**,  
 **assess\_code AS** Counseling\_ICD10  
 **FROM** alc\_followup\_assess\_raw\_temp) **AS** couns\_icd\_temp  
 **ON** couns\_icd\_temp.**encounter\_id** = universe\_temp\_raw.**encounter\_id  
 LEFT JOIN** (**SELECT patient\_id**,  
 **performed\_on**,  
 **snomed\_code AS** Counseling\_SNOMED  
 **FROM** alc\_followup\_struct\_raw\_temp) **AS** couns\_struct\_temp  
 **ON** couns\_struct\_temp.**patient\_id** = universe\_temp\_raw.**patient\_id  
 AND** couns\_struct\_temp.**performed\_on** :: **DATE** = universe\_temp\_raw.**Date\_of\_Service** :: **DATE  
WHERE** audit\_score\_temp.**patient\_id IS NOT NULL  
 OR** auditc\_score\_temp.**patient\_id IS NOT NULL  
 OR** single\_q\_score\_temp.**patient\_id IS NOT NULL  
 OR** couns\_cpt\_temp.**encounter\_id IS NOT NULL  
 OR** couns\_hcpcs\_temp.**encounter\_id IS NOT NULL  
 OR** couns\_icd\_temp.**encounter\_id IS NOT NULL  
 OR** couns\_struct\_temp.**patient\_id IS NOT NULL  
UNION  
SELECT** *-- This part is for exclusions that are not attatched to a specific visit* **NULL AS** Date\_of\_Service,  
 **NULL AS** Site\_Name,  
 **NULL AS** Site\_ID\_Number,  
 **NULL AS** Provider\_Key,  
 **NULL AS** Clinician\_NPI\_Number,  
 **NULL AS** Clinician\_Name,  
 **NULL AS** Clinician\_First\_Name,  
 **NULL AS** Clinician\_Middle\_Name,  
 **NULL AS** Clinician\_Last\_Name,  
 undup\_pts.**Member\_Key**,  
 **NULL AS** Member\_Name, *--Optional* undup\_pts.**Member\_First\_Name**,  
 undup\_pts.**Member\_Middle\_Name**,  
 undup\_pts.**Member\_Last\_Name**,  
 undup\_pts.**DOB**,  
 undup\_pts.**Sex**,  
 **NULL AS** Audit\_Test\_Score,  
 **NULL AS** Audit\_Score\_Interpretation,  
 **NULL AS** AuditC\_Test\_Score,  
 **NULL AS** AuditC\_Score\_Interpretation,  
 **NULL AS** Single\_Q\_Score,  
 **NULL AS** Single\_Q\_Interpretation,  
 **NULL AS** Counseling\_CPT,  
 **NULL AS** Counseling\_HCPCS,  
 **NULL AS** Counseling\_ICD10,  
 **NULL AS** Counseling\_SNOMED,  
 exclusions\_1a.Exclusions\_ICDDX10\_1,  
 exclusions\_1a.Exclusions\_ICDDX10\_1\_DOS,  
 exclusions\_2a.Exclusions\_ICDDX10\_2,  
 exclusions\_2a.Exclusions\_ICDDX10\_2\_DOS,  
 exclusions\_3a.Exclusions\_ICDDX10\_3,  
 exclusions\_3a.Exclusions\_ICDDX10\_3\_DOS,  
 exclusions\_4a.Exclusions\_ICDDX10\_4,  
 exclusions\_4a.Exclusions\_ICDDX10\_4\_DOS,  
 exclusions\_5a.Exclusions\_ICDDX10\_5,  
 exclusions\_5a.Exclusions\_ICDDX10\_5\_DOS,  
 exclusions\_1a.Exclusions\_ICDDX10\_1\_Resolution,  
 exclusions\_2a.Exclusions\_ICDDX10\_2\_Resolution,  
 exclusions\_3a.Exclusions\_ICDDX10\_3\_Resolution,  
 exclusions\_4a.Exclusions\_ICDDX10\_4\_Resolution,  
 exclusions\_5a.Exclusions\_ICDDX10\_5\_Resolution  
**FROM** (**SELECT DISTINCT patient\_id**,  
 **Member\_Key**,  
 **Member\_First\_Name**,  
 **Member\_Middle\_Name**,  
 **Member\_Last\_Name**,  
 **DOB**,  
 **Sex  
 FROM** universe\_temp\_raw) **AS** undup\_pts  
 **LEFT JOIN** (**SELECT patient\_id**,  
 **exclude\_code AS** Exclusions\_ICDDX10\_1,  
 **first\_dx\_date AS** Exclusions\_ICDDX10\_1\_DOS,  
 **resolution\_date AS** Exclusions\_ICDDX10\_1\_Resolution  
 **FROM** exclusions\_raw\_final  
 **WHERE row\_excl** = 1) **AS** exclusions\_1a  
 **ON** exclusions\_1a.**patient\_id** = undup\_pts.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**,  
 **exclude\_code AS** Exclusions\_ICDDX10\_2,  
 **first\_dx\_date AS** Exclusions\_ICDDX10\_2\_DOS,  
 **resolution\_date AS** Exclusions\_ICDDX10\_2\_Resolution  
 **FROM** exclusions\_raw\_final  
 **WHERE row\_excl** = 2) **AS** exclusions\_2a  
 **ON** exclusions\_2a.**patient\_id** = undup\_pts.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**,  
 **exclude\_code AS** Exclusions\_ICDDX10\_3,  
 **first\_dx\_date AS** Exclusions\_ICDDX10\_3\_DOS,  
 **resolution\_date AS** Exclusions\_ICDDX10\_3\_Resolution  
 **FROM** exclusions\_raw\_final  
 **WHERE row\_excl** = 3) **AS** exclusions\_3a  
 **ON** exclusions\_3a.**patient\_id** = undup\_pts.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**,  
 **exclude\_code AS** Exclusions\_ICDDX10\_4,  
 **first\_dx\_date AS** Exclusions\_ICDDX10\_4\_DOS,  
 **resolution\_date AS** Exclusions\_ICDDX10\_4\_Resolution  
 **FROM** exclusions\_raw\_final  
 **WHERE row\_excl** = 4) **AS** exclusions\_4a  
 **ON** exclusions\_4a.**patient\_id** = undup\_pts.**patient\_id  
 LEFT JOIN** (**SELECT patient\_id**,  
 **exclude\_code AS** Exclusions\_ICDDX10\_5,  
 **first\_dx\_date AS** Exclusions\_ICDDX10\_5\_DOS,  
 **resolution\_date AS** Exclusions\_ICDDX10\_5\_Resolution  
 **FROM** exclusions\_raw\_final  
 **WHERE row\_excl** = 5) **AS** exclusions\_5a  
 **ON** exclusions\_5a.**patient\_id** = undup\_pts.**patient\_id  
WHERE** exclusions\_1a.**patient\_id IS NOT NULL  
 OR** exclusions\_2a.**patient\_id IS NOT NULL  
 OR** exclusions\_3a.**patient\_id IS NOT NULL  
 OR** exclusions\_4a.**patient\_id IS NOT NULL  
 OR** exclusions\_5a.**patient\_id IS NOT NULL** ) **AS** all\_records  
**ORDER BY Member\_Last\_Name**, **Member\_First\_Name**, **Member\_Middle\_Name**, **Member\_Key**, Exclusions\_ICDDX10\_1\_DOS **DESC**, **Date\_of\_Service**

1. The presentation (<http://www.partnershiphp.org/Providers/Quality/Documents/QIP%202023/ECDS%20HEDIS%20Provider%20Training_Final_v2.pdf>) and the recording (https://partnershiphp.webex.com/recordingservice/sites/partnershiphp/recording/9b27696d3302103cb5fd96d971e86f76/playback) are available online (current as of September 29, 2023) [↑](#footnote-ref-1)
2. https://aliadoshealth.org/population-health/data-analytics-and-governance/#toggle-id-2 [↑](#footnote-ref-2)
3. In DataGrip, for example, you can use this SQL to look for the group number(s) at your health center for Partnership Managed Care or however your health center names this group: SELECT \* FROM rdm.payer\_groups [↑](#footnote-ref-3)
4. The sample SQL code was designed in the Santa Rosa instance. The Transformers are named relevant\_phq2 and relevant\_phq9 [↑](#footnote-ref-4)