



Partnership Quality Improvement Program (QIP) Quality Measure Notes and Set-up Instructions (2023 Edition)

Version 3

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Table of Contents

Introduction	3
General Notes on the SQL Code Used	4
Exchanging the Default Denominator for the True QIP Denominator	6
End of Life Exclusion	7
Notes on Validation Reports and Associated Instructions.....	9
Notes on the Descriptive Sections Below	9
Breast Cancer Screening	11
Cervical Cancer Screening.....	13
Colorectal Cancer Screening.....	15
Comprehensive Diabetes Management – HbA1c Good Control.....	17
Comprehensive Diabetes Management – Retinal Eye Exam	19
Controlling High Blood Pressure	20
Well-Child Visits in the First 15 Months of Life	23
Child and Adolescent Well-Care Visits.....	25
Childhood Immunization Status	27
Immunizations for Adolescents.....	30
Asthma Medication Ratio	32
Appendix: Value Sets Associated With the QIP Measures	35
Appendix A: Value Set References.....	36



Introduction

A set of eleven Quality Measures have been created in Relevant to produce results for the 2023 Partnership HealthPlan QIP Clinical Domain measures. This instruction manual describes the Quality Measures in general as well as the appropriate set-up of the Data Elements and data validation. It is for health centers using either eCW or NextGen.

The QIP Quality Measures work in a standard manner like other kinds of Quality Measures that appear in Relevant. Therefore, they can be examined for different measurement periods and filtered using the standard fields like location and provider. The measurement period is always assumed to be one year in length. Although the SQL code can be copied to DataGrip or a Relevant Report, it has not been designed or tested to be accurate for measurement periods of variable lengths.

Many of the 2023 Quality Measures have been reported historically or are similar to existing UDS Quality Measures. Therefore, the SQL code of the 2023 Quality Measures borrows heavily from pre-existing SQL code developed by Relevant or Aliados Health programmers. Some aspects of the code have been standardized so that data is being pulled in the same manner among all QIP reports. Generally, the results should agree with previous Quality Measure versions or UDS Quality Measures except where the measure definitions are different.

All Quality Measures in this set currently follow the 2023 QIP Measure Specifications as outlined in the Partnership document “Primary Care Provider Quality Improvement Program (PCP QIP) Detailed Specifications, Published: December 31, 2022” and the 2023 HEDIS specifications.

The Data Workgroup webinar from June 6 was titled “2023 QIP Quality Measure Set Using Relevant.” The recording and slides are available on the Aliados Health website.



General Notes on the SQL Code Used

All Quality Measures rely on the Relevant Analytics Database (also known as the Production Database) and contain the same SQL code for all health center instances of Relevant. Like with the UDS measures, this approach assumes that the data processing and analysis will be the same at each health center, but that each health center is responsible for establishing and maintaining their own Transformers and Data Elements that extract the desired data from their Electronic Health Record (EHR). It is primarily on the level of the Transformers that customization is required because different health centers use different EHRs (eCW and NextGen) and have different set-ups, unique fields and settings, or distinctive data entry workflow or procedures.

In the instructions below, references are only made to the Data Elements because in the Relevant model, Data Elements are standardized among the health centers. Generally, the SQL code used to pull the data from the underlying EHR tables exist in the Transformers while the Data Elements are used to format the Transformer data into a defined structure¹. However, in some cases, the Data Element contains the SQL code to pull the data directly. Therefore, when the instructions below reference Data Element names, it is understood that the health center may need to first look at the Data Element, but more likely, the associated Transformer contains the SQL code that is actually doing the work.

Some comments in the Report Notes sections below discuss the expected data coming from the Data Elements. For example, it may say that data from a particular Data Element needs to be unduplicated, contain data in certain fields, or have another expected structure. Some of the UDS and QIP Quality Measures share the same Data Elements because the eCQM and HEDIS Value Sets are the same. For example, the Data Element `essential_hypertension_cases` is used in both the QIP and UDS Quality Measures for Controlling High Blood Pressure because both QIP and UDS Value Sets contain the same diagnostic codes. There are not separate sets of QIP and UDS Data Elements.

All of the SQL code in the QIP Quality Measure set follows a common structure to make it easier for health center programmers to view and understand. For example, no field aliases appear in the SQL code (except the childhood

¹ This has recently been changed in the new “Schema” model. However, many health centers will still have Transformer/Data Element pairs



immunization measure) and notes are used liberally. The SQL is broken up into various sub-queries that create Temporary Tables. The first subquery is the “universe,” which defines the basic denominator of the measure. Then, there is a numerator subquery that begins with a note “-- Numerator” and a definition of the numerator itself. The next subquery features a note “-- Exclusion” and a definition. The last subquery displays a note “-- Results query” and produces an output with the five standard fields that are used by the Relevant software to display the Quality Measure data in graph form and allow for filtering.

As mentioned previously, there are separate QIP and UDS Quality Measures, even for those measures with similar names and similar broad descriptions. It is highly unlikely that the denominator and numerator of a QIP measure (in default version) will be exactly the same as the denominator and numerator of a similar UDS measure for the same measurement period. Even though there has been a national effort to “standardize” the measures, there are still subtle differences in the definitions from each measure steward and even differences in how each funding agency specifically deviates from those standards².

It is recommended that health centers thoroughly validate the QIP Quality Measure set before activating and using them for clinical or reporting purposes. Since Aliados Health is the author of these reports, questions should be directed to the Aliados Health data department. The most efficient way to describe a discrepancy is to provide as much detail as possible so that specific records in question can be examined by the Aliados Health programmers directly. For example, record identifiers, dates, values, etc. are extremely helpful. A discrepancy is where the Quality Measure is displaying or not displaying some data about a specific record that can be verified in the EHR. In contrast, it is less helpful to generally ask why the QIP and UDS measurement results are different from each other or to ask questions about the results without thoroughly understanding the measure definitions.

² In 2023, there is a lot more overlap in measure definitions than in prior years



Exchanging the Default Denominator for the True QIP Denominator

The initial structure of the Quality Measure SQL code defines a “universe” of patients. Each denominator is defined in the sections below under the heading Default Denominator Description. Generally, the denominator covers all EHR patients who qualify for the measure based on diagnosis or other characteristics (such as age, sex assigned at birth, etc.) and who had at least one medical encounter in the Measurement Period. Therefore, the default denominator is much broader than the actual denominator supplied by Partnership HealthPlan, even if filtered for EHR patients with current Partnership insurance.

If a health center has a routine to download the measure denominator data from Partnership eReports and integrate it with patients in Relevant, the QIP Quality Measures to be connected directly to the appropriate Partnership patient denominator population. This approach is more specific than using current Partnership insurance status. The health center should modify the SQL code in each 2023 Quality Measure so that the default denominator is replaced by the actual monthly Partnership denominator universe. In this case, the 2023 Quality Measures would display the “true” denominator that Partnership recognizes³.

The SQL code for the Quality Measures has been designed for easy transition to this scenario. For each Quality Measure, the patient universe is defined in the first subquery commonly named “universe” (as in “CREATE TEMPORARY TABLE universe AS...”). When the Partnership universe is available for the measure, it can be used in place of the code in this subquery. Note, however, that the “universe” subquery with all of its fields (named the same way) still needs to exist because it is joined to other subqueries later in the SQL code. Furthermore, key fields on the universe Temporary Table (i.e., patient_id, provider_id, and location_id) are also displayed in the final results subquery.

The Partnership/HEDIS universe definition in the specifications includes patients who have been “continuously enrolled” in Partnership HealthPlan managed care insurance. This definition states that these patients are assigned to the health center on the first of the month for nine out of the 12 months in the past year. For year-end reporting (i.e., measurement period between January 1 and December

³ For measures that are unique to the QIP (i.e., that do not overlap with UDS measures), the health center should consider having one version of the measure for Partnership patients and one version for all patients.



31), patients must also be assigned to the health center on the “anchor date,” which is December 1st. The default version of most of the Quality Measures includes all patients (regardless of insurance) who meet the measure-specific denominator criteria and were seen at least once in the past year and does not attempt to make this enrollment criteria.

End of Life Exclusion

All HEDIS measures now exclude patients who have died during the measurement period. A specific date is needed to make this calculation (not just a checkbox indicating the patient is deceased). UDS measures do not have this exclusion in 2023.

Furthermore, some measures exclude patients who have certain conditions indicating they are nearing the end of their life. These include the breast and colorectal cancer screening measures, along with the diabetes measures. The controlling high blood pressure measure has a similar but different definition (it will be explained below). This year, all end-of-life exclusions are exactly the same between the QIP and UDS measures, and so the SQL code in this respect is the same for each measure.

Therefore, for these QIP Quality Measures (but not cervical cancer, which is explained below), end-of-life conditions have any of the following characteristics:

- In hospice care any time during the measurement period
- In palliative care any time during the measurement period
- Age 66 years or above and living in a nursing home any time before the end of the measurement period
- Age 66 years or above with advanced illness and frailty. Defined as having frailty AND one of the following:
 - Advanced illness diagnosis on Problem List AND at least two visits with an advanced illness diagnosis on the assessment in the past two years
 - Used dementia medications in the past two years

This definition differs from the definition in prior years in the following ways:

1. A “nursing home stay” any time before the end of the measurement period replaces “long-term care for at least 90 days during the measurement period”



2. A patient must have at least two visits in the past two years with advanced illness diagnosis codes from Assessments

There are two new Data Elements for these new exclusions:

- nursing_home_stays
- advanced_illness_outpatient_visits

The following Data Elements are used for these exclusions. They should be linked to the appropriate Value Set as defined in the Appendix.

- hospice_care_interventions
- palliative_care_cases
- nursing_home_stays
- advanced_illness_cases
- advanced_illness_outpatient_visits
- dementia_medications

Note that there are now two Data Elements for advanced illness. The first (advanced_illness_cases) focuses on diagnosis codes on the Problem List. The other (advanced_illness_outpatient_visits) focuses on diagnosis codes from visit Assessments. Both use the same eCQM Value Set (“Advanced Illness” with OID = 2.16.840.1.113883.3.464.1003.110.12.1082).

The Controlling High Blood Pressure measure has the same criteria for hospice care, palliative care, and nursing home stays. The advanced illness and frailty criteria is the same except it only applies to patients between 66 and 80 years of age. Patients 81 to 85 years of age are excluded if they have frailty.

Since the cervical cancer screening measure includes patients up to 65 years of age, the exclusion definition does not include advanced illness and frailty. It does, however, feature the hospice and palliative care criteria.



Notes on Validation Reports and Associated Instructions

The sections below reference a set of validation reports and a validation report instruction manual. These are being updated in 2023 but are not available as of the writing of these instructions. Many of the validation functions described can still be performed with the “old” set of reports.

The text in the sections below refer to the Aliados Health validation reports and the Aliados Health validation report instructions. Be aware that the “old” set of reports and instructions technically have the name RCHC in them.

There will be an announcement and a Data Workgroup webinar about the new version of the validation reports and instructions when they become available.

Notes on the Descriptive Sections Below

Each section below describes one Quality Measure. They have a standardized arrangement of headings. The description of the headings are as follows:

- Quality Measure Name: The Quality Measure name, as it appears in Relevant.
- Version: The version text, as it appears in the SQL header.
- Measure Description: A general description of the measure (used for the design of the default version).
- Default Denominator Description: The denominator definition used for the design of the default version. Note that the default version measures all patients who meet the denominator definition, not only patients defined by Partnership HealthPlan as being in the denominator.
- Numerator Description: The numerator definition used for the design of the default version.
- Exclusion Description: The exclusion definition used for the design of the default version.
- Report Notes: Additional notes that are helpful in understanding the design of the Quality Measure, setting-up the Quality Measure in your instance of Relevant, and interpreting the data.
- Common Data Elements Used: A list of Data Elements for patients, visits, and other data items commonly used by Quality Measures in Relevant.



- **Specific Data Elements Used:** A list of Data Elements that are unique to the Quality Measure or uncommon among the Quality Measures.
- **Data Validation:** Recommendations for ensuring the data required by the Quality Measure is complete and accurate. Separate validation reports can display missing or erroneous records that are necessary for the measure. Refer to the separate manual “Instructions for Using the Relevant Validation Report Set” available from Aliados Health (this manual is being updated for 2023).

The accuracy of all Data Elements and associated Transformers is important for these measures. Some comments under the Report Notes heading give additional descriptions of the data expected by the report from the Data Elements. It is recommended that Data Elements (or associated Transformers) directly utilize the designated Value Set for diagnosis, procedure, lab, and immunization codes. These Value Sets are updated by Relevant annually. Many of the Value Sets needed by the 2023 QIP Report Sets can be found on the eCQM Value Set table and the HEDIS Value Set table in Relevant. See the Appendix for a list of Value Sets recommended for the measures.



Breast Cancer Screening

Quality Measure: Breast Cancer Screening (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of female patients age 52 to 74 years who had appropriate breast cancer screening.

Default Denominator Description: Female patients age 52 to 74 years (at the end of the measurement period) with at least one medical visit in the measurement period.

Numerator Description: Denominator patients who had a mammogram within 27 months of the measurement period end date.

Exclusion Description: History of bilateral mastectomy, history of two unilateral mastectomies, in hospice, palliative care or nursing home during the measurement period, died during the measurement period, or had a diagnosis of frailty and advanced illness.

Report Notes: The Data Element “mastectomies” is key to defining perhaps the most common exclusion for this measure. It must be designed properly or there will be a risk of excluding too many patients from the denominator. The measure excludes patients who have had one complete bilateral mastectomy or two complete unilateral mastectomies. The Data Element features a Boolean (i.e., TRUE or FALSE) field to indicate if the mastectomy was bilateral (field name “bilateral”) and also a field for the surgery date (field name “performed_on”).

The Data Element should correctly evaluate single unilateral mastectomies. Ideally, there should be an indication of left or right breast and a surgery date in the EHR, although this is not directly assessed or displayed by the Data Element. In any case, the Data Element should display one record for one unilateral mastectomy for one side with one surgery date. The measure SQL will count the number of unique records where the field bilateral is equal to FALSE. This represents a count of unilateral mastectomies and a patient is excluded when she has two unilateral mastectomies. However, if two records appear in the Data Element for a single complete surgery on one side because they have different dates, it will be counted as two different sides done.



Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions, palliative_care_cases, nursing_home_stays, advanced_illness_cases, advanced_illness_outpatient_visits, dementia_medications

Specific Data Elements Used: mammograms, mastectomies

Data Validation: There is a standard approach to documenting breast cancer exclusions in the health record. These standards, as well as the recommended diagnosis codes and key text words, are defined in Appendix A of the Aliados Health document “Instructions for Using the Relevant Validation Reports.” Relevant Data Elements in the health center instance should follow these recommendations. The validation report “Aliados Health Cancer Exclusion Validation Report” (for both NextGen and eCW health centers) displays records that contain partial evidence of an exclusion, but do not meet the full standard. These records should be reviewed and corrected, if necessary. See the Aliados Health validation instructions document for more detail (this manual is being updated for 2023).

Mammograms are normally entered into the health record as images. There are particular criteria that define a complete image record. The validation report “Aliados Health Incomplete Image Validation Report” (for eCW health centers) displays image records that are partially complete. These records should be reviewed and corrected, if necessary.

Furthermore, because mammogram results typically come from outside the health center, they must be added to the EHR as a Document, placed in the appropriate folder, and attached to an image order. Image documents that are not attached to an order are unlikely to be counted by the measure because the results contained in them are unlikely to have been put into structured data. The validation report “Aliados Health Unattached Lab and Image Validation Report” (for eCW health centers) displays image records that are not in the proper folder and/or not attached to an order. These records should be reviewed and corrected, if necessary.



Cervical Cancer Screening

Quality Measure: Cervical Cancer Screening (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of female patients age 24 to 64 years who had appropriate cervical cancer screening.

Default Denominator Description: Female patients age 24 to 64 years (at the end of the measurement period) with at least one medical visit in the measurement period.

Numerator Description: Denominator patients who had cervical cytology performed within the last 3 years (for those 24 to 64 years of age at the time of the test) or had cervical cytology and high-risk human papillomavirus co-testing within the last 5 years (for those 30 to 64 years of age at the time of the test)

Exclusion Description: History of hysterectomy with no residual cervix, diagnosis of cervical agenesis or acquired absence of cervix, or in hospice, palliative care or died during the measurement period.

Report Notes: Cervical cytology tests are defined by the Data Element pap_tests. These tests can be identified by the Value Set described in the Appendix. The 2023 QIP Instruction Manual states that biopsies are not valid for primary cervical cancer screening because they are diagnostic and therapeutic.

Like with other labs or images, documentation in the EHR must include a date that the cervical cytology or HPV test was done and a result or finding. The Data Element should be examining the standard structured data fields for these items. Also note that test results that indicate that the cervical cytology lab sample was not actually evaluated (for example, a lab result like “no endocervical cells” or “inadequate sample”) should be excluded from the Data Element results.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions, palliative_care_cases

Specific Data Elements Used: pap_tests, hpv_tests, hysterectomies, congenital_absence_cervix_cases



Data Validation: There is a standard approach to documenting cervical cancer exclusions in the health record. These standards, as well as the recommended diagnosis codes and key text words, are defined in Appendix A of the Aliados Health document “Instructions for Using the Relevant Validation Reports.” Relevant Data Elements in the health center instance should follow these recommendations. The validation report “Aliados Health Cancer Exclusion Validation Report” (for both NextGen and eCW health centers) displays records that contain partial evidence of an exclusion, but do not meet the full standard. These records should be reviewed and corrected, if necessary. See the Aliados Health validation instructions document for more detail (this manual is being updated for 2023).

Pap tests are entered into the health record as labs. There are particular criteria that define a complete lab record. The validation report “Aliados Health Incomplete Lab Validation Report” (for both NextGen and eCW health centers) displays lab records that are partially complete. These records should be reviewed and corrected, if necessary.

Furthermore, pap test results may also come from outside the health center. Therefore, they must be added to the EHR as a Document, placed in the appropriate folder, and attached to a lab order. Lab documents that are not attached to an order are unlikely to be counted by the measure. The validation report “Aliados Health Unattached Lab and Image Validation Report” (for eCW health centers) displays lab records that are not in the proper folder and/or not attached to an order. These records should be reviewed and corrected, if necessary.



Colorectal Cancer Screening

Quality Measure: Colorectal Cancer Screening (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of patients age 46 to 75 years who had appropriate colorectal cancer screening.

Default Denominator Description: Patients between age 46 to 75 years (at the end of the measurement period) with at least one medical visit in the measurement period.

Numerator Description: Denominator patients who had any of the following:

- Fecal occult blood test (FOBT) within one year of the end of the measurement period.
- FIT-DNA test within three years of the end of the measurement period.
- Flexible sigmoidoscopy within five years of the end of the measurement period.
- CT colonography within five years of the end of the measurement period.
- Colonoscopy within ten years of the end of the measurement period.

Exclusion Description: History of colorectal cancer, history of colectomy, in hospice, palliative care or nursing home during the measurement period, died during the measurement period, or had a diagnosis of frailty and advanced illness.

Report Notes: Each of the labs or images that qualify for the numerator has its own Data Element. Make sure that the Data Elements are identifying the appropriate image or lab (for example, lab LOINC codes are defined by a Value Set, and all Value Sets appear in the Appendix at the end of this document). Like with other labs or images, documentation in the EHR must include the date it was performed and a result or finding. The Data Element should examine the standard structured data fields for these items. The measure displays only the last qualifying colorectal cancer screen entered into the system in the column measurement_value.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions, palliative_care_cases, nursing_home_stays, advanced_illness_cases, advanced_illness_outpatient_visits, dementia_medications



Specific Data Elements Used: fecal_occult_blood_tests, stool_dna_tests, sigmoidoscopies, ct_colonographies, colonoscopies, colorectal_cancer_cases, colectomies

Data Validation: There is a standard approach to documenting colorectal cancer exclusions in the health record. These standards, as well as the recommended diagnosis codes and key text words, are defined in Appendix A of the Aliados Health document “Instructions for Using the Relevant Validation Reports.” Relevant Data Elements in the health center instance should follow these recommendations. The validation report “Aliados Health Cancer Exclusion Validation Report” (for both NextGen and eCW health centers) displays records that contain partial evidence of an exclusion, but do not meet the full standard. These records should be reviewed and corrected, if necessary. See the Aliados Health validation instructions document for more detail (this manual is being updated for 2023).

Fecal occult blood tests and FIT-DNA tests are entered into the health record as labs. There are particular criteria that define a complete lab record. The validation report “Aliados Health Incomplete Lab Validation Report” (for both NextGen and eCW health centers) displays lab records that are partially complete. These records should be reviewed and corrected, if necessary.

Colonoscopies, sigmoidoscopies and CT colonographies are normally entered into the health record as images. There are particular criteria that define a complete image record. The validation report “Aliados Health Incomplete Image Validation Report” (for eCW health centers) displays image records that are partially complete. These records should be reviewed and corrected, if necessary.

Furthermore, because colonoscopy, sigmoidoscopy and CT colonography results typically come from outside the health center, they must be added to the EHR as a Document, placed in the appropriate folder, and attached to an image order. Image documents that are not attached to an order are unlikely to be counted by the measure because the results contained in them are unlikely to have been put into structured data. The validation report “Aliados Health Unattached Lab and Image Validation Report” (for eCW health centers) displays image records that are not in the proper folder and/or not attached to an order. These records should be reviewed and corrected, if necessary.



Comprehensive Diabetes Management – HbA1c Good Control

Quality Measure: Diabetes: HbA1c Good Control ($\leq 9\%$) (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of patients age 18 to 75 years with diabetes who had an HbA1c test in the measurement period and the last test had a value of 9% or less.

Default Denominator Description: Patients age 18 to 75 years (at the end of the measurement period) with a diagnosis of diabetes and at least one medical visit in the measurement period.

Numerator Description: Denominator patients with at least one HbA1c test in the measurement period and the last test had a value of 9% or less.

Exclusion Description: Diagnosis of gestational diabetes or steroid-induced diabetes during the two years prior to the end of the measurement period, in hospice, palliative care or nursing home stay during the measurement period, died during the measurement period, or had a diagnosis of frailty and advanced illness.

Report Notes: The Data Element diabetes_cases should display patients with a diabetes diagnosis code on their Problem List. These codes belong to a Value Set defined in the Appendix at the end of this document. The Data Element has columns for the diagnosis start date (column started_on) and end date (column ended_on), which are used to determine if the patient has a diagnosis overlapping the measurement period. Although diabetes is a chronic disease that normally cannot be “cured,” there may be cases where the diagnosis is clinically determined to be no longer appropriate or necessary. In this case, follow the standard protocol described by the EHR to remove the diagnosis from the Problem List. The Data Element should contain SQL code that extracts and displays the date that the diagnosis was resolved (column ended_on). Failing to do so will leave these patients in the denominator because it is assumed that if a patient has a diagnosis without an end date, the diagnosis is still active.



This measure excludes patients with a diagnosis of gestational diabetes or steroid-induced diabetes. There are no Data Elements for these diagnoses in the Relevant standard model. Therefore, for this QIP Quality Measure alone, the diagnosis codes are identified directly by the report in the exclusions Temporary Table. Since these diagnoses typically arise from time-limited conditions (for example, pregnancy or medications), they are obtained from visit diagnoses rather than the Problem List.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions, palliative_care_cases, nursing_home_stays, advanced_illness_cases, advanced_illness_outpatient_visits, dementia_medications, visit_diagnosis_codes, diagnosis_codes

Specific Data Elements Used: diabetes_cases, a1c_labs

Data Validation: Patients with a current clinical diagnosis of diabetes are the focus of this report. For the default version, the standard is to use the Problem List in the EHR as the official source of diagnosis “truth.” The validation report “Aliados Health Problem List Validation Report” (for both NextGen and eCW health centers) displays records that suggest the patient should be considered for the addition of a diabetes diagnosis to the Problem List, or should be considered for removal of the diagnosis from the list, based on other evidence in the health record. These records should be reviewed and corrected, if necessary, in order to minimize the number of false positives and false negatives in the measure denominator. See the Aliados Health validation instructions document for more detail (this manual is being updated for 2023).

Hemoglobin A1c tests are entered into the health record as labs. There are particular criteria that define a complete lab record. The validation report “Aliados Health Incomplete Lab Validation Report” (for both NextGen and eCW health centers) displays lab records that are partially complete. These records should be reviewed and corrected, if necessary.



Comprehensive Diabetes Management – Retinal Eye Exam

Quality Measure: Diabetes: Diabetes: Retinal Eye Exam (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of patients age 18 to 75 years with diabetes who had an eye exam in the appropriate time frame

Default Denominator Description: Patients age 18 to 75 years (at the end of the measurement period) with a diagnosis of diabetes and at least one medical visit in the measurement period.

Numerator Description: Denominator patients who had an eye exam in the appropriate time frame defined as any of the following:

- A retinal or dilated eye exam in the past year
- A negative retinal or dilated eye exam in the past two years
- Bilateral eye enucleation any time in the past

Exclusion Description: Diagnosis of gestational diabetes or steroid-induced diabetes during the two years prior to the end of the measurement period, in hospice, palliative care or nursing home stay during the measurement period, died during the measurement period, or had a diagnosis of frailty and advanced illness.

Report Notes: Note that a negative retinal or dilated eye exam is defined as the field `retinal_eye_exams.result = FALSE`. Therefore, it is important to set-up the Data Element to interpret the result in structured data appropriately.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions, palliative_care_cases, nursing_home_stays, advanced_illness_cases, advanced_illness_outpatient_visits, dementia_medications, visit_diagnosis_codes, diagnosis_codes

Specific Data Elements Used: diabetes_cases, retinal_eye_exams, eye_enucleations

Data Validation: See the first paragraph in the data validation for the diabetes A1c measure above.



Controlling High Blood Pressure

Quality Measure: Controlling High Blood Pressure (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of patients age 18 to 85 years with essential hypertension who had a blood pressure in the measurement period and the last blood pressure reading had a value below 140/90 mmHg.

Default Denominator Description: Patients age 18 to 85 years (at the end of the measurement period) with a diagnosis of essential hypertension, at least one medical visit in the measurement period.

Numerator Description: Denominator patients with at least one blood pressure in the measurement period and the last blood pressure had a value below 140/90 mmHg.

Exclusion Description: Diagnosis of pregnancy during the measurement period, diagnosis of end-stage renal disease (ESRD), dialysis, or kidney transplant, in hospice, palliative care or had a nursing home stay during the measurement period, died during the measurement period, or had a diagnosis of frailty and advanced illness.

Report Notes: The sources of blood pressure readings accepted by this Quality Measure follow the HEDIS guidelines and differ somewhat from the sources accepted by HRSA for the UDS report. Generally, the HEDIS/QIP accepts more sources than HRSA/UDS. The QM Highlights document states “Eligible readings include BP readings taken during an outpatient visit, telephone visit, e-visit or virtual check-in, or remote monitoring event (BP taken by any digital device).” The HRSA/UDS definition does not include self-reported/non-verified blood pressure readings. The table on the next page explains that statement in more detail.



Blood pressure measurement	HEDIS/QIP	HRSA/UDS
Blood pressure taken by an appropriately trained staff member in a clinical setting	Yes	Yes
Blood pressure readings from a remote device that are digitally stored and transmitted directly to the electronic health record	Yes	Yes
Blood pressure readings from a remote device that an appropriately trained staff member can confirm visually during an E-visit or virtual check	Yes	Yes
Self-reported blood pressure readings from a digital device collected verbally from the patient by an appropriately trained staff member during an outpatient visit, telephone visit, e-visit, virtual check-in, or remote monitoring event	Yes	No
Self-reported blood pressure readings from a digital device sent to the health center via the patient portal or e-mail	Yes	No

In the September 2020 Data Standards and Integrity Council (DSIC) meeting, it was agreed that health centers should develop their own approach to identifying non-verified Self-Monitored Blood Pressures (SMBP) in their EHR. Health centers should then distinguish non-verified SMBP in Relevant by configuring the field `exclude_from_uds` on the Data Element `blood_pressure_readings` to read TRUE.

Since the HEDIS/QIP standards accept all blood pressures, the measure SQL code does not consider the field `blood_pressure_readings.exclude_from_uds` at all. However, the health center should ensure that all blood pressures being entered into the EHR are displayed by the blood pressure Data Element and that the blood pressure exclusion field on that Data Element is working for the UDS version of the measure.

Common Data Elements Used: `patients`, `visits`, `visit_set_memberships`, `hospice_care_interventions`, `palliative_care_cases`, `nursing_home_stays`, `advanced_illness_cases`, `advanced_illness_outpatient_visits`, `dementia_medications`

Specific Data Elements Used: `essential_hypertension_cases`, `blood_pressure_readings`, `end_stage_renal_disease_cases`, `dialysis_treatments`, `renal_transplants`, `pregnancy_observations`

Data Validation: Patients with a current clinical diagnosis of essential hypertension are the focus of this report. For the default version, the standard is to use the Problem List in the EHR as the official source of diagnosis “truth.” The validation



report “Aliados Health Problem List Validation Report” (for both NextGen and eCW health centers) displays records that suggest the patient should be considered for the addition of an essential hypertension diagnosis to the Problem List, or should be considered for removal of the diagnosis from the list, based on other evidence in the health record. These records should be reviewed and corrected, if necessary, in order to minimize the number of false positives and false negatives in the measure denominator. See the Aliados Health validation instructions document for more detail (this manual is being updated for 2023).



Well-Child Visits in the First 15 Months of Life

Quality Measure: Well-Child Visits in the First 15 Months of Life (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of children turning 15 months of age in the measurement period who had six or more well-child visits

Default Denominator Description: Patients who turned 15 months of age (1 year + 30 days) in the measurement period and had at least one medical visit in the measurement period

Numerator Description: Denominator patients with at least six well-child visits, each at least 14 days apart, before turning 15 months of age.

Exclusion Description: Hospice care or died in the measurement period

Report Notes: There are two QIP measures that consider well-child visits. They differ by age range and number of visits required. However, the CPT and ICD-10 codes used to define a well-child visit are the same for both reports. Therefore, the Data Element well_child_interventions can be used for both. Since well-child visits are only considered by a QIP Quality Measure, the QIP Value Set “Well-Care” should be used to define the codes. It is not recommended that health centers assume that patients with a particular visit type or who saw a particular provider actually meet the criteria as having a well-child visit in the absence of the specified CPT or ICD-10 codes.

Note that the Well-Child Value Set contains both procedure (CPT) codes and diagnosis (ICD) codes. Therefore, the Data Element “well_child_interventions” should pick up both.

The 2022 QIP Instruction manual states “There must be at least 14 days between each date of service.” The SQL of the Quality Measure automatically makes this calculation. Therefore, it is likely that there may be patients who appear to have more visits in the EHR than the report is counting, unless the 14-day rule is manually applied.



The QM Highlight for this measure states that the “well-child visit must occur with a PCP, but the PCP does not have to be the practitioner assigned to the child.” This provision must be considered on the level of the Data Element well_child_interventions. The Quality Measure SQL assumes that all well-child visits identified by that Data Element meet all of the criteria defined by Partnership HealthPlan and counts them accordingly.

It is important to note that the default denominator definition includes patients who had at least one medical visit of any kind in the Measurement Period. This approach is the same as the other Quality Measure default denominators but will tend to bias the measure to a higher numerator percentage than if the actual Partnership-supplied denominator is used. The reason for this is because this measure looks at patients who have had visits to the health center. However, with the default denominator, we are not really sure who is supposed to have a visit because if they have not been seen in the Measurement Period, we do not even know if they are still in the area, still the health center’s patients, etc. The assumption is therefore to take patients who are known to have access to health services, which in this case, are patients seen recently. However, a bias occurs because those in this age group who are seen for any medical visit are commonly seen for a well-child visit.

In contrast, the denominator supplied by Partnership HealthPlan contains only patients who they expect to have a well-child visit. This is true because these patients are continuously enrolled in Partnership insurance and assigned to the health center. Such a list contains patients enrolled in Partnership who were seen and who were not seen at the health center in the measurement period. In either case, the Partnership list contains patients expected to be seen for a well-child visit. It is impossible to identify these kinds of patients using only information in the EHR.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions

Specific Data Elements Used: well_child_interventions

Data Validation: There is not a separate validation report for this measure



Child and Adolescent Well-Care Visits

Quality Measure: Child and Adolescent Well-Care Visits (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of children between 3 and 17 years of age who had at least one well-child visit in the measurement period.

Default Denominator Description: Patients age 3 to 17 years (at the end of the measurement period) and had at least one medical visit in the measurement period

Numerator Description: Denominator patients with at least one well-child visit in the year prior to the end of the measurement period

Exclusion Description: Hospice care or died in the measurement period

Report Notes: There are two QIP measures that consider well-child visits. They differ by age range and number of visits required. However, the CPT and ICD-10 codes used to define a well-child visit are the same for both reports. Therefore, the Data Element well_child_interventions can be used for both. Since well-child visits are only considered by a QIP Quality Measure, the QIP Value Set “Well-Care” should be used to define the codes. It is not recommended that health centers assume that patients with a particular visit type or who saw a particular provider actually meet the criteria as having a well-child visit in the absence of the specified CPT or ICD-10 codes.

The QM Highlight for this measure states that the “visit must occur with a PCP or an OB/GYN practitioner (as applicable); the practitioner does not have to be the practitioner assigned to the member.” This provision must be considered on the level of the Data Element well_child_interventions. The Quality Measure SQL assumes that all well-child visits identified by that Data Element meet all of the criteria defined by Partnership HealthPlan and counts them accordingly.

It is important to note that the default denominator definition includes patients who had at least one medical visit of any kind in the Measurement Period. This approach is the same as the other Quality Measure default denominators but will tend to bias the measure to a higher numerator percentage than if the actual Partnership-supplied denominator is used. The reason for this is because this



measure looks at patients who have had visits to the health center. However, with the default denominator, we are not really sure who is supposed to have a visit because if they have not been seen in the Measurement Period, we do not even know if they are still in the area, still the health center's patients, etc. The assumption is therefore to take patients who are known to have access to health services, which in this case, are patients seen recently. However, a bias occurs because those in this age group who are seen for any medical visit are commonly seen for a well-child visit.

In contrast, the denominator supplied by Partnership HealthPlan contains only patients who they expect to have a well-child visit. This is true because these patients are continuously enrolled in Partnership insurance and assigned to the health center. Such a list contains patients enrolled in Partnership who were seen and who were not seen at the health center in the measurement period. In either case, the Partnership list contains patients expected to be seen for a well-child visit. It is impossible to identify these kinds of patients using only information in the EHR.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions

Specific Data Elements Used: well_child_interventions

Data Validation: There is not a separate validation report for this measure



Childhood Immunization Status

Quality Measure: Childhood Immunization Status (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of children turning two years of age in the measurement period who were fully immunized with ten vaccines.

Default Denominator Description: Patients who turned two years of age in the measurement period and had at least one medical visit in the measurement period.

Numerator Description: Denominator patients with the following ten immunizations:

- 4 diphtheria, tetanus and acellular pertussis (DTaP) between 42 days old and second birthday
- 3 polio (IPV) between 42 days old and second birthday
- 3 haemophilus influenza type B (HiB) between 42 days old and second birthday
- 4 pneumococcal conjugate (PCV) between 42 days old and second birthday
- 1 measles, mumps and rubella (MMR) on or between the first and second birthdays
- 1 chicken pox (VZV) on or between the first and second birthdays
- 1 Hepatitis A (HepA) on or between the first and second birthdays
- 3 hepatitis B (HepB) on or before the second birthday
- 2 or 3 Rotavirus (RV), depending on type, between 42 days old and second birthday
- 2 Influenza (Flu) between 181 days old and second birthday

For the immunizations MMR, VZV, HepA and HepB, a documented history of the illness or a seropositive test result for the antigen counts toward the numerator as well.

Exclusion Description: Hospice care or died in the measurement period, or an anaphylactic reaction to any of the vaccines.



Additionally, for individual vaccines, the following apply:

- Encephalopathy due to vaccination: DTaP
- Immunodeficiency: MMR, VZV and Flu
- HIV: MMR, VZV and Flu
- Lymphoreticular cancer, multiple myeloma or leukemia: MMR, VZV and Flu

Report Notes: Vaccines in the numerator must have been given within age ranges specified in the section Numerator Description above. Vaccines given outside of those age ranges are not counted by the Quality Measure. Therefore, the vaccine counts on this report may appear different than what appears in the electronic medical record unless date ranges from the record are manually taken into consideration. Furthermore, the numerator percentage may appear lower when compared to other versions of Quality Measures or reports that only take into consideration if the vaccines were given any time before the patient's second birthday.

Data Elements that display immunizations should display unique records like this: one patient with one vaccine administered on one date. If duplicate records appear or a single dose appears with different dates, then the report will over-count the number of vaccines. The names of these Data Elements end in “_immunizations” (for example, mmr_immunizations or flu_immunizations).

There are two types of rotovirus vaccines, each with different CVX codes and a different Data Element. These are the two-dose variety (Data Element rv_double_dose_immunizations) and the three-dose variety (Data Element rv_triple_dose_immunizations). The report does not allow mixing of doses, but rather will recognize the one with the most doses as the main one administered if at least one of each has been given to a particular patient. The QM Highlights document for this measure described the immunization requirement breakdown as “2 or 3 Rotavirus (RV) [given] between 42 days old and 8 months of age.” This requirement is what has been programmed into the report for Rotavirus.

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions

Specific Data Elements Used: dtap_immunizations, mmr_immunizations, flu_immunizations, hep_b_immunizations, vzv_immunizations, hep_a_immunizations, pcv_immunizations, ipv_immunizations,



rv_triple_dose_immunizations, rv_double_dose_immunizations,
hi_b_three_dose_immunizations, hi_b_four_dose_immunizations,
dtap_vaccine_allergies, encephalopathy_cases, ipv_vaccine_allergies,
streptomycin_allergies, polymyxin_b_allergies, neomycin_allergies, measles_cases,
mumps_cases, rubella_cases, histiocytic_tissue_cancer_cases,
lymphoreticular_tissue_cancer_cases, multiple_myeloma_cases, leukemia_cases,
immunodeficiency_cases, hiv_cases, mmr_antigen_labs, mmr_vaccine_allergies,
neomycin_allergies, hepatitis_b_cases, hep_b_antigen_labs, hep_b_vaccine_allergies,
baker_yeast_allergies, chicken_pox_cases, vzv_antigen_labs, vzv_vaccine_allergies,
pcv_vaccine_allergies, hepatitis_a_cases, hep_a_antigen_labs,
hep_a_vaccine_allergies, rv_vaccine_allergies, flu_vaccine_allergies,
hi_b_vaccine_allergies

Data Validation: There is not a separate validation report for this measure



Immunizations for Adolescents

Quality Measure: Immunizations for Adolescents (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of children turning 13 years of age in the measurement period who were fully immunized with three vaccines.

Default Denominator Description: Patients who turned 13 years of age in the measurement period and had at least one medical visit in the measurement period.

Numerator Description: Denominator patients with the following three immunizations:

- One meningococcal conjugate vaccine (MCV) on or between the eleventh and thirteenth birthdays
- One tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine on or between the tenth and thirteenth birthdays
- Two human papillomavirus vaccines (HPV), with different dates of service at least 146 days apart, on or between the ninth and thirteenth birthdays or 3 HPV with different dates of service on or between the ninth and thirteenth birthdays

For each immunization, a documented history of the illness or a seropositive test result for the antigen counts toward the numerator as well.

Exclusion Description: Hospice care or died in the measurement period, or an anaphylactic reaction to any of the vaccines. Furthermore, encephalopathy due to vaccination is an exclusion for the Tdap vaccine.

Report Notes: All vaccines must be given in the time frame indicated by the measure (see Numerator Description section above). Therefore, the electronic health record may show additional vaccines not administered in the defined time frame.

Data Elements that display immunizations should display unique records like this: one patient with one vaccine administered on one date. If duplicate records appear or a single dose appears with different dates, then the report will over-count the



number of vaccines. The names of these Data Elements end in “_immunizations” (for example, mcv_immunizations).

Note that there are two options for the human papillomavirus vaccine portion of the numerator. The Quality Measure evaluates both. The patient can enter the numerator if the dates of the first and last HPVs between the ninth and thirteenth birthdays are at least 146 days apart. If this is not true, the patient can also enter the numerator if the count of HPVs between the ninth and thirteenth birthdays is equal to three or more. If the patient had exactly two vaccines but they were under 146 days apart, the patient is not considered compliant and the column measurement_value in the detailed results will read “HPV doses too close (shots 2/2).”

Common Data Elements Used: patients, visits, visit_set_memberships, hospice_care_interventions

Specific Data Elements Used: mcv_immunizations, tdap_immunizations, hpv_immunizations, mcv_vaccine_allergies, tdap_vaccine_allergies, hpv_vaccine_allergies, meningococcal_meningitis_antigen_labs, tetanus_antigen_labs, diphtheria_antigen_labs, pertussis_antigen_labs, hpv_antigen_labs, encephalopathy_cases

Data Validation: There is not a separate validation report for this measure



Asthma Medication Ratio

Quality Measure: Asthma Medication Ratio (QIP 2023)

Version: 2023 Version 1. Based on SQL code modified from the QIP 2021 version

Measure Description: The percentage of patients age 5 to 64 years with persistent asthma who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement period.

Default Denominator Description: Patients age 5 to 64 years (at the end of the measurement period) with a diagnosis of persistent asthma, at least one medical visit in the measurement period, and at least one asthma medication dispensing event.

Numerator Description: Denominator patients who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year. The Asthma Medication Ratio Calculation is as follows:

$$\frac{\text{(Units of Controller Medication)}}{\text{(Units of Controller Medication + Units of Rescue Medication)}}$$

Exclusion Description: Patients with a diagnosis of emphysema, other emphysema, chronic obstructive pulmonary disease (COPD), obstructive chronic bronchitis, chronic respiratory conditions due to fumes/vapors, cystic fibrosis or acute respiratory failure. Also, patients who were in hospice or who died during the measurement year.

Report Notes: Note that a second version of this report is planned in 2023 once the Data Element “Prescriptions” is released. Instructions will be available on how to configure the Data Element Asthma Medications and how to join to the HEDIS medication Value Sets.

This Quality Measure is an approximation of the actual measure that will be calculated by Partnership HealthPlan. The QM Highlight says that the measure is “based on administrative data; there is no manual upload to eReports.” The actual denominator defined by HEDIS contains additional denominator criteria that consider Emergency Department visits and acute inpatient stays with a principal



diagnosis of asthma. This information is typically not available in the health center EHR. Furthermore, the health center EHR contains information on prescriptions and refills given to the patient, but typically it is unknown in the EHR which medications were actually picked up at the pharmacy.

Therefore, the Quality Measure default denominator has been drastically simplified so that it focuses on patients with persistent asthma as well as at least one medical visit and at least one asthma medication dispensing event in the measurement period. If using the default denominator to track all patients, the Quality Measure should give a good perspective on medication ratio trends for quality purposes. But like with the other Quality Measures, it is recommended that the health center use the actual denominator supplied by Partnership to really focus on those patients with the complex array of visits and dispensing events defined by HEDIS.

The report identifies all patients with Persistent Asthma from the Data Element `asthma_cases`. These patients are defined by having a diagnosis start date before the end of the Measurement Period and the column `persistent` equal to TRUE. Note that this Data Element does not have a column for `end_date` (which is present, for example, on the Data Element `diabetes_cases`). Therefore, the Data Element must not display any patients with an inactive diagnosis or with an otherwise resolved diagnosis. Ideally, one patient should not have both persistent and intermittent asthma diagnoses active at the time. However, in this case, the Quality Measure determines which diagnosis was the most recent one entered (or in other words, the one with the most recent `started_on` date).

The Data Element `asthma_medications` identifies all of the Asthma Medications for this measure. When the Quality Measure was first developed, the medication names were hard-coded in the SQL. This list should be compared against the medication list in the Quality Measure Highlight⁴. Somebody knowledgeable should review the list of medications actually picked up by this Data Element to make sure that no appropriate medications are missing or inappropriate medications included, and also that the type of medication is correct.

The Data Element `asthma_medications` defines the type of each medication (oral, inhaler or injection) and the number of units dispensed (column `units_dispensed`). The units for inhalers and injections are pretty straightforward (i.e., 1 inhaler or 1 injection is one unit). However, the units for oral medications requires a calculation.

⁴ The expected second version of this Quality Measure will use HEDIS medication Value Sets



The health center may need to examine how the package size and number of pills taken per day is entered into their EHR for oral asthma medications. The goal is to define one unit as a prescription lasting 30 days (or, in other words, divide the days supply by 30 and round-down). For example, if an oral medication has a package size lasting 30 days, it is one unit. A package size of 100 days is 3 units (100 divided by 30 and rounded down). Note that at many health centers, the package sizes are commonly 30 days, 60 days and 90 days (and so, 1, 2 or 3 units). Make sure that the Data Element is interpreting these common package sizes correctly⁵.

Common Data Elements Used: patients, visits, visit_set_memberships

Specific Data Elements Used: asthma_cases, asthma_medications, chronic_obstructive_pulmonary_disease_cases, cystic_fibrosis_cases, acute_respiratory_failure_cases, fumes_exposure_cases

Data Validation: The default denominator of this report is focused on patients with a persistent asthma diagnosis on the Problem List. The validation report “Aliados Health Persistent Asthma Diagnosis Validation Report” can be used to “clean up” the Problem List and make the default denominator more accurate. The report suggests patients who should be examined more closely so a decision can be made to add a diagnosis code to the Problem List or remove the code from the Problem List, depending on the report findings. Preferably, each patient should be diagnosed with either persistent or intermittent asthma, but not both.

⁵ The expected second version of this Quality Measure will use the Prescriptions Data Element instead of the Medications Data Element. This will increase the accuracy of the calculation.



Appendix: Value Sets Associated With the QIP Measures

The QIP Quality Measures use Value Sets to define diagnosis (ICD), procedure (CPT), lab (LOINC), and immunization (CVX) codes. This ensures that all reporting health centers are extracting data in a standardized manner. For example, the diabetes value set includes all diagnosis codes for diabetes that are applicable to the Quality Measure. This relieves each health center of the burden of identifying appropriate codes from their own system. For example, not all diagnosis codes with a name containing the word “diabetes” are appropriate for identifying that Quality Measure population of patients with diabetes.

It is recommended that Data Elements (or associated Transformers) directly utilize the designated Value Set in the SQL code. If the health center uses additional codes as a matter of routine (or if the health center can identify records using key words in structured data or other means), these can be added after proper internal review. The Aliados Health Data Standards and Integrity Committee regularly makes recommendations for data standardization and many of these recommendations have been discussed in the instructions above.

The QIP measures officially use the HEDIS Value Sets and the UDS measures use the eCQM Value Sets. Among similar QIP and UDS measures, these Value Sets are identical. When the UDS measure of the pair was developed first, the eCQM Value Set was used. The current recommendation is to continue to use eCQM Value Sets for similar measures and HEDIS Value Sets for measures unique to the QIP.

The large table below lists the standard Data Elements for each QIP Quality Measure, along with the associated Value Set. The ID numbers mostly reference eCQM Value Sets, except where noted. In Relevant, the table with the eCQM Value Set codes is named “cqm_value_set_codes” and the table with the QIP Value Set codes is named “hedis_value_set_codes.” The most recently updated Value Sets on the table are identified by the column latest = TRUE.

Appendix A: Value Set References

The following tables show the Value Set references needed to properly code the Data Elements for the QIP Quality Measures.

Current QIP Measures Attached to eCQM Value Sets

Quality Measure Name	Data Element	eCQM Value Set Name	eCQM OID	Value Set Type
Breast Cancer Screening (QIP 2023)	mammograms	No applicable Value Set (see Note #1)		
	mastectomies	History of bilateral mastectomy	2.16.840.1.113883.3.464.1003.198.12.1068	Diagnosis
		Status Post Left Mastectomy	2.16.840.1.113883.3.464.1003.198.12.1069	Diagnosis
		Status Post Right Mastectomy	2.16.840.1.113883.3.464.1003.198.12.1070	Diagnosis
		Unilateral Mastectomy, Unspecified Laterality	2.16.840.1.113883.3.464.1003.198.12.1071	Diagnosis
Cervical Cancer Screening (QIP 2023)	pap_tests	Pap Test	2.16.840.1.113883.3.464.1003.108.12.1017	Labs
	hpv_tests	HPV Test	2.16.840.1.113883.3.464.1003.110.12.1059	Labs
	hysterectomies	Hysterectomy with No Residual Cervix	2.16.840.1.113883.3.464.1003.198.12.1014	Diagnosis
	congenital_absence_cervix_cases	Congenital or Acquired Absence of Cervix	2.16.840.1.113883.3.464.1003.111.12.1016	Diagnosis
Colorectal Cancer Screening (QIP 2023)	fecal_occult_blood_tests	Fecal Occult Blood Test (FOBT)	2.16.840.1.113883.3.464.1003.198.12.1011	Labs
	stool_dna_tests	FIT DNA	2.16.840.1.113883.3.464.1003.108.12.1039	Labs
	sigmoidoscopies	No applicable Value Set (see Note #1)		
	ct_colonographies	No applicable Value Set (see Note #1)		
	colonoscopies	No applicable Value Set (see Note #1)		
	colorectal_cancer_cases	Malignant Neoplasm of Colon (See Note #2)	2.16.840.1.113883.3.464.1003.108.12.1001	Diagnosis
	colectomies	No applicable Value Set (see Note #1)		
Diabetes: HbA1c Good Control (≤9%) (QIP 2023)	diabetes_cases	Diabetes	2.16.840.1.113883.3.464.1003.103.12.1001	Diagnosis
	a1c_labs	HbA1c Laboratory Test	2.16.840.1.113883.3.464.1003.198.12.1013	Labs
	No applicable Importer	QIP: Diabetes Exclusions	No eCQM. See Note #3	Diagnosis
Controlling High Blood Pressure (QIP 2023)	essential_hypertension_cases	Essential Hypertension	2.16.840.1.113883.3.464.1003.104.12.1011	Diagnosis
	blood_pressure_readings	No applicable Value Set (see Note #1)		

Quality Measure Name	Data Element	eCQM Value Set Name	eCQM OID	Value Set Type
	end_stage_renal_disease_cases	End Stage Renal Disease	2.16.840.1.113883.3.526.3.353	Diagnosis
		Chronic Kidney Disease, Stage 5	2.16.840.1.113883.3.526.3.1002	Diagnosis
	dialysis_treatments	Dialysis Services (See Note #4)	2.16.840.1.113883.3.464.1003.109.12.1013	Procedures
		Vascular Access for Dialysis (See Note #4)	2.16.840.1.113883.3.464.1003.109.12.1011	Procedures
	renal_transplants	Kidney Transplant Recipient	2.16.840.1.113883.3.464.1003.109.12.1029	Diagnosis
	pregnancy_observations	Pregnancy or Other Related Diagnoses	2.16.840.1.113883.3.600.1.1623	Diagnosis
Childhood Immunization Status (QIP 2023)	dtap_immunizations (See Note #4)	DTaP Vaccine	2.16.840.1.113883.3.464.1003.196.12.1214	Vaccines
		DTaP Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1022	Procedures
	flu_immunizations	Influenza Vaccine	2.16.840.1.113883.3.464.1003.196.12.1218	Vaccines
		Influenza Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1044	Procedures
	hep_a_immunizations	Hepatitis A Vaccine	2.16.840.1.113883.3.464.1003.196.12.1215	Vaccines
		Hepatitis A Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1041	Procedures
	hep_b_immunizations	Hepatitis B Vaccine	2.16.840.1.113883.3.464.1003.196.12.1216	Vaccines
		Hepatitis B Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1042	Procedures
	hi_b_four_dose_immunizations	HiB Vaccine (3 dose schedule)	2.16.840.1.113883.3.464.1003.110.12.1083	Vaccines
		Hib Vaccine (3 dose schedule) Administered	2.16.840.1.113883.3.464.1003.110.12.1084	Procedures
	hi_b_three_dose_immunizations	HiB Vaccine (4 dose schedule)	2.16.840.1.113883.3.464.1003.110.12.1085	Vaccines
		Hib Vaccine (4 dose schedule) Administered	2.16.840.1.113883.3.464.1003.110.12.1086	Procedures
	ipv_immunizations	Inactivated Polio Vaccine (IPV)	2.16.840.1.113883.3.464.1003.196.12.1219	Vaccines
		Inactivated Polio Vaccine (IPV) Administered	2.16.840.1.113883.3.464.1003.110.12.1045	Procedures
	mmr_immunizations	Measles, Mumps and Rubella (MMR) Vaccine	2.16.840.1.113883.3.464.1003.196.12.1224	Vaccines
		Measles, Mumps and Rubella (MMR) Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1031	Procedures
	pcv_immunizations	Pneumococcal Conjugate Vaccine	2.16.840.1.113883.3.464.1003.196.12.1221	Vaccines
		Pneumococcal Conjugate Vaccine Administered	2.16.840.1.113883.3.464.1003.110.12.1046	Procedures
	rv_double_dose_immunizations	Rotavirus Vaccine (2 dose schedule)	2.16.840.1.113883.3.464.1003.196.12.1222	Vaccines
		Rotavirus Vaccine (2 dose schedule) Administered	2.16.840.1.113883.3.464.1003.110.12.1048	Procedures
rv_triple_dose_immunizations	Rotavirus Vaccine (3 dose schedule)	2.16.840.1.113883.3.464.1003.196.12.1223	Vaccines	
	Rotavirus Vaccine (3 dose schedule) Administered	2.16.840.1.113883.3.464.1003.110.12.1047	Procedures	

Quality Measure Name	Data Element	eCQM Value Set Name	eCQM OID	Value Set Type
	vzv_immunizations	Varicella Zoster Vaccine (VZV)	2.16.840.1.113883.3.464.1003.196.12.1170	Vaccines
		Varicella Zoster Vaccine (VZV) Administered	2.16.840.1.113883.3.464.1003.110.12.1040	Procedures
	chicken_pox_cases	Varicella Zoster	2.16.840.1.113883.3.464.1003.110.12.1039	Diagnosis
	encephalopathy_cases	Encephalopathy due to Childhood Vaccination	2.16.840.1.113883.3.464.1003.114.12.1007	Diagnosis
	hepatitis_a_cases	Hepatitis A	2.16.840.1.113883.3.464.1003.110.12.1024	Diagnosis
	hepatitis_b_cases	Hepatitis B	2.16.840.1.113883.3.464.1003.110.12.1025	Diagnosis
	measles_cases	Measles	2.16.840.1.113883.3.464.1003.110.12.1053	Diagnosis
	mumps_cases	Mumps	2.16.840.1.113883.3.464.1003.110.12.1032	Diagnosis
	rubella_cases	Rubella	2.16.840.1.113883.3.464.1003.110.12.1037	Diagnosis
	histiocytic_tissue_cancer_cases	Malignant Neoplasm of Lymphatic and Hematopoietic Tissue (See Note #6)	2.16.840.1.113883.3.464.1003.108.12.1009	Diagnosis
	leukemia_cases	Malignant Neoplasm of Lymphatic and Hematopoietic Tissue	2.16.840.1.113883.3.464.1003.108.12.1009	Diagnosis
	lymphoreticular_tissue_cancer_cases	Malignant Neoplasm of Lymphatic and Hematopoietic Tissue	2.16.840.1.113883.3.464.1003.108.12.1009	Diagnosis
	multiple_myeloma_cases	Malignant Neoplasm of Lymphatic and Hematopoietic Tissue	2.16.840.1.113883.3.464.1003.108.12.1009	Diagnosis
	hiv_cases	HIV	2.16.840.1.113883.3.464.1003.120.12.1003	Diagnosis
	immunodeficiency_cases	Disorders of the Immune System	2.16.840.1.113883.3.464.1003.120.12.1001	Diagnosis
	No applicable Importer	Intussusception	2.16.840.1.113883.3.464.1003.199.12.1056	Diagnosis
	hep_a_antigen_labs	Anti Hepatitis A IgG Antigen Test	2.16.840.1.113883.3.464.1003.198.12.1033	Labs
	hep_b_antigen_labs	Anti Hepatitis B Virus Surface Ab	2.16.840.1.113883.3.464.1003.198.12.1073	Labs
	mmr_antigen_labs	Measles Antibody Test (IgG Antibody presence)	2.16.840.1.113883.3.464.1003.198.12.1060	Labs
		Measles Antibody Test (IgG Antibody Titer)	2.16.840.1.113883.3.464.1003.198.12.1059	Labs
		Mumps Antibody Test (IgG Antibody presence)	2.16.840.1.113883.3.464.1003.198.12.1062	Labs
		Mumps Antibody Test (IgG Antibody Titer)	2.16.840.1.113883.3.464.1003.198.12.1061	Labs
		Rubella Antibody Test (IgG Antibody presence)	2.16.840.1.113883.3.464.1003.198.12.1064	Labs
		Rubella Antibody Test (IgG Antibody Titer)	2.16.840.1.113883.3.464.1003.198.12.1063	Labs
	vzv_antigen_labs	Varicella Zoster Antibody Test (IgG Antibody Presence)	2.16.840.1.113883.3.464.1003.198.12.1067	Labs
		Varicella Zoster Antibody Test (IgG Antibody Titer)	2.16.840.1.113883.3.464.1003.198.12.1066	Labs
	baker_yeast_allergies	No applicable Value Set (see Note #1)		

Quality Measure Name	Data Element	eCQM Value Set Name	eCQM OID	Value Set Type
	dtap_vaccine_allergies	No applicable Value Set (see Note #1)		
	flu_vaccine_allergies	No applicable Value Set (see Note #1)		
	hep_a_vaccine_allergies	No applicable Value Set (see Note #1)		
	hep_b_vaccine_allergies	No applicable Value Set (see Note #1)		
	hi_b_vaccine_allergies	No applicable Value Set (see Note #1)		
	ipv_vaccine_allergies	No applicable Value Set (see Note #1)		
	mmr_vaccine_allergies	No applicable Value Set (see Note #1)		
	neomycin_allergies	No applicable Value Set (see Note #1)		
	neomycin_allergies	No applicable Value Set (see Note #1)		
	pcv_vaccine_allergies	No applicable Value Set (see Note #1)		
	polymyxin_b_allergies	No applicable Value Set (see Note #1)		
	rv_vaccine_allergies	No applicable Value Set (see Note #1)		
	streptomycin_allergies	No applicable Value Set (see Note #1)		
	vzv_vaccine_allergies	No applicable Value Set (see Note #1)		
Common	hospice_care_interventions	No applicable Value Set (see Note #1)		
	palliative_care_cases	Palliative care encounter	2.16.840.1.113883.3.600.1.1575	Diagnosis
	frailty_cases	Frailty Diagnosis	2.16.840.1.113883.3.464.1003.113.12.1074	Diagnosis
		Frailty Symptom	2.16.840.1.113883.3.464.1003.113.12.1075	Diagnosis
		Frailty Encounter	2.16.840.1.113883.3.464.1003.101.12.1088	Procedures
	advanced_illness_cases	Advanced Illness	2.16.840.1.113883.3.464.1003.110.12.1082	Diagnosis
	advanced_illness_outpatient_visits	Advanced Illness	2.16.840.1.113883.3.464.1003.110.12.1082	Diagnosis
	dementia_medications	Dementia Medications	2.16.840.1.113883.3.464.1003.196.12.1510	Medications
nursing_home_stays	No applicable Value Set (see Note #1)			

(Reference notes appear after the table beginning on the next page)

Current QIP Measures Attached to HEDIS Value Sets

Quality Measure Name	Data Element	HEDIS Value Set Name	HEDIS OID	Value Set Type
Well-Child Visits in the First 15 Months of Life (QIP 2023)	well_child_interventions	Well-Care (see Note #7)	2.16.840.1.113883.3.464.1004.1262	Procedures and Diagnosis
Child and Adolescent Well-Care Visits (QIP 2023)	well_child_interventions	Well-Care (see Note #7)	2.16.840.1.113883.3.464.1004.1262	Procedures and Diagnosis
Immunizations for Adolescents (QIP 2023)	mcv_immunizations	Meningococcal Immunization	2.16.840.1.113883.3.464.1004.1777	Vaccines
		Meningococcal Vaccine Procedure	2.16.840.1.113883.3.464.1004.1778	Procedures
	tdap_immunizations	Tdap Immunization	2.16.840.1.113883.3.464.1004.1791	Vaccines
		Tdap Vaccine Procedure	2.16.840.1.113883.3.464.1004.1792	Procedures
	hpv_immunizations	HPV Immunization	2.16.840.1.113883.3.464.1004.1763	Vaccines
		HPV Vaccine Procedure	2.16.840.1.113883.3.464.1004.1764	Procedures
	mcv_vaccine_allergies	No applicable Value Set (see Note #1)		
	tdap_vaccine_allergies	No applicable Value Set (see Note #1)		
	hpv_vaccine_allergies	No applicable Value Set (see Note #1)		
	meningococcal_meningitis_antigen_labs	No applicable Value Set (see Note #1)		
	tetanus_antigen_labs	No applicable Value Set (see Note #1)		
	diphtheria_antigen_labs	No applicable Value Set (see Note #1)		
	pertussis_antigen_labs	No applicable Value Set (see Note #1)		
	hpv_antigen_labs	No applicable Value Set (see Note #1)		
encephalopathy_cases	eCQM: Encephalopathy due to Childhood Vaccination (see Note #8)	See Note #8		Diagnosis
Asthma Medication Ratio (QIP 2023)	asthma_cases	Asthma (see Note #9)	2.16.840.1.113883.3.464.1004.1025	Diagnosis
	chronic_obstructive_pulmonary_disease_cases	COPD	2.16.840.1.113883.3.464.1004.1053	Diagnosis
		Obstructive Chronic Bronchitis	2.16.840.1.113883.3.464.1004.1193	Diagnosis
		Emphysema	2.16.840.1.113883.3.464.1004.1091	Diagnosis
		Other Emphysema	2.16.840.1.113883.3.464.1004.1200	Diagnosis
	cystic_fibrosis_cases	Cystic Fibrosis	2.16.840.1.113883.3.464.1004.1068	Diagnosis
	acute_respiratory_failure_cases	Acute Respiratory Failure	2.16.840.1.113883.3.464.1004.1019	Diagnosis
	fumes_exposure_cases	Chronic Respiratory Conditions Due To Fumes or Vapors	2.16.840.1.113883.3.464.1004.1063	Diagnosis
asthma_medications (see Note #10)	Omalizumab Medications	2.16.840.1.113883.3.464.1004.1996	Medications	

Quality Measure Name	Data Element	HEDIS Value Set Name	HEDIS OID	Value Set Type
		Dupilumab Medications	2.16.840.1.113883.3.464.1004.2233	Medications
		Benralizumab Medications	2.16.840.1.113883.3.464.1004.1982	Medications
		Mepolizumab Medications	2.16.840.1.113883.3.464.1004.1993	Medications
		Reslizumab Medications	2.16.840.1.113883.3.464.1004.1997	Medications
		Budesonide Formoterol Medications	2.16.840.1.113883.3.464.1004.1983	Medications
		Fluticasone Salmeterol Medications	2.16.840.1.113883.3.464.1004.1989	Medications
		Fluticasone Vilanterol Medications	2.16.840.1.113883.3.464.1004.1990	Medications
		Formoterol Mometasone Medications	2.16.840.1.113883.3.464.1004.1991	Medications
		Beclomethasone Medications	2.16.840.1.113883.3.464.1004.1981	Medications
		Budesonide Medications	2.16.840.1.113883.3.464.1004.1984	Medications
		Ciclesonide Medications	2.16.840.1.113883.3.464.1004.1985	Medications
		Flunisolide Medications	2.16.840.1.113883.3.464.1004.1987	Medications
		Fluticasone Medications	2.16.840.1.113883.3.464.1004.1988	Medications
		Mometasone Medications	2.16.840.1.113883.3.464.1004.1994	Medications
		Montelukast Medications	2.16.840.1.113883.3.464.1004.1995	Medications
		Zafirlukast Medications	2.16.840.1.113883.3.464.1004.1999	Medications
		Zileuton Medications	2.16.840.1.113883.3.464.1004.2000	Medications
		Theophylline Medications	2.16.840.1.113883.3.464.1004.1998	Medications
		Albuterol Medications	2.16.840.1.113883.3.464.1004.1980	Medications
		Levalbuterol Medications	2.16.840.1.113883.3.464.1004.1992	Medications
Diabetes: HbA1c Good Control ($\leq 9\%$) (QIP 2023) <i>Also see the CQM table above for this measure</i>	No applicable Data Element	Diabetes Exclusions	2.16.840.1.113883.3.464.1004.1105	Diagnosis
Diabetes: Retinal Eye Exam (QIP 2023)	retinal_eye_exams (see Note #11)	Diabetic Retinal Screening	2.16.840.1.113883.3.464.1004.1078	Procedures
		Automated Eye Exam	2.16.840.1.113883.3.464.1004.2251	Procedures
	eye_enucleations (see Note #11)	Unilateral Eye Enucleation	2.16.840.1.113883.3.464.1004.1454	Procedures
		Unilateral Eye Enucleation Left	2.16.840.1.113883.3.464.1004.1455	Diagnosis
		Unilateral Eye Enucleation Right	2.16.840.1.113883.3.464.1004.1456	Diagnosis

Notes

Note #1: "No applicable Value Set" means that either there is no Value Set at all, or the Value Set contains codes not applicable to a health center EHR.

Note #2: The HEDIS Value Set "Colorectal Cancer" overlaps the eCQM Value Set "Malignant Neoplasm of Colon" but features these additional codes that seem appropriate:

- [Z85.038] Personal history of other malignant neoplasm of large intestine
- [Z85.048] Personal history of other malignant neoplasm of rectum, rectosigmoid junction, and anus
- [V10.05] Personal history of malignant neoplasm of large intestine
- [V10.06] Personal history of malignant neoplasm of rectum, rectosigmoid junction, and anus

Note #3: The HEDIS Value Set "Diabetes Exclusions" contains the codes used by the exclusion, but there is not a Data Element for this in Relevant. Therefore, these codes are built into the measure SQL itself (this is an exception to the standard QIP QM design). The HEDIS Value Set OID is listed in the table "Current QIP Measures Attached to HEDIS Value Sets"

Note #4: The procedure codes for dialysis are very unlikely to be used in a health center. Therefore, the health centers may choose to not use the Value Sets directly.

Note #5: Value Sets for each vaccine are shown in pairs. One Value Set contains CVX codes and one Value Set contains CPT codes. Health centers can choose to use either Value Set or both. Investigation of the use of codes should be conducted before a choice is made. It is recommended that the CVX code Value Sets be used to capture vaccines entered into the Immunizations section of the EHR but not directly billed. Note that sometimes vaccine CPT codes may not be specific enough to differentiate between individual vaccines for this measure. However, CVX codes are normally specific to the individual vaccine.

Note #6: The Value Set "Malignant Neoplasm of Lymphatic and Hematopoietic Tissue" contains all of the codes for the four related Data Elements. Note that these Data Elements are always referenced together in the Childhood Immunization Quality Measure.

Note #7: The same HEDIS Value Set (named "Well-Care") can be used for both the "first 15-months" and the "Child and Adolescent" well-care measures. Some of the codes refer to one of the age groups or another, but generally health centers are billing the appropriate codes for the appropriate age group and so they do not have to be separated in the Data Element. Also note that the Value Set contains both procedure and diagnosis codes.

Note #8: Encephalopathy is also an exclusion for the Childhood Immunization measure, and so the eCQM Value Set is recommended

Note #9: The HEDIS Value Set for Asthma contains codes for persistent, intermittent and other kinds of asthma. The HEDIS measure description (and the old UDS measure description) specifically refer to persistent asthma. Depending on other uses for patients with asthma that the health center might have in Relevant, one approach might be to identify all patients with any kind of asthma using the HEDIS Value Set "Asthma" (HEDIS OID = '2.16.840.1.113883.3.464.1004.1025') and then identify a sub-set of these patients who have persistent asthma using the CQM Value Set "Persistent Asthma" (CQM OID = '2.16.840.1.113883.3.464.1003.102.12.1023'). The Data Element asthma_cases features a BOOLEAN field "persistent" that can be used to distinguish patients with persistent asthma.

Note #10: The Data Element asthma_medications should eventually use the Value Sets on the HEDIS medication table in Relevant. Aliados Health will release some recommended SQL code for this Data Element once the new Prescriptions Data Element has been developed. This Data Element is not available as of the writing of this instruction manual.

Note #11: The procedure codes in the retinal eye exam and eye enucleation Value Sets are present on claims if the health center performs these procedures. Otherwise, it is recommended to establish eye exams and enucleations in Images (or Labs).