# DATA QUALITY AND **REPORTING RESOURCE 3:** MEASURE CALCULATION AND REPORTING FOR PHMI

#### **Overview**

This document supports community health centers (CHCs) in evaluating their capacity to produce and report core HEDIS measures for PHMI with fidelity to PHMI/HEDIS specifications.

Population Health Management Initiative (PHMI) core measures were selected to align with metrics for alternative payment methodology (APM) and Medi-Cal managed care plan (MCP) pay-for-performance (P4P) programs to prepare CHCs for success in these value-based reimbursement structures. To optimize performance in these programs, HEDIS measures for PHMI utilize the Healthcare Effectiveness Data and Information Set (HEDIS) specifications, which are the measures used in APM and MCP P4P with some modifications for PHMI.

For many CHCs, HEDIS measurement is a shift from the more familiar Uniform Data System (UDS) measures CHCs routinely report to the Health Resources and Services Administration (HRSA). One key difference is that HEDIS measures capture all patients who are assigned to the CHC from a health plan including those who have not had an encounter at the CHC. In contrast, UDS measures capture only patients who have had an encounter at the CHC within the year. HEDIS provides an examination of the population that the CHC is responsible for and identifies opportunities for engagement and improvement in their care. Understanding the importance of this new measurement set requires education and role setting across the CHC.

This measure calculation and reporting process document supports CHCs in evaluating their capacity to produce and report core HEDIS measures for PHMI with fidelity to PHMI/HEDIS specifications.

Processes developed should be based on the following:

- An understanding of how the CHC is running or coding the measures.
- The resources available or being used by them (e.g., EHR, PHM platform).
- Key steps and sequencing for improving calculation with greater fidelity to HEDIS specifications.

Working with their practice coaches and subject matter experts (SME), CHCs can use this document to better understand their current HEDIS measure calculation, reporting capabilities and gaps, and steps to improve capacity toward greater alignment and fidelity with APM and MCP P4P measurement.

## **Measure Calculation and Reporting Process Guidelines**

Working with their practice coach and subject matter experts, CHCs should follow a defined process to identify current calculation processes, assess gaps, and define steps going forward to improve calculation and reporting of the core HEDIS measures for PHMI. The following general process can be tailored for each CHC based on their specific factors (e.g., data analytics systems available).

#### Step 1: Assess current understanding of PHMI/HEDIS measurement.

a. Relevant staff at the CHC (e.g., the data/analytics team) should aim to have a solid understanding of HEDIS measurement (See Data Quality and Reporting Resource 2: Core Measure Specifications Manual tool), including HEDIS specifications and associated value sets and PHMI modifications.

### Step 2: Review current processes for calculating measures, if any.

- a. For each core measure, review current system(s) used or available to calculate measures and any upcoming changes to that capacity (e.g., plans to adopt new systems and timeline).
- b. Within that system(s), review current specifications used or available to calculate measures, and determine whether it is NCQA-certified according to NCQA's certification process for software that calculates HEDIS measures. (A directory of vendors that have earned measure certification <u>can be accessed</u> here.)
- c. Identify all data sources captured by the metrics.

## Step 3: Determine gaps for each measure; assess fidelity to PHMI/HEDIS specifications.

- a. Evaluate if the CHC has system or capability needs to be addressed.
- b. Review gaps in demographic data (e.g., race and ethnicity), coding, structure setup and ongoing process.
- c. Assess whether modifications can be made to existing systems/specifications used, or whether alternate processes would be needed.
- d. Use Figure 3.1 Measure Calculation Checklist provided below to assess current processes and gaps.

## Step 4: Develop action plan and timeline for improving calculation. The action plan could include:

- a. Modify existing systems/specifications.
- b. Seek alternate measure calculation solutions (e.g., analytics platforms, RAC support).
- c. Write code for manual measure calculation.
- d. Implement recommendations on coding, structure setup and an ongoing process going forward.
- e. Plan to ensure ongoing sustainability:
  - Develop policies and procedures to ensure ongoing oversight of measurement calculation, periodic (annual) review of specifications and making modifications as needed, etc.
  - ii. Develop or adapt a step-by-step guide on measure calculation.

#### FIGURE 3.1: MEASURE CALCULATION CHECKLIST

Measure	Calculation Criteria	Y/N	Notes
Hemoglobin A1c Control in	System/Calculation Methodology		
Patients With Diabetes (Poor	An analytics platform is available/in use to calculate the measure.		
Control >9%)	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).		
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify diabetic or pre-diabetic patients (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify HbA1c test results >9% and missing values (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
	The system/calculation methodology can accurately identify measure exclusions.		

## FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Hemoglobin A1c Control in Patients With Diabetes	The system/calculation methodology can accurately identify HbA1c test results >9% and missing values (numerator).		
(Poor Control >9%) (continued)	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
Controlling High Blood Pressure	System/Calculation Methodology		
blood Flessure	An analytics platform is available/in use to calculate the measure.		
	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).		
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify hypertensive patients (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify blood pressure results <140/90 mm Hg (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		

FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Controlling High Blood Pressure	System/Calculation Methodology		
(continued)	An analytics platform is available/in use to calculate the measure.		
	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).	;	
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify hypertensive patients (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify blood pressure results <140/90 mm Hg (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		

## FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Prenatal and Postpartum Care	System/Calculation Methodology		
(Postpartum)	An analytics platform is available/in use to calculate the measure.		
	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).		
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify patients with a live birth (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify postpartum visits (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
Colorectal Cancer	System/Calculation Methodology		
Screening	An analytics platform is available/in use to calculate the measure.		
	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).		

## FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Colorectal Cancer Screening	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
(continued)	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify patients aged 45 to 75 (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify colorectal cancer screenings and date (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
Well Child Visits in the First 30	System/Calculation Methodology		
Months of Life (First 15 Months)	An analytics platform is available/in use to calculate the measure.		
(i ii st 15 Months)	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).	5	
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		

FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Well Child Visits in the First 30	Fidelity to Specifications <sup>5</sup>		
Months of Life (First 15 Months)	The system/calculation methodology can accurately identify patients aged 15 months (denominator).		
(continued)	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify six or more well child visits (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (i.e., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
Child Immunization	System/Calculation Methodology		
Status (Combo	An analytics platform is available/in use to calculate the measure.		
10)	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).	6	
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications <sup>1</sup>		
	The system/calculation methodology can accurately identify patients aged two years (denominator).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify immunizations and date (numerator).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		

FIGURE 3.1: MEASURE CALCULATION CHECKLIST (continued)

Measure	Calculation Criteria	Y/N	Notes
Child Immunization	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
Status (Combo 10) (continued)	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		
Depression Screening and	System/Calculation Methodology		
Follow-Up for Adolescents and	An analytics platform is available/in use to calculate the measure. <sup>7</sup>		
Adults	a. System is NCQA-certified (if yes, further assessment for this measure is not needed).		
	<ul> <li>b. System utilizes HEDIS or HEDIS-like specifications (but is non-NCQA certified).</li> </ul>		
	If no, does CHC have or is it considering another platform/system? (If it is, assess steps above for the alternate system.)		
	The CHC intends to manually calculate the measure.		
	Fidelity to Specifications¹		
	The system/calculation methodology can accurately identify patients aged 12+ (denominator 1).		
	The system/calculation methodology can accurately identify measure exclusions.		
	The system/calculation methodology can accurately identify patients aged 12+ with a screen on an ageappropriate depression screener (numerator 1).		
	The system/calculation methodology can accurately identify patients aged 12+ with a positive screen on an age-appropriate depression screener (denominator 2).		
	The system/calculation methodology can accurately identify follow up visits within 30 days of positive screen (numerator 2).		
	The system/calculation methodology can accurately calculate the rate for the appropriate reporting period (e.g., quarterly, rolling).		
	The system/calculation methodology can accurately calculate the subpopulations (e.g., race/ethnicity, site).		
	If no to any of the above, the system/calculation methodology can be modified to accurately identify the needed component.		

## **Measure Calculation Step By Step**

After completing the above checklist, CHCs should work with their practice coaches and SMEs to address any gaps. If their platform or system of reporting cannot calculate a measure with fidelity to the PHMI/HEDIS specifications, the CHC should consider whether they will manually calculate the measure.

The below criteria can be used to:

- Identify current gaps in the CHC's ability to accurately calculate the denominator, the numerator and exclusions indicated in the checklist above.
- Identify basic steps needed to calculate the measure should a manual calculation process be pursued.

#### FIGURE 3.2: CRITERIA FOR MEASURE CALCULATION: HEMOGLOBIN A1C **CONTROL FOR PATIENTS WITH DIABETES**

Hemoglobin A	A1c Control for Patients with Diabetes (Poor Control >9%) [HBD]
Identification of diabetic or pre- diabetic patients (denominator)	<ul> <li>Utilize the NCQA Value Set Directory to query the applicable codes for patients who have had a claim or encounter for diabetes in the current year or the year prior to the current year.</li> <li>Utilize NCQA Value Set Directory to query pharmacy data for applicable codes in the current year.</li> </ul>
Identification of exclusions	<ul> <li>Utilizing the NCQA Value Set Directory, query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator.</li> </ul>
Service (and code) measured (numerator)	<ul> <li>From the remaining denominator, use the NCQA Value Set Directory codes, query the claims and encounter system for the set of codes to identify if the patients in the denominator have a HbA1c test and the result was above 9%. The numerator represents the patients identified whose last test was greater than 9%, (i.e., the lower the rate the better).</li> <li>Any patient who has not had a test in the measurement time frame is automatically counted as being above 9% in this calculation.</li> </ul>
Calculation of measure	<ul> <li>Divide the numerator (those identified with &gt;9% HbA1c or no test) by the denominator (identified patients only with those excluded removed).</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>

#### FIGURE 3.3: CRITERIA FOR MEASURE CALCULATION: CONTROLLING HIGH **BLOOD PRESSURE**

Controlling High Blood Pressure [CBP]		
Identification of hypertension patients (denominator)	<ul> <li>Utilize the NCQA Value Set Directory to query the applicable codes for patients who have had a claim or encounter for hypertension in the current year or the year prior to the current year.</li> </ul>	
Identification of exclusions	<ul> <li>Utilize the NCQA Value Set Directory to query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator.</li> </ul>	
Service (and code) measured (numerator)	■ From the remaining denominator, utilize NCQA Value Set Directory codes to query the claims and encounter system for the set of codes to identify if the patients in the denominator have a captured blood pressure (BP) reading.	
	The code would need to be present for both the systolic and diastolic BP readings for the same date of service.	
	• Numerator compliance requires the patient to have both a systolic pressure below 140, AND a diastolic pressure below 90 as their most recent BP reading in the year.	
	ot had a BP reading captured in the measurement year is non-compliant rator (and they remain in the denominator).	
Calculation of measure	<ul> <li>Divide the numerator (those identified with last BP reading below 140/90 mm Hg) by the denominator (identified patients only with those excluded removed).</li> </ul>	
The rate can be broke	n down by relevant subpopulation (e.g., race/ethnicity, clinic site).	

#### FIGURE 3.4: CRITERIA FOR MEASURE CALCULATION: PRENATAL AND **POSTPARTUM CARE (POSTPARTUM)**

	Prenatal and Postpartum Care (Postpartum) [PPC]
Identification of pregnant patients or live births (denominator)	<ul> <li>Utilizing the NCQA Value Set Directory, query the applicable codes for patients who have had a claim or encounter that identifies them as pregnant (see Data Quality and Reporting Resource 2: Core Measure Specifications Manual for live birth date ranges).</li> <li>Utilizing NCQA Value Set Directory, query pharmacy data for applicable codes in the reporting period.</li> </ul>
Identification of exclusions	<ul> <li>Utilizing the NCQA Value Set Directory, query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator (typically these codes identify that it was not a live birth).</li> </ul>
Service (and code) measured (numerator)	<ul> <li>From the remaining denominator, utilizing NCQA Value Set Directory codes, query the claims and encounter system for the set of codes to identify if the patients in the denominator have a captured postpartum visit within the time frames.</li> <li>The code set would identify any of the compliant services or visit</li> </ul>
	codes that would meet criteria for the postpartum visit. Patients identified with these codes would be numerator-positive for the measure if within time frames.
	<ul> <li>Global authorization codes for prenatal and postpartum care can result in a postpartum visit not being individually coded and picked up in the administrative calculation of the measure; therefore, medical record review by the CHC is a best practice to capture these services.</li> </ul>
Calculation of measure	Divide the numerator (those identified with the service codes within time frames) by the denominator (identified by age of patient with those excluded removed).
	The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).

#### FIGURE 3.5: CRITERIA FOR MEASURE CALCULATION: COLORECTAL **CANCER SCREENING**

Colorectal Cancer Screening [COL]		
Identification of patients 45- 75 years of age during the current measurement year (denominator)	The denominator is determined based on the age of the patient, therefore codes are not needed to identify the first step of the denominator.  The denominator is determined based on the age of the patient, therefore codes are not needed to identify the first step of the denominator.	
Identification of exclusions	Utilize the NCQA Value Set Directory to query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator (typically these codes identify patients who had colon cancer or a colectomy).	
Service (and code) measured (numerator)	■ From the remaining denominator, utilize NCQA Value Set Directory codes to query the claims and encounter system for the set of codes to identify if the patients in the denominator have a captured colorectal cancer screening during the appropriate time frames (e.g., either during the measurement year, and/or up to nine years prior to the measurement year, depending on the type of test):	
	<ul> <li>Fecal occult blood test [gFOBT and iFOBT] (within the year).</li> <li>Stool DNA (sDNA) with FIT test (within past three years).</li> <li>Flexible sigmoidoscopy (within past five years)</li> <li>CT colonography (within past five years)</li> <li>Colonoscopy (within the past 10 years)</li> </ul>	
Calculation of measure	<ul> <li>Divide the numerator (those identified with the service codes within timeframes) by the denominator (identified by age of patient with those excluded removed)</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>	

#### FIGURE 3.6: CRITERIA FOR MEASURE CALCULATION: WELL CHILD VISITS IN THE FIRST 30 MONTHS OF LIFE

Well Child	Visits in the First 30 Months of Life (First 15 Months) [WC15]
Identification of patients who have turned 15 months of age during the measurement year (denominator)	The denominator is determined based on the age of the patient, therefore codes are not needed to identify the first step of the denominator.  The denominator is determined based on the age of the patient, therefore codes are not needed to identify the first step of the denominator.
Identification of exclusions	Utilize the NCQA Value Set Directory to query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator.
Service (and code) measured (numerator)	<ul> <li>From the remaining denominator, utilize NCQA Value Set Directory codes to query the claims and encounter system for the set of codes to identify if the patients in the denominator that have well child visits. Capture all episodes of visits from their birthdate to 15 months of age.</li> <li>All patient that have six or more visits would be compliant for the numerator of this measure.</li> </ul>
Calculation of measure	<ul> <li>Divide the numerator (those identified with six compliant visits prior to 15 months of age) by the denominator (identified by age of patient with those excluded removed).</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>

#### FIGURE 3.7: CRITERIA FOR MEASURE CALCULATION: CHILD **IMMUNIZATION STATUS**

Child Immunization Status [Combination 10]	
Identification of patients who have turned two years of age during the current year (denominator)	The denominator is determined by the age of your patient population, so no codes are needed to identify the first step of the denominator.  The denominator is determined by the age of your patient population, so no codes are needed to identify the first step of the denominator.
Identification of exclusions	Utilize the NCQA Value Set Directory to query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator (typically these codes identify patients' conditions that would make the immunization a risk).
Service (and code) measured (numerator)	<ul> <li>From the remaining denominator, utilize NCQA Value Set Directory codes to query the claims and encounter system for the set of codes to identify if the patients in the denominator that have a captured immunization within the Combination 10 criteria, prior to two years of age).</li> <li>For each patient, capture and calculate the individual count of antigens by date to determine the number of each that have been given.</li> <li>All patients who have a count of 4 DTaP, 4 PCV, 3 Hib, 3 Hep B, 3 IPV, 3 Rotavirus, 2 Flu, 1 Hep A, 1 MMR, and 1 VZV prior to two years of age are compliant for the numerator.</li> </ul>
Calculation of measure	<ul> <li>Divide the numerator (those identified with the required immunizations prior to two years of age) by the denominator (identified patients with those excluded removed).</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>

#### FIGURE 3.8: CRITERIA FOR MEASURE CALCULATION: DEPRESSION SCREENING AND FOLLOW-UP FOR ADOLESCENTS AND ADULTS

Depression Screening and Follow-Up for Adolescents and Adults [DSF-E]	
Identification of patients 12 years of age or older at the start of the measurement year (denominator 1)	The denominator is determined by the age of your patient population, so no codes are needed to identify the first step of the denominator.  The denominator is determined by the age of your patient population, so no codes are needed to identify the first step of the denominator.
Identification of exclusions	Utilize the NCQA Value Set Directory to query the claims and encounter system for applicable exclusion codes and remove any patients identified from the denominator (typically this includes patients with a history of bipolar disorder and patients with a diagnosis of depression in the year prior to the measurement year).
Service (and code) measured (numerator 1 and denominator 2)	From the remaining denominator 1, query applicable codes for patients who had a depression screening using a standardized tool and have a positive screen.
Service (and code) measured (numerator 2)	From the remaining denominator 2, query the claims and encounter system for the set of codes to identify if the patients in the denominator have a follow-up visit within 30 days.
Calculation of sub-measure 1	<ul> <li>Divide numerator 1 (identified patients with a positive depression screening using a standardized tool) by denominator 1 (identified patients, minus exclusions)</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>
Calculation of sub-measure 2	<ul> <li>Divide numerator 2 (those identified with a follow-up visit) by denominator 2 (identified patients with a positive depression screening) using a standardized tool, minus exclusions.</li> <li>The rate can be broken down by relevant sub-population (e.g., race/ethnicity, clinic site).</li> </ul>

## **Measurement Reporting and Monitoring**

Developing and utilizing reporting mechanisms that provide relevant stakeholders with access to timely and relevant data is a key function. Comparative data is needed to understand how CHCs are tracking and trending in overall performance and amongst sub-groups. CHCs should utilize their calculated rates to create processes for ongoing reporting to proactively monitor care and identify opportunities for improvement.

Best practice features of reports include:

- Segmenting rates by sub-populations such as patient race/ethnicity, and sitelevel and clinician-level reports to monitor discrepancies in rates and health inequities among groups.
- Producing year-to-date (YTD) rates in addition to 12-month rolling measurement. While rolling measurement is used by PHMI to track improvement throughout the year, additional YTD reporting is a best practice that should be considered. This aligns with HEDIS, P4P and APM methodologies and builds population health capacities by tracking patients and planning services based on patients who will be part of measures throughout the course of the year (e.g., tracking all patients who will turn 2 during the calendar year allows for advance planning and practice management around their immunization needs/schedules).
- Comparing benchmarks.
- Comparing prior time periods,
- Comparing to peers (for clinicians) or similar organizations/sites.
- Reviewing patient-level drill-down reports
- Tracking comparisons using cascading goals that calculate the number of patient services (gaps) needed to reach goals.
- Testing statistical significance to determine if change over time and/or rates by subpopulations is significantly different.
- Setting realistic internal targets for continuous improvement.

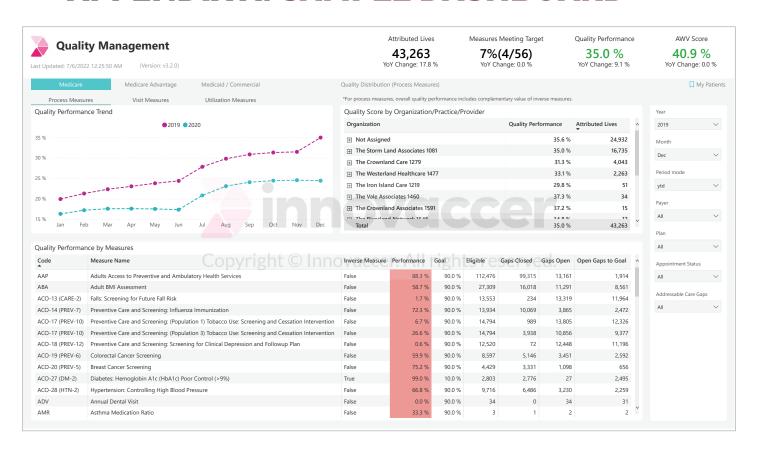
CHCs should also consider the various audiences that need access to calculated rates, on what cadence, and how the data could be best displayed for that audience. For example, CHC leadership and board of directors may need formal presentations of results that align with their meeting cadence. Care teams should have frequent at-a-glance access through tools such as dashboards to proactively monitor care and identify opportunities for improvement.

Data visualization is a best practice to display complex sets of data because it supports understanding of concepts and identification of new patterns. To develop a data visualization approach, CHCs should:

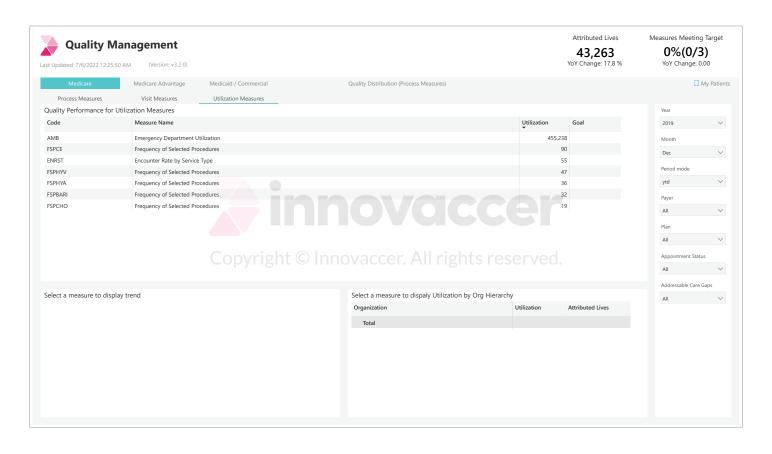
- Understand the data.
- Determine what kind of information the CHC wants to communicate.
- Know each audience and understand how they process visual information.
- Use a visual that conveys the information in the best and simplest form for the given audience.

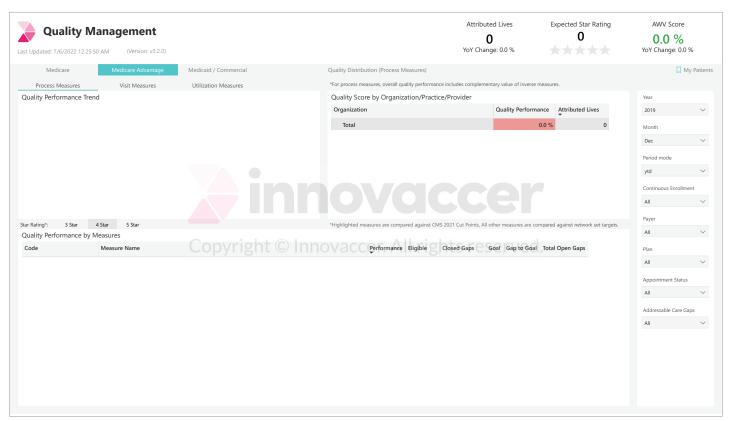
An example dashboard is provided in Appendix A.

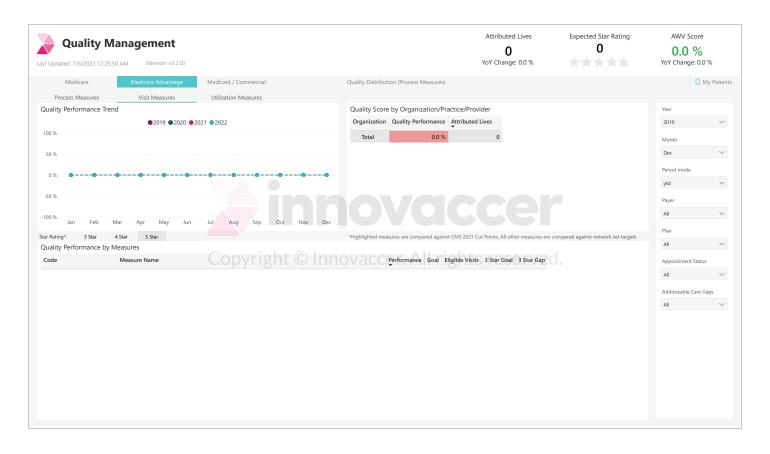
## **APPENDIX A: SAMPLE DASHBOARD**

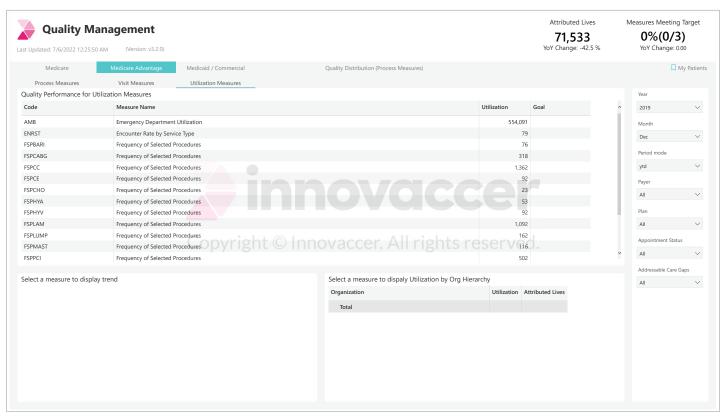


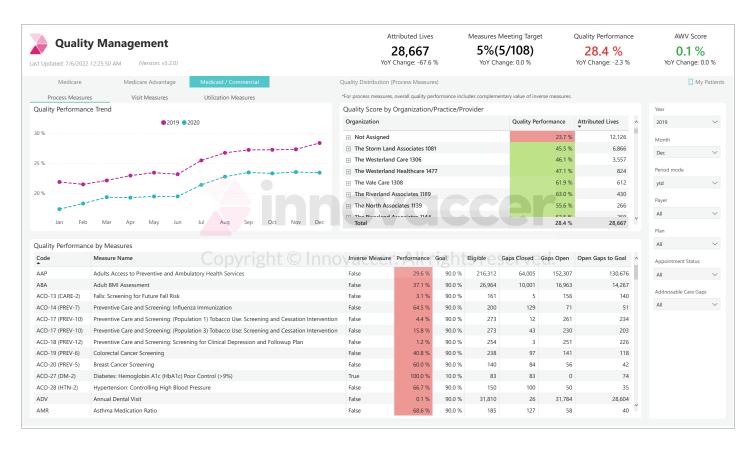


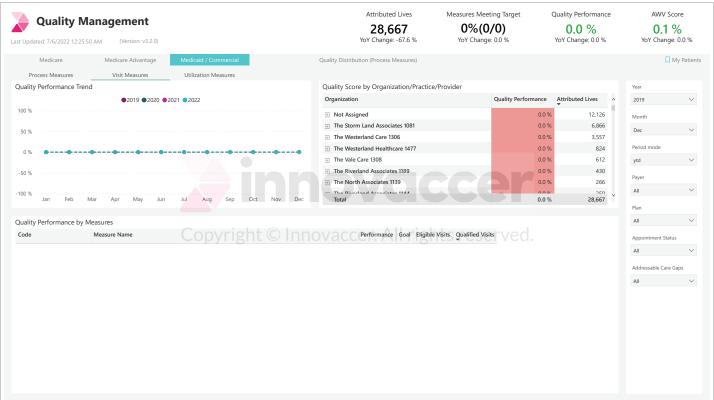


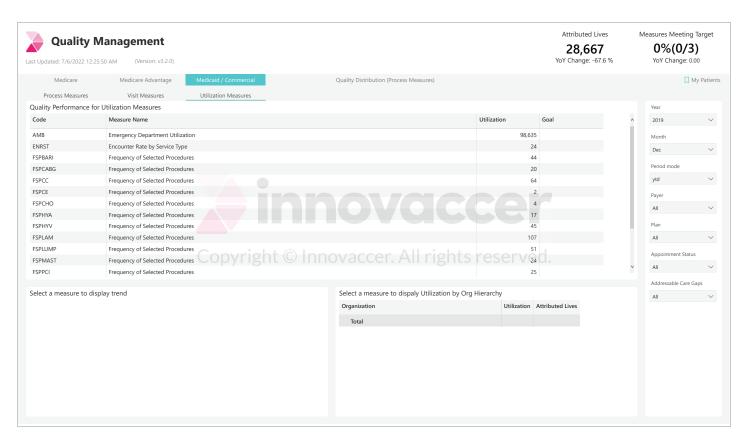


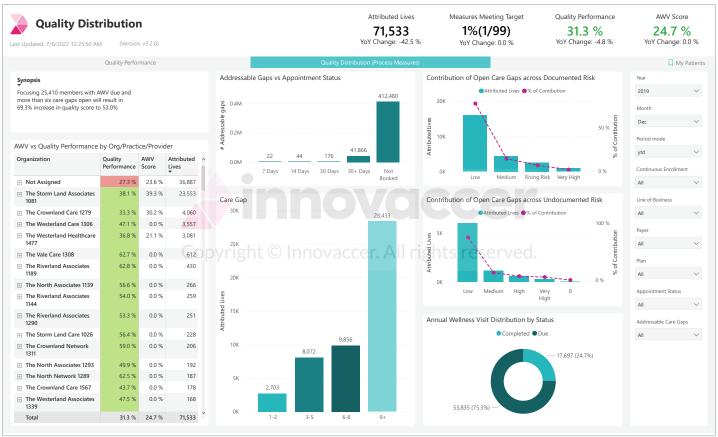












## **ENDNOTES**

1 See Data Quality and Reporting Resource 5: Documentation and Coding Playbook for information on accessing full denominator specifications/codes.