Healthcare Benchmark Initiative Data Validation and Quality Control Process – May 2025

I. Data Collection

Payer data submissions for the Cost Growth Benchmark, Primary Care Spending Target, and Quality Benchmarks initiatives are all expected by August 15th of each year. Payers submit data for the calculation of the Cost Growth Benchmark and Primary Care Spending Target performance in one data submission template (i.e., Excel workbook) and quality data for the calculation of Quality Benchmark performance in a separate data submission template. Each data submission has a distinct data validation and quality control process. This section describes the data validation checks of payers' data submissions for both requests.

A. Cost Growth Benchmark and Primary Care

Data for calculating performance against the cost growth benchmark and primary care spending target programs are collected in a data submission template that collects two years of data: the performance year (the year for which spending growth is being assessed) and the baseline year (the year preceding the performance year). For example, in 2024, spending data were collected for calendar years 2022 and 2023 to calculate performance against the 2023 cost growth benchmark and 2023 primary care spending target. This performance data is then reported in 2025.

In addition to the data submission template, OHS annually provides payers with a list of Advanced Network Tax Identification Numbers (TINs), collected from Advanced Networks, for the payers to use to attribute spending to a specific Advanced Network in the payer's data submission.

Payers are required to fill out the data submission template, which collects spending data at the Advanced Network (large provider group) and payer levels, pharmacy rebate data, membership by lines of business, standard deviations for payers and providers, and spending data by age/sex bands. Given the breadth of data being collected, these templates feature several data validation tabs:

- **Mandatory Questions**: This tab requires attestations on the data accuracy and checks on the methodology used to produce the data reported.
- **Validation by Market**: This tab allows payers to review their overall spending trends at the market and insurance category code level.

- **Validation by Advanced Network**: This tab allows payers to review their overall spending trend at the Advanced Network level.
- **Data Validation**: This tab provides several checks, including consistency in spending and membership reporting across tabs as well as membership and spending "reasonableness" checks.

Payers are encouraged to perform an internal validation of their own data using the validation tabs above. In addition, the template contains data input checks, which ensure the values are within a reasonable range (e.g., pharmacy rebates are reported as a negative value, whole numbers entered for insurance category codes).

Following the receipt of payer submission, the template is reviewed for completeness and reasonableness. A list of the completeness checks can be found below:

- Reporting periods are correct.
- Data are submitted for all relevant lines of business and for all relevant Advanced Networks.
- Member months are consistent across Advanced Network data and Market Enrollment data.
- Payer submitted pharmacy rebates for all relevant lines of business and submitted data are negative values.
- Payer included "Doing Business As" information if it has Medicare Advantage members.
- Payer included data for the Income from Fees of Uninsured Plans if it has Commercial Full or Partial Claims data.
- Total medical expense (TME) data is submitted according to the service categories outlined in the Data Submission Guide (formerly called the Implementation Manual).
- Methodology for estimating costs for Commercial Partial Claims is appropriate and aligns with the specifications in the Data Submission Guide.
- Payer answers to the mandatory questions in the Excel template correspond with the expected answers.
- Payer attests to having used the OHS' provided Advanced Network tax TINs for the purposes of attributing spending to Advanced Networks.

A list of the reasonableness checks can be found below:

- Member months are reasonable compared to other publicly available data sources (e.g., enrollment reported by CMS for Medicare Advantage enrollees).

- Year-to-year change in member months is reasonable, specifically flagging any change in member months greater than or equal to 10%.
- TME per member per month (PMPM) spending is reasonable across service categories, specifically flagging any PMPM spending that is more or less than would be expected based on the market (e.g., long-term care TME PMPM higher for commercial spending than Medicare spending).
- Difference in TME between Commercial Full and Commercial Partial Claims is reasonable, specifically flagging any differences greater than or equal to 10%.
- TME trends PMPM by market and service category are reasonable, specifically flagging overall TME trends greater than 5% and individual spending category trends greater than 10%.
- TME Trends PMPM by Advanced Networks are reasonable, specifically flagging overall TME trends greater than 10% and individual spending categories greater than 30%
- Member months and spending data are reported consistently across tabs.
- Truncated dollars for the payer and providers are within a reasonable range and aligns with specifications in the Data Submission Guide.

Following the review of a payer submission, a list of questions and concerns are compiled during the initial validation and provided to the payer. Then, a call is scheduled with the payer to discuss any identified issues. During the validation call, OHS and the payer discuss the data submission and determine whether a resubmission is necessary. If a resubmission is deemed necessary, the payer submits a new Excel file, and the data validation process above is repeated.

If a resubmission is deemed unnecessary, the payer's data are entered into the CT Cost Growth Benchmark Excel Databook for further analysis.

B. Quality Benchmarks

Data for calculating performance against the Quality Benchmarks program are collected in a data submission template (i.e., Excel workbook) that collects one year of data. For example, in 2024, OHS collected quality performance data for calendar year 2023 to calculate performance against the 2023 Quality Benchmark values.

Payers are required to fill out the template, which collects numerator and denominator data at the Advanced Network and payer level for the Quality Benchmark measures. This template features three data validation tabs:

- **Mandatory Questions**: This tab requires attestations on the data accuracy and checks on the methodology used to produce the data reported.

- **Validation by Market**: This tab allows payers to review their overall Quality Benchmark performance at the market level.
- **Validation by Advanced Network**: This tab allows payers to review their Quality Benchmark performance data at the Advanced Network level.

Payers are encouraged to perform an internal validation of their own data using the validation tabs above. In addition, the template contains built-in data validation flags, which bring the payers' attention potential errors in their submission (e.g., performance rates that are lower than expected, numerators and denominators that are lower than expected).

Following the receipt of payer submission, the templates are reviewed for completeness and reasonableness. A list of the completeness checks can be found below:

- Reporting period is correct.
- Data are submitted for all relevant lines of business.
- Data are submitted for all requested Quality Benchmark measures at both the payer level and the Advanced Network level.
- Payer answers to the mandatory questions in the Excel template correspond with the expected answers.

A list of the reasonableness checks can be found below:

- Payer quality performance rates are reasonable compared to other available data sources (e.g., performance as reported by the National Committee for Quality Assurance through Quality Compass).
- Payer and Advanced Network performance rates are reasonable. Performance rates of less than 40% (or higher than 60% for *Hemoglobin A1c (HbA1c) Control for Patients with Diabetes*: *HbA1c Poor Control* for which higher rates indicate suboptimal performance) are flagged, suggesting a potential error (e.g., the payer did not include all relevant clinical data).
- Payer and Advanced Network numerators and denominators are reasonable. Numerators and denominators of less than 30 are flagged, suggesting a potential error (although some measure numerators and denominators for federally qualified health centers may reasonably be below 30).

Following the review of a payer submission, a list of questions and concerns are compiled during the initial validation and provided to the payer. Then, a call is scheduled with the payer to discuss any identified issues. During the validation call, OHS and the payer discuss

the data submission and determine whether a resubmission is necessary. If a resubmission is deemed necessary, the payer submits a new Excel file, and the data validation process above is repeated.

If a resubmission is deemed unnecessary, the payer's data are entered into the CT Quality Benchmark Excel Databook for further analysis.

II. Data Analysis and Quality Assurance

Following the receipt of complete, acceptable data submissions, the data analysis begins.

Each year, Databooks are prepared for the following initiatives:

- Cost Growth Benchmark Databook, which contains each payer's spending and membership data, including commercial and Medicare Advantage payers, Medicare fee-for-service, Department of Social Services (DSS), Veterans Health Affairs, and Department of Corrections. This Databook also contains relevant data to estimate the Net Cost of Private Health Insurance, which is calculated using data collected from payers, Medical Loss Ratios (MLR) reports, and SEC Form 10-K, in the case of one or more payers.
- Quality Benchmarks Databook, which contains each payer's quality performance data, including commercial and Medicare Advantage payers, and DSS.

Databooks for both Quality Benchmarks and the Cost Growth Benchmark program have undergone several revisions since their inception, and thus now have minimal changes year-over-year. Several analyses are produced in the report (C = Cost Growth/Primary Care, Q = Quality):

- State-level analyses (C)
- Market-level analyses (C/Q)
- Payer cross analyses (C/Q)
- Advanced Network cross analyses (C/Q)
- Payer reports (C/Q)
- Advanced Network reports (C/Q)
- Primary care analyses (C)

Because these analyses are typically carried over from previous years, formulas are rarely rewritten, except in the case of efficiencies. Still, each year, formulas are reviewed by at least one other analyst for quality assurance (the analyst that reviews the formula is not the same analyst that prepared the Databook).

OHS shares preliminary internal analyses with payers and Advanced Networks to validate data accuracy and cost growth and quality performance. Before sharing a report with a payer or Advanced Network, it is reviewed for reasonableness and accuracy by at least one analyst. Reasonableness assessments include evaluating the magnitude and direction of an entity's trends (by market and service category) relative to the overall market. Accuracy assessments may involve manual recalculations of any measure, especially if it diverges from expectations. Additional reports are generated and reviewed following significant payer resubmission.

As requested, OHS facilitates calls with individual payers and Advanced Networks to discuss the preliminary performance data and address any inquiries regarding the analyses. Advanced Networks may also contact individual payers for further clarification on underlying data. Any of these calls may occasionally prompt payer resubmissions.

III. Process Improvement

OHS is dedicated to ongoing, iterative enhancement by leveraging insights and feedback from previous cycles. Each cycle is reviewed to identify opportunities for refinement and to implement necessary process improvements.