## Overview of the VA APCD Data Validation Process

## VHI Represents all Health Care Stakeholders

> VHI is an independent, nonprofit, 501(c)(3) health information organization established in 1993
> Formed to administer Virginia Health Care Data Reporting Initiatives to benefit Virginians


## Virginia All Payer Claims Database



## Virginia APCD Validation Process

## Data Validation at Intake

| Quality Tests |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Test <br> Name | Test Description | Low <br> Threshold | File Test Result | High Threshold |
| DQE005 | Subscriber SSN (ME008) or Plan Specific Contract number (ME009) must be populated | 100.00 | 100.00 | 100.00 |
| DQE010 | Number of members divided by the total number of contracts | 1.00 | 1.00 | 3.00 |
| DQE023 | Number of records where Gender $=$ 'Male` divided by total records | 40.00 | 42.66 | 60.00 |
| DQE024 | Number of records where Gender = 'Unknown' divided by total records | 0.00 | 0.00 | 0.40 |
| DQE026 | Average age of dependents. | 6.00 | 0.00 | 18.00 |
| DQE038 | Number of records with members older than 65 and not enrolled in a Medicare Product divided by total records | 0.00 | 41.93 | 17.00 |
| DQE039 | Number of records with members older than 115 or where DOB is after expiry of membership divided by total records | 0.00 | 0.00 | 3.00 |
| DQE102 | Number of members <65 years enrolled for Medicare product divided by the total number of members | 0.00 | 0.00 | 25.00 |
| DQE182 | Number of records with Member Zip Code (ME017) not belonging to primary state divided by the total number of records | 0.00 | 0.63 | 5.00 |
| DQE309 | Number of subscriber records that are not Medicare or Medicaid product divided by total records | 20.00 | 0.00 | 80.00 |
| DQE311 | Number of single contract records that are not Medicare or Medicaid product divided by the total number of records. (All commercial (non-Medicaid and Medicare) members as the denominator, and as the numerator, those members with individual policies (MC007=EMP or IND)) | 0.00 | 0.00 | 30.00 |

## Data Validation at Intake

# File Checker Results for Virginia All Payer Claims Database Status = CATASTROPHIC FAILURE 

File Checker Results for Virginia All Payer Claims Database
Status = FAILED

File Checker Results for Virginia All Payer Claims Database

$$
\text { Status }=\text { PASSED }
$$

## Data Validation at Intake

| Quality Failures |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Name | Description | Current MII <br> Threshold | File Results | Current MAX <br> Threshold |  | Thresholds <br> Maximum | Reason | Pass/Fail | Valid Through (mm/ddyyyy) | Ruling Notes |
| DQM437 | Number of adjustment claim records with charge amount $<0$ or Quantity $>=0$ divided by total records | 1.70 | 1.61 | 1.97 | 1.70 | 1.610 | This is the data which is contained in our database. | $\begin{array}{\|l\|l\|} \hline \text { 〇 Pass } \\ \text { OFail } \end{array}$ |  |  |

Enter ruling notes that will be presented to the data supplier upon your ruling.

## Virginia APCD Validation Process

## Longitudinal Review during Data Aggregation

| Member: |  | Date: |  |
| :--- | :--- | :--- | :--- |
| Data Acceptance <br> Recommendation: | Accept | Reviewed <br> by: |  |
| Sign-Off Advisory <br> Board |  |  |  |

Summary Data Findings:
The data is fine to process. There are some data quality issues that need investigation:

- There is only $\mathbf{1}$ line per inpatient facility claim.
- Allowed amounts are greater than billed amounts.

Units are often zero on the claim lines; this is the most important issue to resolve.

Detailed Data Quality Findings:

| Enrollment |  |  |  |
| :--- | :---: | :---: | :---: |
| Finding | Impact | Recommendation |  |
| We don't have PCP is column in Source <br> table (AO57). | The system can' <br> (chose the assigned PCP if there is one. | The system will attribute a PCP. Discuss if <br> the assigned PCP is used with the Data <br> Supplier. |  |


| Medical Claims |  |  |
| :--- | :--- | :--- |
| Finding | Impact | Recommendation |
| There is only 1 line per inpatient facility <br> claim. Usualll facility claims average at <br> least 12 lines (A010). | Can't analyze the utilization that <br> occurred during the inpatient stay. | Need to investigate whether this will <br> impact any othere engines. Discuss with the <br> Data Supplier. |
| Units are almost all showing up as zero <br> (A14). | This may impact utilization counts. | Discuss with the Data Supplier. |
| We don't have DRG Column in Source <br> (A037). | Inpatient HCGs will not be correct. | Milliman will run DRG grouping. Discuss <br> with data supplier. |

## Virginia APCD Validation Process

## Health Plans Review their own Data within Vendor Tool

| ICD9 | $\begin{aligned} & \text { ED Patient } \\ & \text { Visits per } \\ & 1000 \end{aligned}$ | ED Cases | $\begin{aligned} & \text { Paid/ED } \\ & \text { Case } \end{aligned}$ | $\begin{gathered} \text { ED Patient } \\ \text { Visits } \\ \text { Admitted } \end{gathered}$ | Admits | $\begin{aligned} & \text { \% Admits } \\ & \text { from ED } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J069 - Acute upper respiratory infection, unspecified | 6.4 | 21,258 | 5328 | 30 | 44 | 68.2\% |
| N390-Utinary tract infection, site not specified | 3.7 | 11,818 | 5703 | 392 | 633 | 61.9\% |
| R509 - Fever, unspecified | 3.3 | 10,788 | \$475 | 70 | 108 | 64.8\% |
| R0789 - Other chest pain | 3.3 | 10,712 | \$885 | 123 | 165 | 74.5\% |
| R51-Headache | 3.2 | 10.451 | 5733 | 13 | 28 | 46.4\% |
| J029 - Acute pharyngitis, unspecified | 3.0 | 9.795 | \$372 |  | 6 | 50.0\% |
| R079 - Chest pain, unspecified | 2.9 | 9.445 | 5942 | 88 | 111 | 79.3\% |
| B349-Viral infection, unspecified | 2.7 | 8.743 | 5439 | 44 | 65 | 67.7\% |
| R109 - Unspecified abdominal pain | 2.6 | 8.546 | \$888 | 43 | 57 | 75.4\% |
| R112 - Nausea with vomiting, unspecified | 2.6 | 8.468 | S841 | 41 | 63 | 65.1\% |
| J209 - Acute bronchitis, unspecified | 2.3 | 7.648 | \$490 | 58 | 84 | 69.0\% |
| 4659 - ACUTE URI NOS | 2.3 | 7,504 | \$310 | 33 | 37 | 89.2\% |
| M545-Low back pain | 2.2 | 7.418 | \$517 | 12 | 31 | 38.7\% |
| J020 - Streptococoal pharyngitis | 1.9 | 8.249 | \$390 | 7 | ${ }^{11}$ | 63.6\% |
| S0990XA - Unspecified injury of head, initial encounter | 1.8 | 6.125 | \$867 | 1 |  | 50.0\% |
| K529 - Noninfective gastroenteritis and colitis, unspecified | 1.8 | 5.749 | \$830 | 163 | 213 | 78.5\% |
| R1110-Vomiting, unspecified | 1.7 | 5,790 | \$454 | 5 | 9 | 55.6\% |
| k5900-Constipation, unspecified | 1.7 | 5.723 | 5575 | 31 | 54 | 57.4\% |
| J189-Pneumonia, unspecified organism | 1.7 | 4,899 | S888 | 677 | 1.017 | 66.6\% |
| R05-Cough | 1.6 | 5,388 | \$381 |  | 1 | 0.0\% |
| Top 20 ICDs | 52.6 | 172,497 | \$576 | 1.834 | 2.739 | 67.0\% |
| Remaining ICDs | 218.1 | 684,666 | \$634 | 38,044 | 110,234 | 34.5\% |
| Total | 270.7 | 857.163 | \$622 | 39.878 | 112,973 | 35.3\% |
| 0 - |  |  | $\sim$ | - |  | - |
| ¢ mer | Demo Data |  |  | - |  | $\underline{0}$ |
| - |  |  |  | $\square$ |  | - |

## Virginia APCD Validation Process

## Ongoing Validation of Data Quality

Names that come in:

John Jones MD
Jones, John
Jones, John MD
John A Jones
/////Jones, John*** PROVIDER


Creation of standardized core value (JONESJOHN) and manual adjustment

## Ongoing Validation of Data Quality

## VHI Provider Identifier Improvement Plan

Proposal for Review June 2018

## Overview:

Non-standardized provider information has become one of the largest focus areas to improve the analytical utility of Virginia APCD and APCDs around the country. Potential causes for these issues include:

1. Healthcare providers not submitting accurate NPI data, particularly for practitioners or service providers
2. Health plans not retaining NPI data or leveraging all internal databases that may contain NPIs for APCD submissions
3. Health plans submitting billing provider information within service provider fields
4. Health plans and healthcare providers submitting non-standardized provider names that do not match corresponding NPI data
5. Healthcare providers having multiple NPIs with non-standardized names and address information

To ensure provider information analytically useful within the Virginia APCD VHI has developed several proposed operational improvements. The impact of each improvement area based on tests performed on existing provider data within the APCD is also available for further analysis through an accompanying dataset.

Thank You!

