Key Information for reporting Risk Adjusted rates for Category 3

Providers that have selected a risk adjusted admission or readmission measure may use any of the following sources for quantifying the observed and expected rates. It is critical that providers obtain both "Actual" (Re)admission Rates as well as "Expected" (Re)admission rates as both data points are required for reporting. It is this comparison between observed and expected rates that is central to the principles of risk adjustment and will be used to determine future performance goals. The same data sources and methodology must be used across all demonstration years to ensure consistency between baseline and performance reporting in DY4 and DY5.

- **Vendor Supported:** Providers may use vendor supported systems such as 3M Health Information Systems (3M), Thomson Reuters, University HealthSystem Consortium (UHC)/Premier, MIDAS, etc. Vendors not listed here are acceptable for reporting risk adjusted rates and do not require prior approval. HHSC will collect the vendor name as part of the baseline reporting.

- **Indirect Standardization*-(** Readmission rates only) This methodology allows providers flexibility to use a structured and standardized method to report risk adjusted rates using facility specific data and applying normative values for the probability of readmission . HHSC has provided normative values for probability of readmission based on APR-DRG and Severity of Illness (SOI), however providers may use other normative data sets (See below). HHSC has also provided normative data for Clinical Risk Group CRG) assignment to PPA's, however this content is for informational purposes only and should not be applied using Indirect Standardization. Normative data sources for readmission rates may include any of the following. The methodology is described in the next section in greater detail.
    - **Vendor provided normative data (Provider must obtain)**
    - **Texas CY12 Medicaid norms (HHSC provided)**
    - **Florida (2008-2010) All-Payer norms (HHSC provided)**
    - **Provider based historical data norms (Provider must obtain)**

- **Internally applied risk adjustment algorithms***: In some instances, providers have developed unique algorithms (e.g., multivariate logistical regression) for measuring risk adjusted admissions and readmissions. The algorithm should be validated and tested with an intended use of reporting risk adjusted rates, including both an observed and expected rate. Providers using this option will need to submit a description of the algorithm and factors included to HHSC and obtain HHSC approval prior to reporting performance in DY4 and DY5.
    - Note: HHSC may request system validation and reliability data to ensure accuracy of data reporting.

- **Texas External Quality Review Organization:** Providers may submit data contained in the reports used to fulfil Category 4 reporting requirements. The data provided by the Institute of Child Health Policy [ICHP] is calculated using the 3M Potentially Preventable Event (PPA or PPR) software. The rates calculated reflect only Texas Medicaid claims. The PPRs reflect a 30-day readmission rate to any facility with assignment to the provider of Index Admission (i.e., initial discharge).

*Providers developing a risk adjustment methodology or using the indirect standardization approach (options 2 and 3 from above) should keep a narrative record of how the analysis was completed (detailed description of the algorithm) and the results at each step. This description is not required at the time of baseline submission but may be requested prior to establishing DY4 and DY5 performance goals.

Because providers are NOT required to use the same methodology, algorithm or normative dataset (options listed above), comparisons should NOT be made across providers in terms of the rates reported. The variability in these methods is greater than the similarity and will impact the resulting "expected" rates. The goal of Category 3 is to demonstrate improvement over self over time so as long as a provider uses the same methodology across DY's this variability across providers is acceptable and necessary given the wide variation in analytic capacity across DSRIP providers. In order to make comparisons across providers one would need to make comparisons by analyzing a provider's improvement over self across DYs, rather than provider-to-provider within the same DY.

Guidelines for use of the Indirect Standardization approach

- The methodology described below was created for providers that <u>have</u> selected a Pay-for-Performance Risk Adjusted OD-2 or OD-3 Category 3 outcome, but do <u>NOT</u> have a vendor or internally validated and tested methods (i.e. software) for producing risk adjusted rates. The described method is a mechanism for providers to calculate risk adjusted rates using an indirect standardization (i.e. "homegrown" approach).
- HHSC is supplying normative data to assist providers in calculating internal risk adjusted rates. The following describes the normative data available from HHSC as well as how provider can develop normative data based on internal historical rates.
- **Texas CY12 Medicaid norms**
    - Normative data is based on Medicaid claims from hospital providers participating in the 1115 Transformation Waiver (UC and DSRIP) for CY 2012
    - 3M Potentially Preventable (V31.0) software was used to calculate the norms
- **Florida (2008-2010) All-Payer norms**
    - State of Florida Inpatient Discharge Dataset (All-Payer) from January 2008 to December 2010
    - 3M Potentially Preventable (V31.0) software was used to calculate the norms
- **Provider based historical data norms- to be used if provider does not have access to APR-DRG/SOI case assignment**
    - If the grouping definition used in Step 2 (below) is NOT APR-DRG and SOI a normative database based on at least two years of historical data will need to be created with the grouping definition used (e.g., MSDRG). To do this, take all eligible Index admissions (i.e. discharges) from the prior 2 years, and classify them by like category (e.g. MS-DRG). Then calculate a single average rate of readmission for each group based on the rate of 30 day readmission for all cases that came back in that group. Essentially, this process replicates Steps 1-4 on all cases in the prior 2 years and creates an average rate of readmission per group. Those averages become the normative data you will use in Step 5.

Steps to Complete Indirect Standardization

The following process may be used for all Risk adjusted Readmission rates from OD-3 (except IT-3.1)

Step 1: Identify all eligible Index Admission cases- individuals that were discharged (alive) from your facility. If you picked a condition specific readmission rate (e.g. CHF), eligible cases would be only those with that diagnosis (e.g. CHF) upon discharge. If measuring "all cause" readmissions, include all discharges accounting for any relevant exclusion criteria utilized by providers.

Step 2: Categorize individuals by classifications such as APR-DRG (and SOI), MSDRG, etc.

Step 3: Determine which Index Admission was resulted in a readmission within 30 days of discharge

Step 4: Calculation of "Actual (Observed)" Readmission Rate: Divide number of readmissions (Step 3) by total number of Index Admissions (Step 1)

Step 5: Use the normative data**to determine the expected rate of readmission for each Index Admission. Assign to each eligible Index admission a value of the likelihood to be readmitted based on APR-DRG and SOI assignment, and patient age (note: include mental health flag if data is available).

Step 6: Sum the value of each individual expected likelihood of readmission. This results in the "Expected" number of readmissions.

Step 7: Calculation of "Expected" Readmission Rate: Divide number of readmissions (Step 6) by total number of Index Admissions (Step 1)

Step 8: Compare the observed to expected rates as a ratio. Determine what this difference means for your patient population in comparison with the norms you used. For the purposes of reporting, you will list your numerator as the "observed" or actual rate and the denominator as your "expected" rate. In the Category 3 reporting template you will also include responses to qualitative questions around the meaning and implications of the calculated observed to expected rates.

* IT-3.1 is excluded from the methodology described above because the algorithm used to calculate IT-3.1 is prescribed by the measure steward (CMS). For additional information on the algorithm used to calculate IT-3.1, please refer to the following link:
https://www.qualitynet.org/dcs/ContentServer?cid=1228772504318&pagename=QnetPublic%2FPage%2FQnetTier4&c=Page