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#### InterQual®

# Understanding InterQual® Benchmark Data

### Overview

InterQual content include benchmarks for length of stay, percent paid as observation, and Urine Drug Testing. The InterQual benchmark values are derived from a select set of claims data from Change Healthcare, one of the industry's largest claims clearinghouses, representing millions of patient encounters. InterQual benchmarks create guidance designed to facilitate efficient management of the patient to that target. Benchmarks are not intended to serve as treatment limits or substitute for clinical judgement.

Benchmark length of stay values are included in the following content:

- InterQual® Acute Adult
- InterQual® Acute Pediatric
- InterQual® Inpatient Rehabilitation
- InterQual® Subacute & Skilled Nursing
- InterQual<sup>®</sup> Procedures
- InterQual® Adult and Geriatric Psychiatry (Inpatient only)
- InterQual® Child and Adolescent Psychiatry (Inpatient only)
- InterQual<sup>®</sup> Substance Use Disorders (Inpatient and Inpatient Detoxification)

Percent paid as Observation values can be found in the following content:

- InterQual® Acute Adult
- InterQual® Acute Pediatric

Urine drug testing average annual volumes can be found in the following content:

- InterQual® Behavioral Health Services
- InterQual® Procedures

## Data Detail

The data are gathered as follows:

- De-identified primary claims data draws from a nationwide pool of claims submitted through Change Healthcare.
  - Acute, Inpatient Rehabilitation, Subacute & Skilled Nursing, and Procedures data includes approximately 9 million claims from all regions of the US.
  - Behavioral Health data includes approximately 400,000 mental health and substance use patient encounters.
  - UDT data includes approximately 1.4 million Urine Drug Tests.
- Length of stay claims are for patients discharged from general acute care, critical access, children's hospitals, rural hospitals, skilled nursing facilities, psychiatric hospitals, and psychiatric units.
- Urine drug testing claims are from patients 18-80 years old who had 3 or more tests with the same condition for the same year.
- Claims are from a rolling 24-month period, which is continually updated and includes the following payers: Medicare, Medicaid, Commercial/HMO, and Blue Cross Blue Shield.
- Acute Adult, Acute Pediatric, Inpatient Rehabilitation, Subacute & Skilled Nursing, Adult and Geriatric Psychiatry, Child and Adolescent Psychiatry, and Substance Use Disorders data are based on ICD-10 codes as a single diagnosis or, for patients with multiple diagnoses, to address comorbidity for the age groups: Pediatric (0-17), Adult (18-80).
- Procedures data is based on MS-DRG claims for age groups: Pediatric (0-17), Adult (18-80). This data is also included in the Acute Adult General Surgical subset.
- Count of claims are identified by each patient encounter (patients can have more than one).
- Length of stay values represent the Geometric Mean Length of Stay (GMLOS) for that condition.
- Urine drug testing values represent the geometric mean for definitive and presumptive testing by diagnosis, per member, in a 12-month period.

# Analysis Approach & Statistical Validation

#### Length of stay

- Hospital claims with a length of stay of one day or greater were included in the analysis.
- A 95% confidence interval to weighted average LOS ratio was used to exclude outliers and to
  ensure the accuracy and likelihood that the GMLOS is nationally representative and a
  reliable benchmark.

- The claims for the Acute Adult, Acute Pediatric, Inpatient Rehabilitation, Subacute & Skilled Nursing, Adult and Geriatric Psychiatry, Child and Adolescent Psychiatry, and Substance Use Disorders content were grouped by the ICD-10 code for the principal diagnosis. (The GMLOS was calculated for all claims with the same code.)
- For the Acute Adult, Acute Pediatric, Inpatient Rehabilitation, Subacute & Skilled Nursing, Adult and Geriatric Psychiatry, Child and Adolescent Psychiatry, and Substance Use Disorders content some diagnoses (e.g., acute myocardial infarction, adjustment disorder) have multiple available ICD-10 codes. For those diagnoses, the GMLOS for the diagnosis is the weighted average based on the number of claims for each included ICD-10 code.

#### Urine Drug Testing

- Patients with three or more claims with the same condition in a 12-month period were included in the analysis.
- A 95% confidence interval to weighted average test ratio was used to exclude outliers and to
  ensure the accuracy and likelihood that the benchmark is nationally representative and
  reliable.
- The claims for the Presumptive and Definitive urine drug testing content were tagged by the ICD-10 code using a cross-walk.
- Geometric means were calculated for all claims with the same code and grouped by condition.