Executive Summary
Respiratory Infection Episode
Corresponds to DBR and Configuration file V1.1

Updated: January 11, 2017
OVERVIEW OF A RESPIRATORY INFECTION EPISODE

The respiratory infection episode revolves around patients who are diagnosed with a respiratory infection. The trigger event is an evaluation and management visit in an outpatient or emergency department setting where the primary diagnosis is respiratory infection. In addition, a trigger event can be an evaluation and management visit in an outpatient or emergency department setting where the primary diagnosis is unspecified viral infection and a secondary diagnosis is respiratory infection. All related care – such as imaging and testing, evaluation and management, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the clinician or group who diagnosed the respiratory infection. The respiratory infection episode begins on the day of the triggering diagnosis and ends 14 days after the diagnosis.

CAPTURING SOURCES OF VALUE

Providers have multiple opportunities during a respiratory infection episode to improve the quality and cost of care. Example sources of value include the effective use of imaging and testing and appropriate site of diagnosis. Imaging and testing such as X-ray scans and blood work might be used only when a more serious event is suspected, e.g., pneumonia. In addition, the use of antibiotics might be limited to cases where they are clinically indicated, including a confirmed streptococcal pharyngitis infection. Furthermore, providers potentially can minimize generally less effective treatments (e.g., expectorants) as well as complications.

To learn more about the episode's design, please reference the following documents on our website at www.tn.gov/hcfa/topic/episodes-of-care:

- Detailed Business Requirements: Complete technical description of the episode

- Configuration File: Complete list of codes used to implement the episode
  http://www.tn.gov/assets/entities/hcfa/attachments/ConfigRespiratoryInfection.xlsx
**Illustrative Patient Journey**

1. **Patient has symptoms that indicate a possible respiratory infection (RI)**

2. **Diagnosis**
   - Initial assessment is performed by a PCP or other clinician during an office, outpatient, or emergency department visit
   - Patient is diagnosed with an RI (trigger event)
   - Additional tests (e.g., Strep A test, blood work, imaging) may be appropriate if there is suspicion of a more serious condition

3. **Treatment**
   - Symptomatic therapies may be provided, e.g., antihistamines and decongestants
   - In some cases where certain bacterial infections, e.g., Strep A pharyngitis, are suspected, antibiotics may be appropriate

4. **Follow-up care**
   - Patient may be seen by a PCP and may be vaccinated for influenza or pneumococcal infection

5. **Potential complications**
   - Super infections
   - Asthma exacerbation
   - Meningitis

**Potential Sources of Value**

1. **Patient has symptoms that indicate a possible respiratory infection (RI)**

2. **Diagnosis**
   - Initial assessment performed by a PCP or other clinician during an office, outpatient, or emergency department visit
   - Patient is diagnosed with an RI (trigger event)
   - Additional tests (e.g., Strep A test, blood work, imaging) may be appropriate if there is suspicion of a more serious condition

3. **Treatment**
   - Use of antibiotics only when clinically indicated, e.g., confirmed streptococcal pharyngitis
   - Minimizing use of generally less or ineffective treatments, e.g., antitussives, expectorants

4. **Follow-up care**
   - Patient may be seen by a PCP and may be vaccinated for influenza or pneumococcal infection

5. **Potential complications**
   - Super infections
   - Asthma exacerbation
   - Meningitis

6. **Efficient follow up services and care**

7. **Reduction of complications**

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ASSIGNING ACCOUNTABILITY

The quarterback of the episode is the specific health care provider deemed to have the greatest accountability for the quality and cost of care for the patient. To state it differently, the quarterback is the provider who has the greatest ability to influence all of the health care delivered in a given episode. For the respiratory infection episode, the quarterback is the clinician or group who diagnosed the respiratory infection. The contracting entity of the professional trigger claim will be used to identify the quarterback.

MAKING FAIR COMPARISONS

The episode model is designed to be fair to providers and incentivize best practices without penalizing providers who care for sicker patients. As such, important aspects of the model are:

- Inclusion of only the cost of services and medications that are related to the respiratory infection in calculation of episode spend.
- Exclusion of episodes when clinical circumstances create the likelihood that the case will deviate substantially from the typical care path or when claims data is likely to be incomplete.
- Risk adjusting episode spend to account for the cost of more complicated patients.

The respiratory infection episode has no pre-trigger window. The trigger window includes specific evaluation and management visits, specific imaging and testing, specific medications, specific pathology, and specific surgical and medical procedures. The post-trigger window includes care for specific complications, specific evaluation and management visits, specific imaging and testing, specific medications, specific pathology, and specific surgical and medical procedures.

Some exclusions apply to any type of episode, i.e., are not specific to a respiratory infection episode. For example, an episode would be excluded if more than one payer was involved in a single episode of care, if the patient was not continuously insured by the payer during the duration of the episode, or if the patient had a discharge status of ‘left against medical advice’. Other examples of exclusion criteria specific to the respiratory infection episode include a patient who has
acute epiglottis or an organ transplant. These patients have significantly different clinical courses that cannot be risk adjusted. Furthermore, there may be some factors with a low prevalence that would make accurate risk adjustment difficult and may be used to exclude patients completely instead of adjusting their costs.

For the purposes of determining a quarterback’s cost of each episode of care, the actual reimbursement for the episode will be adjusted to reflect risk factors captured in recent claims data in order to be fair to providers caring for more complicated patients. Examples of respiratory infection episodes with factors likely to be impacted by risk adjustment include those patients with a history of asthma, diabetes, or thyroid disorders. Over time, a payer may adjust risk factors based on new data.

MEASURING QUALITY

The episode reimbursement model is designed to reward providers who deliver cost effective care AND who meet certain quality thresholds. A quarterback must meet or exceed all established benchmarks for any quality metric tied to gain sharing in order to be eligible to receive monetary rewards from the episode model. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metric linked to gain sharing for the respiratory infection episode is:

- There are no respiratory infection quality metrics tied to gain sharing.

The quality metrics that will be tracked and reported to providers but that are not tied to gain sharing are:

- **Emergency department visit within the post-trigger window:** Percent of valid episodes with a relevant ED visit within the post-trigger window (lower rate indicative of better performance).
- **Admission within the post-trigger window:** Percent of valid episodes with a relevant admission or relevant observation care within the post-trigger window (lower rate indicative of better performance).
- **Antibiotic injection for Strep A sore throat:** Percent of valid episodes with an antibiotic injection for Strep A sore throat within the trigger or post-trigger windows (lower rate indicative of better performance).
– **Steroid injection for Strep A sore throat:** Percent of valid episodes with a steroid injection for Strep A sore throat within the trigger or post-trigger windows (lower rate indicative of better performance).

It is important to note that quality metrics are calculated by each payer on a per quarterback basis across all of a quarterback’s episodes covered by that payer. Failure to meet all quality benchmarks tied to gain sharing will render a quarterback ineligible for gain sharing with that payer for the performance period under review.