Executive Summary

Asthma Acute Exacerbation Episode

Corresponds to DBR and Configuration file V6.0

Updated December 27, 2019
OVERVIEW OF AN ASTHMA ACUTE EXACERBATION EPISODE

The asthma acute exacerbation episode revolves around individuals with asthma who are treated at a health care facility for an acute exacerbation of their chronic illness. This episode is triggered by an emergency department (ED) visit, observation stay, and/or an inpatient stay, the primary purpose of which is to treat acute symptoms attributed to an asthma exacerbation. Following discharge from the hospital, all asthma-related care include asthma-related drug therapy and follow-up care such as home health visits are included in the episode as are any repeat acute asthma exacerbations occurring within a specified period of time and resulting in further treatment at a hospital. The complete asthma acute exacerbation episode begins with the ED or inpatient admission and ends 30 days after the patient is discharged.

CAPTURING SOURCES OF VALUE

In treating patients with an acute exacerbation of asthma, health care providers have multiple opportunities to improve the quality and cost of care. For example, a provider may be able to prevent an avoidable inpatient admission from the ED or ensure an appropriate length of stay in the case of an inpatient admission. Providers play a pivotal role in administering and prescribing appropriate medications for the patient throughout the episode, assuring that necessary patient/family education and discharge instruction are provided and ordering and facilitating required follow-up care. These practices reduce the likelihood of repeat acute exacerbations and contribute to the delivery of high quality, cost effective care.

To learn more about the episode's design, please reference the Detailed Business Requirements (DBR) and Configuration File on our website at https://www.tn.gov/tenncare/health-care-innovation/episodes-of-care/searchable-episodes-table.html.

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**Illustrative Patient Journey**

- **Pre-trigger window** (not included in episode)
  - Patient experiences acute exacerbation (may attempt home/self-treatment)
  - Contact PCP/Pulmonologist/Allergist (e.g., consultation, treatment, before ER visit)

- **Trigger**
  - Emergency department or Observation room
  - Admitted to in-patient (ICU, floor)

- **Follow-up care**
  - Home
  - Home with nurse visit
  - Patient monitoring
  - Pulmonary rehab
  - Sub-acute setting

- **Potential repeat facility visit** (e.g., another exacerbation, complication)

**Potential Sources of Value**

- **A** Reduce avoidable ED visits (value captured by medical home)
- **B** Reduce avoidable inpatient admissions
- **C** Treat with appropriate medication
- **D** Encourage appropriate length of stay
- **E** Prescribe appropriate follow-up care & increase compliance (e.g., medications, education, counseling)
- **F** Reduce avoidable re-encounters/complications

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ASSIGNING ACCOUNTABILITY

The Principal Accountable Provider (also referred to as 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 an asthma acute exacerbation episode, the quarterback is the hospital where the ED visit, observation stay and/or inpatient admission took place. All quarterbacks will receive reports according to their contracting entity or tax identification number.

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:

- 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, and
- Risk adjusting to account for the cost of more complicated patients.

Some exclusions apply to any type of episode, i.e., are not specific to an asthma acute exacerbation episode. For example, an episode would be excluded if more than one payer was involved in a single episode of care, the patient was not continuously insured by the payer between the day of the earliest claim included in the episode and the end of the episode, or if the patient had a discharge status of “left against medical advice”. Other examples of exclusion criteria specific to the asthma episode include a patient age younger than two years, a diagnosis of cystic fibrosis or intubation during the visit/inpatient stay.

For the purposes of determining a quarterback’s cost for 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. Over time, a payer may add or subtract risk factors in line with new research and/or empirical evidence. Furthermore, there may be some factors with a low prevalence or significance that would make accurate risk
adjustment difficult and may be used to exclude patients completely instead of adjusting their costs. The final risk factor adjustment methodology decisions will be made at the discretion of the payer after analyzing the 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. Quality metrics tied to gain sharing are referred to as threshold metrics. Other quality metrics may be tracked and reported for quality improvement purposes but may not be tied directly to gain sharing.

The quality metrics linked to gain sharing for the asthma acute exacerbation episode are:

- **Follow-up care within the post-trigger window:** Percent of valid episodes where the patient receives relevant follow-up care within the post-trigger window (higher rate indicative of better performance).

- **Appropriate medications within the trigger and post-trigger:** Percent of patients on appropriate medications determined by an administration of or filled prescription for oral corticosteroids and/or injectable corticosteroids within the trigger and post-trigger window. Patients < 5 years old are excluded from this quality metric (higher rate indicative of better performance).

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

- **Repeat acute exacerbation within the post-trigger window:** Percent of valid episodes where the patient has a repeat asthma acute exacerbation within the post-trigger window (lower rate indicative of better performance).

- **Inpatient setting of acute exacerbation:** Percent of valid episodes where the acute exacerbation during the trigger window is treated in an inpatient setting (lower rate indicative of better performance).
– Smoking cessation counseling: Percent of valid episodes where smoking cessation counseling for the patient and/or family was offered (where applicable) (higher rate indicative of better performance).

– Patient education on exacerbations: Percent of valid episodes where education on proper use of medication, trigger avoidance, or asthma action plan was discussed (higher rate indicative of better performance).

– Chest x-ray utilization: Percent of valid episodes where the patient receives a chest x-ray (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 from that payer for the performance period under review.