Executive Summary

Hernia Repair Episode

Corresponds with DBR and Configuration file V1.0

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OVERVIEW OF A HERNIA REPAIR EPISODE

The hernia repair episode revolves around patients who receive an abdominal or groin hernia repair procedure. The trigger event is an inpatient admission or an outpatient visit with a hernia repair. All related care – such as anesthesia, imaging and testing, surgical and medical procedures, pathology, evaluation and management, and medications – is included in the episode. The quarterback, also called the principal accountable provider or PAP, is the facility where the hernia repair took place. The hernia repair episode begins 30 days before the triggering procedure and ends 30 days after discharge.

CAPTURING SOURCES OF VALUE

Providers have multiple opportunities during a hernia repair episode to improve the quality and cost of care. Important sources of value include reducing unnecessary pre-procedural imaging and testing, choosing the most appropriate type of procedure including, where relevant, the appropriate choice of mesh, and selecting the most appropriate post-acute setting of care. Other important sources of value include choosing the most appropriate pain medication and coordinating any necessary follow-up care to support timely recovery and assess the patient for any complications.

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.
Illustrative Patient Journey

1. **Presentation**
   Outside of care setting
   - Patient may experience symptoms that include abdominal pain or constipation, and seeks care with their primary care provider and/or other providers

2. **Evaluation**
   Office, outpatient clinic, emergency department
   - Patient history is taken and clinical assessment is conducted
   - Patient may receive abdominal imaging (e.g., computed tomography scan, ultrasound scan, magnetic resonance imaging) and/or laboratory testing

3. **Surgical Intervention**
   Ambulatory surgery center, outpatient facility, inpatient facility
   - Setting and type of procedure is determined
   - Patient is prepared for procedure and appropriate anesthesia is given
   - One of several surgical approaches (open, laparoscopic, or robotic) is selected
   - The appropriate procedure (for e.g., mesh or non-mesh) is performed
   - Synthetic or biologic meshes may be used for mesh repair

4. **Follow-up care**
   Office, outpatient facility, skilled nursing facility
   - Patient may follow up with the clinical team including any follow-up tests and imaging
   - Patient may be given appropriate prescription or non-prescription medications
   - Patient is discharged home or to a post-acute care facility

5. **Potential complications**
   Office, outpatient facility, emergency department, inpatient facility
   - Surgical site infection/hemorrhage/injury
   - Pulmonary embolism or deep vein thrombosis
   - Other infections
   - Ongoing pain
   - Hernia recurrence

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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 hernia repair episode, the quarterback is the facility where the hernia repair took place. The contracting entity or tax identification number of the facility where the hernia repair took place 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 hernia repair 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 pre-trigger window includes care for specific diagnoses, specific imaging and testing, and specific medications. During the trigger window, all services and specific medications are included. The post-trigger window includes care for specific diagnoses, specific anesthesia, 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 hernia repair 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'. Examples of exclusion criteria specific to the hernia repair episode include patients with gangrenous hernia, vascular insufficiency of the bowel, or end-stage renal disease. These patients have significantly different clinical courses that the episode does not attempt to risk adjust. 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.

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 patient factors likely to lead to the risk adjustment of a hernia repair episode include abdominal adhesions, pregnancy, and chronic obstructive pulmonary disease. 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 metrics linked to gain sharing for the hernia repair episode are:

- **Difference in average MED\(^1\)/day**: Average difference in morphine equivalent dose (MED)/day during the 1-60 days prior to the trigger window and average MED/day during the 7-30 days after the trigger window, across valid episodes (lower value indicative of better performance)

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

- **Average MED/day during the pre-trigger opioid window**: Average MED/day during the 1-60 days prior to the trigger window, across valid episodes (value not indicative of performance)

- **Average MED/day during the post-trigger opioid window**: Average MED/day during the 7-30 days after the trigger window, across valid episodes (value not indicative of performance)

- **Opioid and benzodiazepine prescriptions**: Percentage of valid episodes with both an opioid prescription and a benzodiazepine prescription filled

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\(^{1}\) MED: morphine equivalent dose

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during the trigger or post-trigger windows (lower rate indicative of better performance)

- **Use of mesh**: Percentage of valid episodes triggered on an open incisional or ventral hernia repair with mesh implantation for open incisional or ventral hernia repair in the trigger window (rate not indicative of performance)

- **Related follow-up care**: Percentage of valid episodes with related follow-up care during the post-trigger window (higher rate indicative of better performance)

- **Related admission**: Percentage of valid episodes with a related admission during the post-trigger window (lower rate indicative of better performance)

- **Emergency department (ED) visit for related pain**: Percentage of valid episodes with an ED visit for pain related to the hernia repair during the post-trigger window (lower rate indicative of better performance)

- **ED visit for other related reason**: Percentage of valid episodes with a related ED visit for a reason other than pain during the post-trigger window (lower rate indicative of better performance)

- **Complications**: Percentage of valid episodes with complications during the post-trigger window (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.

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