Discussion Document

Patient Complexity and Disease Severity

Patient Complexity: is a characterization of a patient's overall illness burden, taking into account comorbidities and all claim activity in the last year. Thus, two patients with the same diagnosis, such as progressive angina, may be assigned different relative risk scores. For instance, a patient being treated for progressive angina who also has congestive heart failure, type 1 diabetes, vascular disease and renal failure would be considered to be high risk; while another patient who only had minimal hypertension would be considered low risk. (Source: MEG Grouper User Guide)

Disease severity: is a characterization of the seriousness of the current episode of care based on the progression of medical complications of the disease. The MEG assigns a Disease Related Group (DRG) and calculates one of the following for severity stages:

> Stage 1 - conditions with no complications or problems of minimal severity;

> Stage 2 - problems limited to an organ system or increased risk of complications;

> Stage 3 - problems with multiple site involvement, generalized systemic involvement or poor prognosis;

> Stage 4 - death.

Example: Coronary artery disease would be staged as follows: stage 1, stable angina; stage 2, progressive angina; etc.

MHDO is using the Medical Episode Grouper© (MEG) by Truven Analytics in order to reflect a more complete picture of the episode cost for the following procedures:

1. removal of precancerous skin,

2. removal of noncancerous skin,

3. hip replacement,

4. knee replacement,

5. shoulder arthroscopy,

6. knee arthroscopy,

7. gallbladder removal,

8. carpal tunnel surgery,

9. vaginal delivery and

10. C-section delivery

Constructing the Episode:

The MEG uses clinically based logic to create groupings of claims. These episodes are built from the diagnosis codes that appear on the claim lines to ensure only relevant services are included; services performed at the same time that are not associated with the same diagnosis code would not be grouped into a given episode.

Severity of Episodes

For each episode, the MEG calculates a MEG Diagnosis Related Group (DRG) and assigns a severity stage based on the information that appears in the claim. There are four stages:

Stage 1- Conditions with no complications or problems of minimal severity

Stage 2- Problems limited to an organ system; increased risk of complications

Stage 3- Multiple site involvement; generalized systemic involvement; poor prognosis

Stage 4 -Death

The median payment information that appears on the website is calculated by considering all episodes, regardless of severity. However, we are using the median to calculate the average cost-we use the median vs the mean **because the median is less likely influenced by extreme values**. The median episode will typically have no complications or problems and minimal severity because these tend to be the most common type of episode.

For the surgical procedures on CompareMaine the median cost represent Stage 1 severity episodes with the exception of Stage 2 gallbladder procedures.