Three Basic Statistics

- Numerator and denominator counts: episodes, beneficiaries, reimbursement, case mix weight, etc.
- Payments (sum and average of numerator)
  - Not applicable for Average Case Mix, Outlier Payments
- Average length of stay (numerator and denominator)
  - Not applicable for Average Case Mix numerator, Average Number of Episodes denominator
Percentiles

- Percentiles are at the heart of PEPPER.

- It is easy to confuse percents and percentiles.

- Let’s clarify the definitions and how they relate to each other in PEPPER.
Target Area Statistics

- **Numerator** – number of episodes/sum of dollars/case mix weight as in numerator definition; will not display if <11

- **Denominator** – number of episodes/sum of dollars/beneficiaries as in denominator definition; will not display if <11
Target Area Percents

- Target area percents are calculated by dividing the numerator count by the denominator count for each HHA for each time period, then multiplying by 100.

- Example: Episodes with 5 or 6 Visits:

  \[
  \frac{16 \text{ episodes with 5 or 6 visits}}{98 \text{ total episodes}} \times 100 = 16\%
  \]
Target Area Rates

- Target area rates are calculated by dividing the numerator value by the denominator value.

Example: Average Number of Episodes:

\[
\frac{97 \text{ episodes paid to the HHA}}{84 \text{ count of unique beneficiaries served by the HHA}} = \text{ rate of 1.2}
\]
Target Area Percent or Rate

- The target area percent or rate lets the HHA know its billing patterns.
- More useful information comes from knowing how it compares to other HHAs, which is why we calculate percentiles.
- Definition of a percentile:
  - The percentage of HHAs with a lower target area percent or rate
To calculate percentiles for all HHAs in a comparison group (nation, jurisdiction or state), the target area percents/rates are sorted from largest to smallest for each time period.

Example:

– If 40% of the HHAs’ target area percents/rates were lower than HHA A, then HHA A would be at the 40th percentile.
Percentile Calculation Example

The top two HHAs’ percents/rates are at or above the 80\textsuperscript{th} percentile.
How does PEPPER identify HHAs at Risk?

- An HHA’s target area percent/rate is compared to other HHAs’ percents/rates in the nation, MAC jurisdiction and state.
- If the HHA’s target area percent/rate is at/above the national 80th percentile it is identified as at risk for improper Medicare payments.
- Compare and Target Area reports:
  - **Red bold print** – at or above the national 80th percentile for the target area