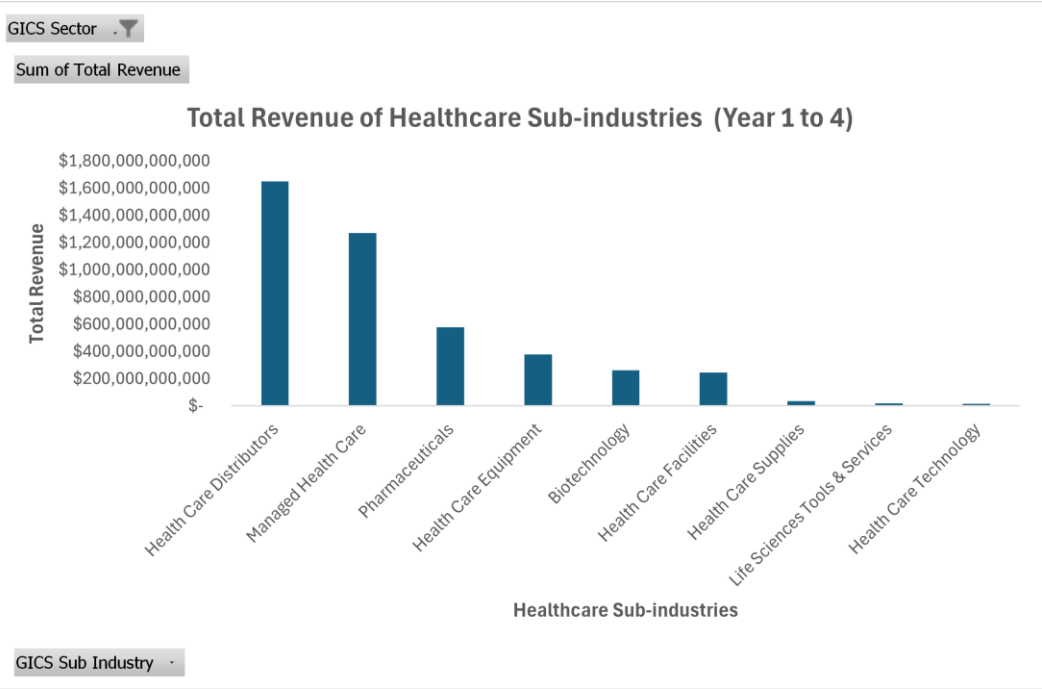


Analyze NYSE Data

Task 1: Descriptive Statistics Analysis & Visualization

**Revenue Distribution Analysis of Healthcare
Sub-Industries (Year 1–4) Findings**

Q1: Which healthcare sub-industries are generating above-average total revenue from Year 1 to 4?
Q2: What does this reveal about revenue distribution within the sector?



The chart shows the total revenue made by sub-industries in the Healthcare sector from Year 1 to 4.

Based on the data and chart, the **average (mean) total revenue** across all healthcare sub-industries is approximately **\$495.33 billion**. The top three sub-industries with total revenue above the mean are **Health Care Distributors, Managed Health Care, and Pharmaceuticals**. These three contribute a combined **total of \$3.5 trillion**, which is about **78.5% of the entire sector's total revenue** revealing a significant concentration of financial power in a few areas with market domination.

This insight is supported by the **median** revenue which is **\$263 billion** (Biotechnology) meaning **50% of sub-industries earn below this amount, as it is right-skewed distribution too** implies a performance gap between large players and the rest of the sector.

With a **standard deviation \$585.4 billion greater than the mean** suggests that **revenue values are widely dispersed** with a few extremely high-revenue outliers pulling up the average and masking the lower earnings of most sub-industries. The **range** of revenue is **\$1.63 trillion**, from **\$15.5 billion** (Health Care Technology) to **\$1.65 trillion** (Health Care Distributors) which emphasizes the **stark disparity** in revenue generation within the healthcare sector. This supports the conclusion of **market concentration and structural imbalance**, potentially signaling opportunities for policy intervention, investment diversification, or innovation targeting in underperforming sub-industries.