### INVESTIGATING RELATIONSHIPS WITH PATIENT DATA

### Scenario

Following your previous analysis of the General Medicine and General Surgery service lines' Length of Stay (LOS) and benchmarking data, an interesting trend has emerged. While both teams are performing well against their CMS benchmarks, the General Surgery service line has been using progressively fewer hospital resources over time. The question now is: why has General Surgery been able to reduce its resource utilization, and what factors are driving this trend?

A key place to start investigating is patient days, which is calculated by summing the Length of Stay (LOS) across all patients in the General Surgery service line. This metric can provide valuable insight into changes in the overall demand for hospital resources and help identify patterns in how care is being delivered.

## **Objective**

In this assignment, you will explore why the General Surgery service line has been using fewer hospital resources over time. You will specifically focus on identifying patterns in patient days and investigate the factors contributing to this decline. Your analysis should help determine whether the reduction in resource utilization is due to operational improvements, changes in patient characteristics, or other external factors.

### Instructions

# 1. Data Analysis:

- o Review the trend in patient days for the General Surgery service line.
  - Calculate the sum of Length of Stay (LOS) over time to identify patterns or changes in the data.

o Investigate any changes in the volume or acuity of patients in the General Surgery service line. Has there been a shift in the types of surgeries performed or patient demographics.

## 2. Identify Contributing Factors:

- o Examine whether the reduction in resource utilization is due to operational changes (e.g., improved care coordination, faster discharges, use of outpatient procedures).
- o Consider whether there are external factors (e.g., changes in insurance policies, clinical guidelines, or patient preferences) that might be influencing how resources are being used.
- Explore whether advances in surgical techniques or the increased use of minimally invasive procedures are contributing to shorter hospital stays and fewer resources needed.

### 3. Recommendations:

- Based on your findings, propose at least three recommendations for
  General Surgery to continue reducing resource utilization while maintaining high-quality care.
- o Consider whether any of the factors driving this reduction in resource use could be applied to the General Medicine service line or other areas of the hospital.

#### 4. Deliverables:

- PowerPoint Presentation (no more than 5 slides): Present your analysis, findings, and recommendations in a clear, concise, and engaging way. Be sure to include:
- o A summary of the patient days trend for General Surgery.

- o Key factors contributing to reduced resource utilization.
- o Actionable recommendations for continued improvements.
- Written Report (optional): If you feel that more detailed explanations are needed, you may include a short-written report (1-2 pages) to provide further context.