

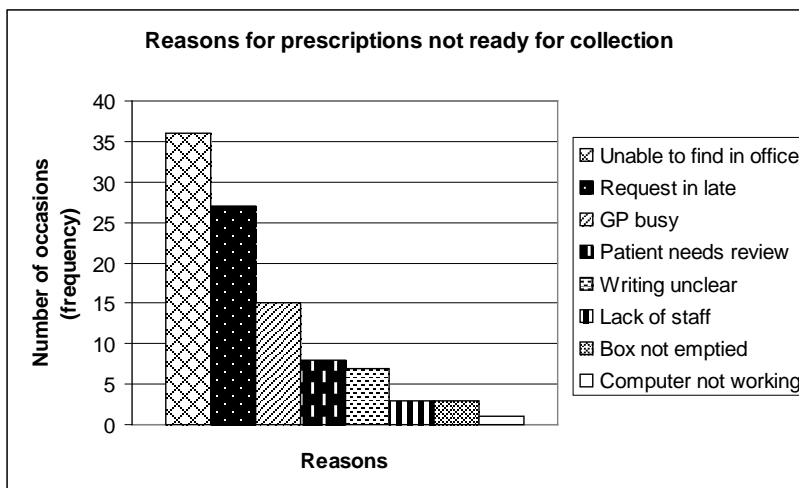
The Pareto Principle

Developed by Quality Management pioneer, Dr. Joseph Juran (1904 – 2008), the Pareto Principle was named after 19th Century Italian economist Vilfredo Pareto, when he observed that 80% of the income in Italy, was received by 20% of the population. The "Law of the Vital Few" as it is known, sets out that majority of results (approximately 80%) in a given situation, can be determined by a small number of causes (roughly 20%) – the 80:20 rule.

Pareto analysis uses a bar graph to separate the few major problems that cause the effect from the many possible causes, allowing you to prioritise competing or conflicting “problems” so that resources are allocated to the most significant areas. Pareto charts are a useful tool to analyse data about the frequency of problems or causes in a process and when there are many problems or causes and you want to focus on the most significant.

Follow these simple steps to construct a Pareto chart:

1. Identify the problem area and possible causes.
2. Collect data on the causes you have identified (e.g frequency of occurrence, cost).
3. Create a table and rank order from largest to smallest.
4. Construct a bar graph with the causes along the horizontal axis and the frequency or cost on the vertical axis.
5. Your graph can be enhanced by using cumulative frequency and stacking the bars.



Information adapted from Improvement Foundation Australia, Quality Improvement Tools Handbook, 2010, p.19.