



# Lean Tool – Pareto Charts

### Purpose

Visualization of highest impact opportunities

# **Application**

 Used to help focus efforts on the opportunities that offer the greatest potential for improvement by showing their relative frequency or size in a visual format

# Methodology

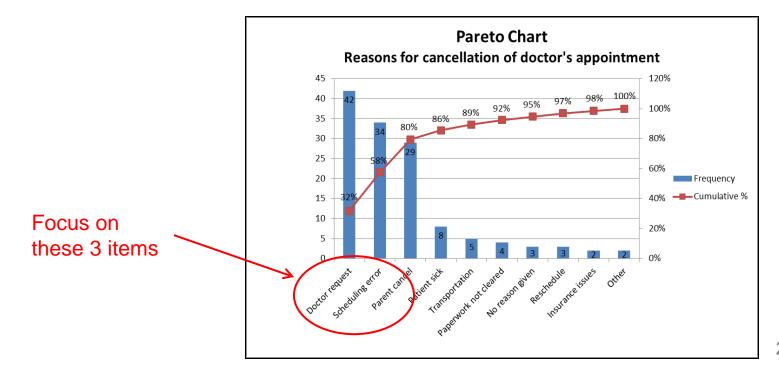
- 1. Develop a list of problems, items or causes to be compared
- 2. Develop a standard measure for comparing the items
  - · How often it occurs: frequency (e.g., utilization, complications, errors)
  - How long it takes: time
  - How many resources it uses: cost
- 3. Choose a timeframe for collecting the data
- 4. Collect the data, recording the category each time it occurs
- 5. Subtotal the measurements for each item, how often it occurred (or cost or total time it took).
- 6. List the items being compared in decreasing order of the measure of comparison: e.g., the most frequent to the least frequent.







- 7. Create a bar graph with the list the items on the horizontal axis from highest to lowest. Label the left vertical axis with the numbers (frequency, time or cost). Draw in the bars for each item
  - Microsoft Excel offers simple charting tools you can use to make your graphs, or you can do them with paper and pencil.
  - Adding a line to the graph showing cumulative percentage can also be helpful
- 8. Use the diagram to identify those items that appear to account for most of the problem
- 9. Further analyze the top problems to identify root cause and develop improvement ideas











Potential Cause	# of occurrences
Boss told wrong time	1
Receptionist didn't unlock door	9
Forgot to set alarm	2
Took wrong turn	1
Car broke down	1
Snow slowed down traffic	2
Drank decaf coffee	1
Alarm clock time incorrect	14

Potential Cause	# of occurrences
Alarm time incorrect	14
Receptionist didn't unlock	9
Forgot to set alarm	2
Snow slowed down traffic	2
Boss told wrong time	1
Took wrong turn	1
Car broke down	1
Drank decaf coffee	1

