Tip Sheet: Data Visualization

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Prepared for: Charity Insights Canada Project (CICP)
Community Education Centre (CEC): https://carleton.ca/cicp-pcpob/cec/

Phase 1: Aggregating Raw Data

Spreadsheet charts cannot easily read raw logs (like a list of 20 individual client visits). You must summarize your data into a table before building your graph.

The COUNTIF function: This function counts the number of times a specific word or value appears in a column.
Syntax: =COUNTIF(Where do you want to look?, What do you want to look for?)
Example: =COUNTIF(B$2:B$21, "Food Hamper")

Tip: Use the $ symbol in your ranges (like B$2:B$21) to "lock" the range. This ensures that when you use the fill handle to drag your formula down to the next row, Google Sheets keeps looking at the exact same list of data!

Phase 2: Building the Basic Chart

Once you have a summary table (e.g., your list of Programs and their Total Visits), you can turn it into a visual.

Select your range: Highlight the summary table (both the text categories and the number totals). Do not highlight your raw data log.

Insert the chart: Go to the Insert menu at the top and select Chart. Google Sheets will automatically generate a chart and open the "Chart editor" panel on the right. If it didn't automatically choose a horizontal bar chart, change the Chart type in the Setup tab to a Bar chart.

Tip: Sorting your data makes your chart easier to read. Highlight your summary table, go to the Data menu, select Sort range > Advanced range sorting options, and sort by your "Total Visits" column. Your horizontal bar chart will automatically reorganize itself!

Phase 3: Decluttering and Labeling the Chart

Default charts include distracting "chart junk" but often leave out important context.

Remove gridlines: Double-click your chart to open the Chart editor. Go to the Customize tab, open the Gridlines and ticks section, and uncheck the box for Major gridlines (or set the line color to 'None').

Add axis titles: Still in the Customize tab, open Chart & axis titles. Choose Horizontal axis title from the dropdown menu and type your label (e.g., "Number of Clients").

Direct labeling: Instead of making people trace a line down to the bottom axis, open the Series section in the Customize tab and check the box for Data labels. The exact number will now sit right next to the bar.

Update the title: Double-click the default chart title directly on your chart to edit it.

Tip: Change the title from a generic label (like "Total Visits") to a clear takeaway message (like "Food Hampers Account for Most Client Visits").

Phase 4: Adding a Second Dimension

What if you want to break your data down further (e.g., splitting "Total Visits" into "First-Time" and "Returning" clients)?

The COUNTIFS function: This works exactly like COUNTIF, but lets you check for multiple things at the same time.
Example: =COUNTIFS(B$2:B$21, "Food Hamper", C$2:C$21, "First-Time")

Expand the chart: You don't need to build a new chart from scratch! Double-click your existing chart. In the Chart editor under the Setup tab, look for Data range. Click the small grid icon ("Select data range") next to your current range, highlight your newly expanded table on the spreadsheet, and click OK.

Tip: Google Sheets will automatically update your graph to show two bars side-by-side for each category. Just make sure to check your Legend (under the Customize tab) so readers know which color represents which group!