Excel 2013 Charting Tips: Part Four

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This article builds on the foundation of the last three *Billing* articles introducing Excel 2013 chart tools. Parts one and two discussed the new icon tools next to Excel 2013 charts. Part three reviewed options on the Ribbon to provide more power and flexibility to your charts. With that foundation, we are now ready to discuss one of the more complex Excel charts: the combo chart.

It is often helpful to display two different types of information in one chart. In today's example, the chart will show the dollar amounts collected from major payors in 2015 and 2016 as well as the average percentage of billed charges collected in 2015 and 2016. The challenge with displaying both sets of data on the same chart is that dollars collected is measured in millions of dollars, while the percentage of charges collected is less than one. If you display both sets of data on the same axis, you will never be able to see the difference between 60 percent (0.6) and 35 percent (0.35) on an axis that goes over one million. The trick is to use a combo chart with two axes, one axis for the dollars and the other axis for the percentage. Here's how to do it.
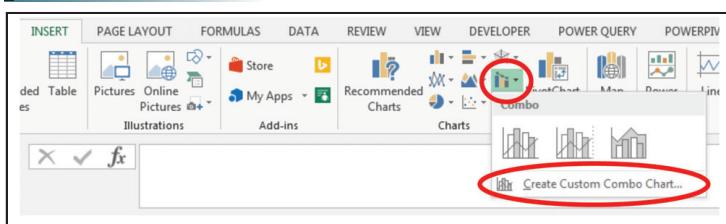
Creating a Combo Chart in Excel 2013

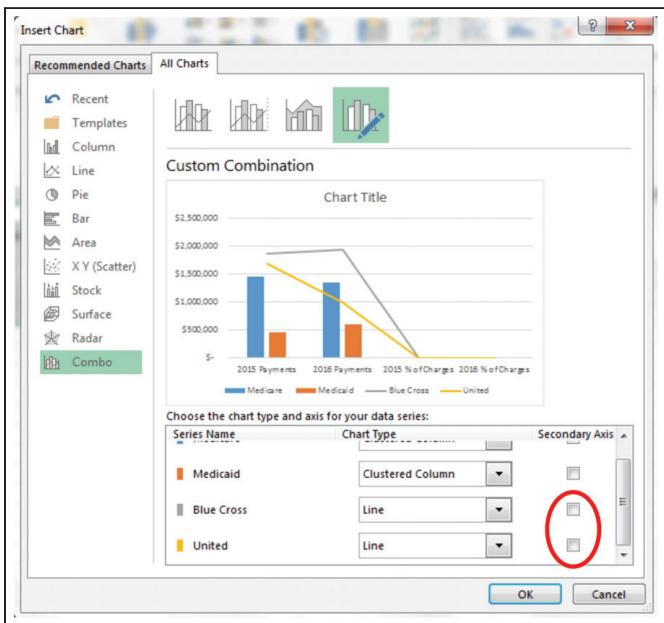If you would like to follow along with this example, please download the sample spreadsheet accompanying this article at mooresolutionsinc.com/articles.

Figure 1 shows the raw data we will use for our sample chart. The data is completely random and has no relation to any contracts or payments with existing payors. Again, notice the dramatic difference between the millions of dollars in the payments columns and the percentages in the percent of charges columns. Highlight cells A2 through E6 and click the Combo Chart button from the Insert tab on the Ribbon, as shown in Figure 2. Then choose "Create Custom Combo Chart," as circled in Figure 2. Your screen should look like Figure 3. Note that I have scrolled down so that I can see line charts listed for Blue Cross and United, while Medicare and Medicaid are clustered column charts. Our problem is that we need to switch rows and columns, as described in Part 3 of this series of articles. For now, leave Blue Cross and United as line charts and check the boxes to plot on the secondary axis. (The two boxes to check are circled in red in Figure 3.) Your screen should look like Figure 4. Now, with the chart selected, click the Switch Row/Column button shown in Figure 5 from the Chart Tools Design tab on the Ribbon. Your chart should look like Figure 6.

Customizing the Combo Chart

That's more like it! Notice what the chart in Figure 6 tells the reader. At a glance, the reader can use the columns to see the trend in payments by the four insurance groups. It's easy to see that in our sample data, United payments are down significantly in 2016. At the same time, it's also easy to see that the percentage of charges has been relatively constant from 2015 to 2016, except for United, which has gone up in 2016. The key is plotting the percentages on the right chart axis—what Excel calls the secondary axis.
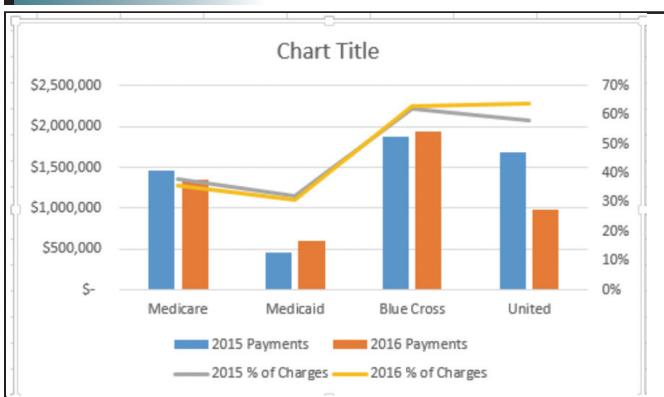
I would suggest a couple of things to customize this chart. First, click on the Chart Title to add a more descriptive title. I chose "2015–2016 Payments and % of Charges" and bolded the title by clicking on the bold "B" icon on the home tab. Next, the Chart Legend is especially important in this chart, so I clicked the plus next to the chart. I hovered over the Legend option in the Chart Elements menu until the right-pointing triangle appeared and clicked the triangle to get the menu shown in Figure 7. I chose "Top" to move the legend to the top of my chart. Finally, I clicked inside

FIGURE 1

	A	B	C	D	E
1					
2		2015 Payments	2016 Payments	2015 % of Charges	2016 % of Charges
3	Medicare	$ 1,456,280	$ 1,355,209	38%	36%
4	Medicaid	$ 452,337	$ 602,151	32%	31%
5	Blue Cross	$ 1,880,032	$ 1,945,283	62%	63%
6	United	$ 1,692,232	$ 990,218	58%	64%
7					

FIGURE 2

FIGURE 3

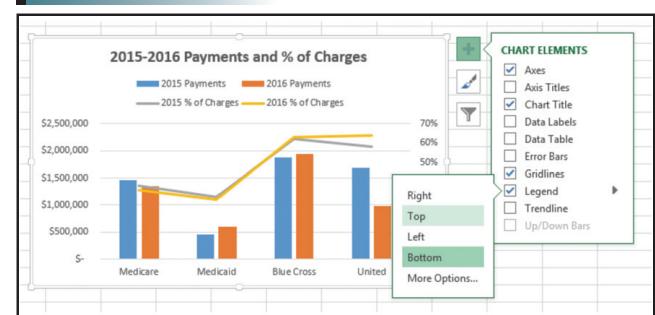**FIGURE 4**

FIGURE 5

FIGURE 6

the main area of my chart (Excel calls it the Plot Area). My cursor changed to a four-way arrow. I dragged the plot area down a little to add some space between the legend and the actual chart. The finished product is shown in Figure 8.

More Resources

If a picture is worth a thousand words, the ability to coherently and convincingly create charts is critical for conveying information. Mastering the charting tips in this *Billing* series should go a long way toward helping to create those charts. For more charting tips and examples, visit mooresolutionsinc.com. There are several playlists and close to 100 videos on charting data for a medical practice. ◼
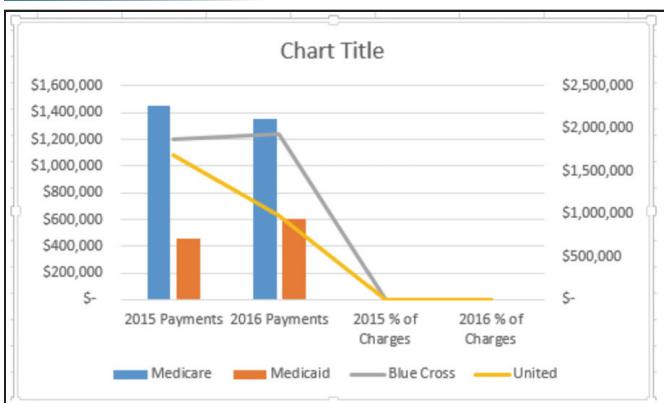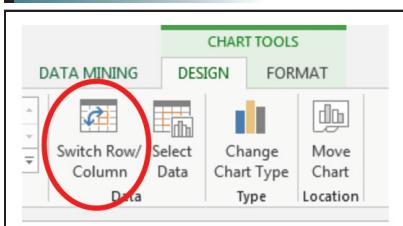
Nate Moore, CPA, MBA, FACMPE, writes custom SQL Server code to mine practice management and clinical data for analysis in Excel, dashboards, and via email. Moore's first book, Better Data, Better Decisions: Using Business Intelligence in the Medical Practice, *written with Mona Reimers, is an MGMA bestseller. His free Excel videos have been viewed over 1.5 million times and are available at mooresolutionsinc.com. Like PivotTableGuy on Facebook or follow @PivotTableGuy on Twitter to be notified each time an Excel video is released.*

FIGURE 7

FIGURE 8