ABOUT PULSEIQ

The Pulse IQ data cubes in combination with Excel PivotTables provide an excellent resource for compiling and presenting information for the financial and appointment data housed in the PulsePro PRMS system.

Click anywhere to continue...

Click Box

The Pulse IQ data cubes in combination with Excel Pivot Tables provide an excellent resource for compiling and presenting information for the financial and appointment data housed in the PulsePro PRMS system.
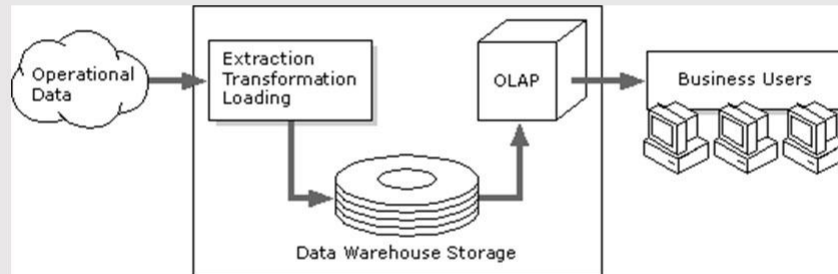
Click anywhere to continue

As discussed in the Working with the Output PACE lesson, The PulsePro Reports data can be exported directly to Microsoft Excel.
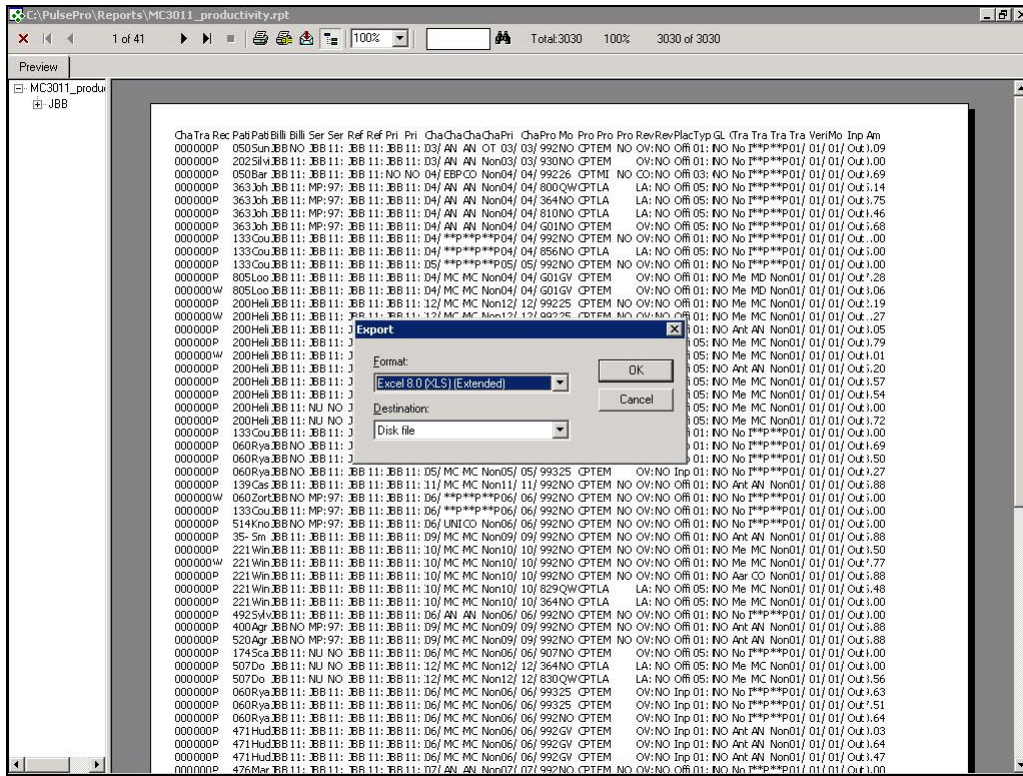
However, as our PRMS data increases in size this becomes an inefficient means for analyzing data in Excel and may actually create too many records to load into Excel.

PULSEIQ

PulseIQ utilizes Sql Analysis Services to organize and summarize large amounts of data from the PulsePro PRMS system into a warehouse so it can be evaluated quickly using Microsoft Excel Pivot Tables.

Operational Data → Extraction Transformation Loading → OLAP → Business Users

Data Warehouse Storage

Click anywhere to continue...

PulseIQ utilizes Sql Analysis Services to organize and summarize large amounts of data from the PulsePro PRMS system into a warehouse so it can be evaluated quickly using Microsoft Excel Pivot Tables.

Click anywhere to continue.

PULSEIQ DATA CUBES

The PulseIQ warehouse of data is compiled every evening providing a "Static" set of data as of the previous night's build. The warehouse is comprised of four data cubes.

- **Aging Cube** - The Aging cube is built from a series of subtotals that are captured every time you process the Month Close in PulsePro and provides access to Patient, Insurance, Unassigned, and Total AR Aging.

- **Appoinment Cube** - The Appointment cube is built from the appointment data and provides access to the Appointment Counts and Minutes.

- **Financials Cube** - The Financials Cube summarizes financial data and is use full in Trend reporting.
  Click Box

- **Transactions Cube** - The Transactions cube is built directly from the transaction detail entered into PulsePro and contains the most detailed information of all the cubes. This cube should be used to balance "Month Close" financial data to the PulsePro Month Close reports.

Click anywhere to continue...

The PulseIQ warehouse of data is compiled every evening providing a "Static" set of data as of the previous night's build. The warehouse is comprised of these four data cubes.

Click anywhere to continue.

PULSEIQ MISSING VALUES ARE NOT ALLOWED

In the data cube world we must have a value at all times. In the real world it is permissible to have "missing" values. For example:

Private pay patients can be considered to have missing insurance information. Payments from patients will not have an associated insurance company tagged to the payment so the insurance information is considered missing.
We may have failed to get the patient's date of birth – that is considered "missing".

In all of these cases the rules of the data cube require that missing values be replaced with something. Thus you will see things like this:

NOSPE to indicate "Not Specified" Click Box
XX to indicate "Unknown"
?? to indicate "Illegal Value"
12/01/2020 or **1/1/1900** to indicate a missing date

Click anywhere to continue...

Since Data Cubes must have a value at all times, displayed are rules for replacing missing values when the warehouse data is processed each evening.

Click anywhere to continue.

PULSEIQ OPEN/CLOSED FINANCIAL DATA

We use the term "Open" and "Closed" to refer to two classes of data in the cube:

Open financial data is data that has not been period closed.
Closed financial data is data that has been period closed.

Typically PulsePro reports against period closed information. The data cubes can report against either group separately or combined.

In the data cube world we must have a value at all times. Since "open" transactions are not period closed, there is no period close date to assign and thus no value. This violates our requirement. To solve this problem, all "open" transactions have been assigned an artificial period close date of 12/2020. Whenever you see a close date of 12/2020 you know that this is not actually closed.

Click anywhere to continue...

Displayed are the rules for dealing with open data such as un-verified transactions or transactions that have not been processed in a Month Close.

Click anywhere to continue.
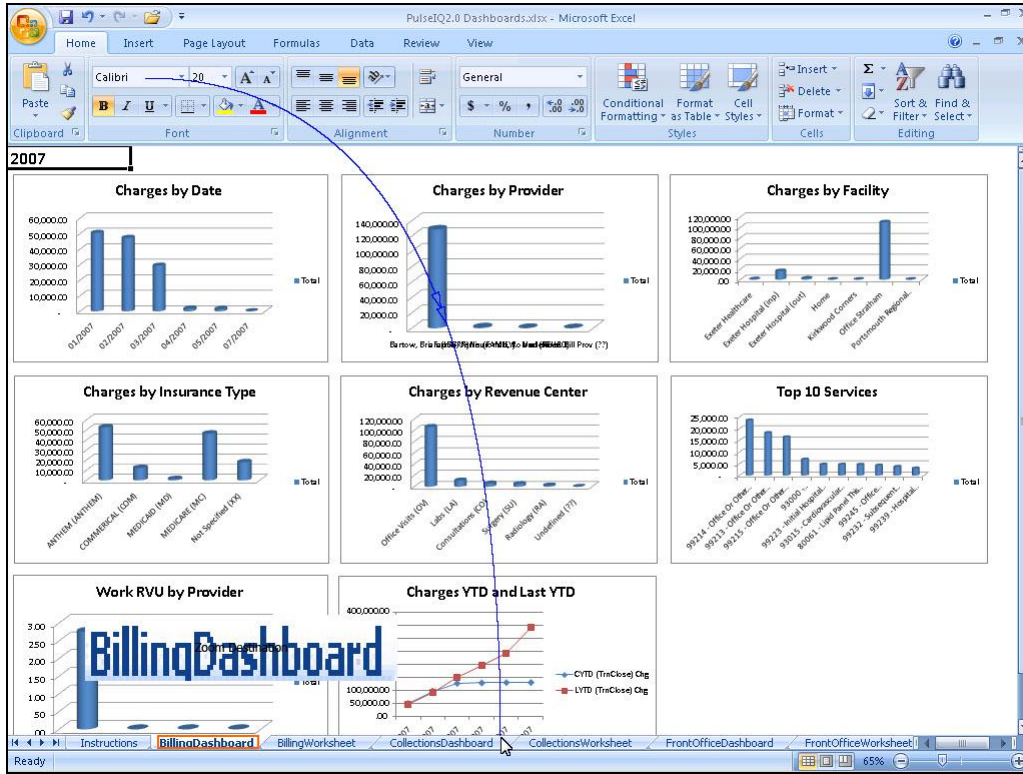
The results are demonstrated here in this sample Excel spreadsheet that is provided to you with the purchase of PulseIQ. This spreadsheet contains areas for the Billing results including Charges and RVU production.
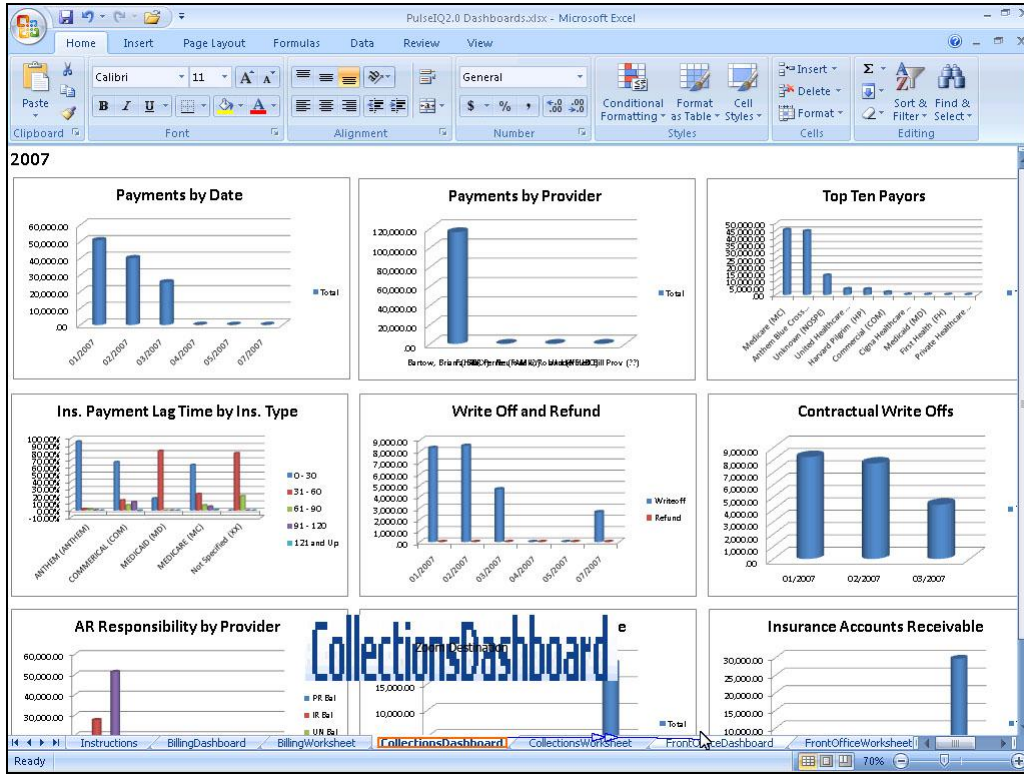
Collections results including Payments, write-offs, refunds and Accounts Receivables.
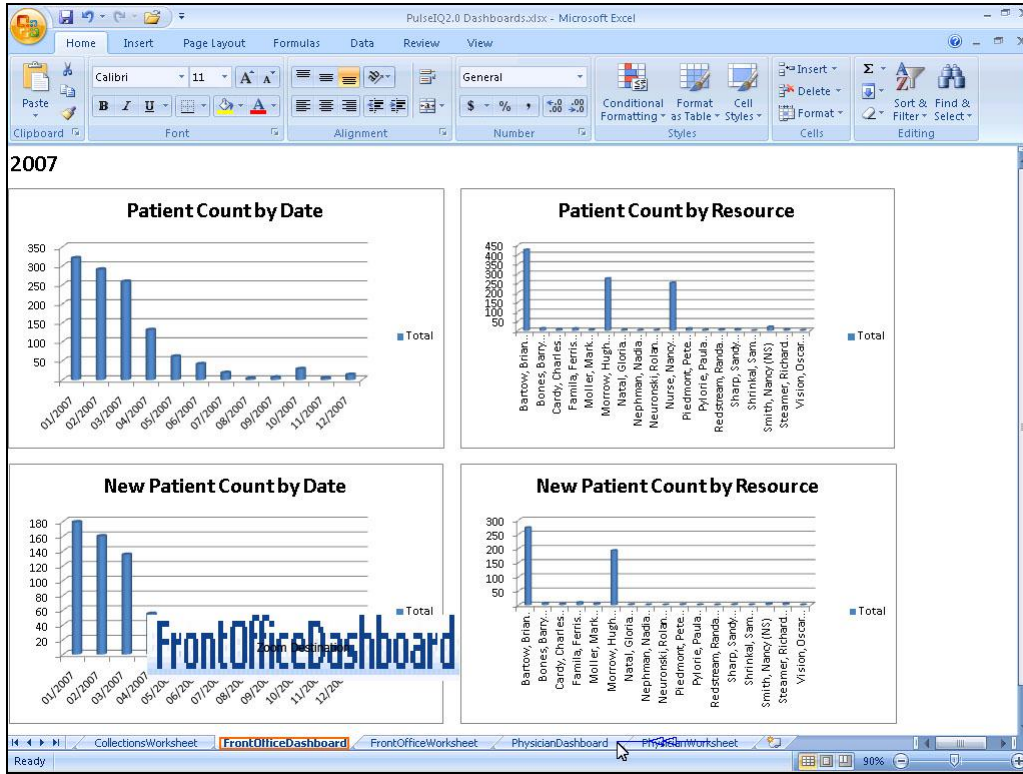
Front office appointment results including Total Patient and New Patient counts.
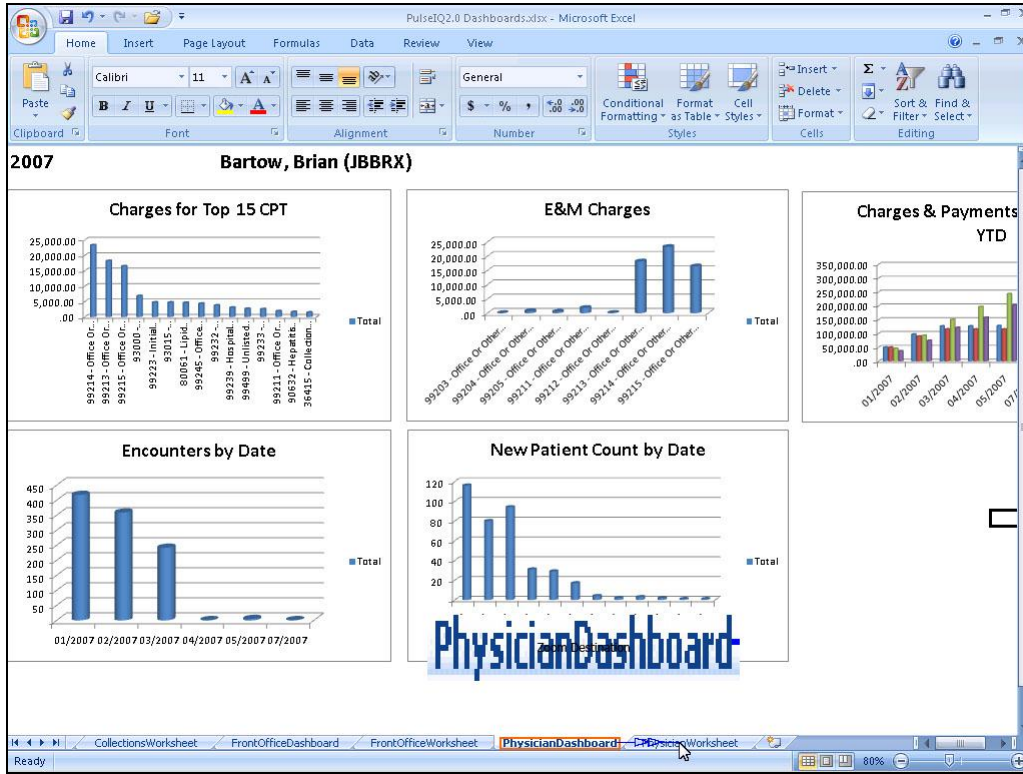
And specific physician results including Production and Appointment data.
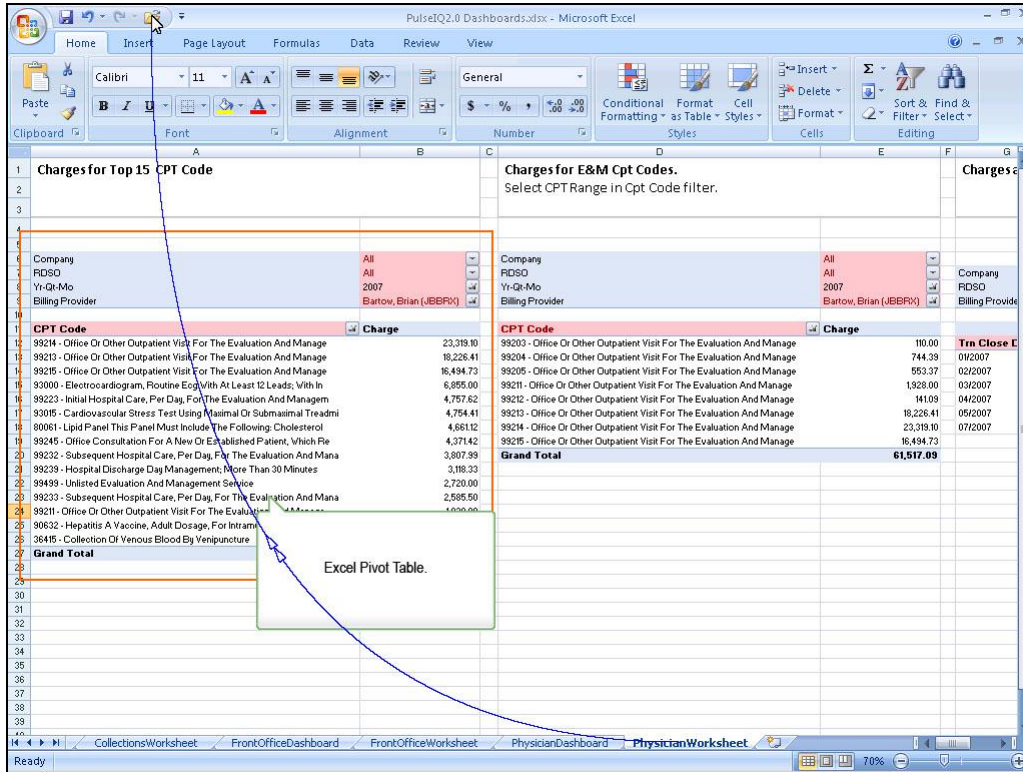
All of these results are accomplished by utilizing the Excel Pivot table tool to read directly into the Analysis Server data cubes.

LEARNING ABOUT PIVOTTABLES

This lesson will briefly demonstrate creating an Excel Pivottable. However, it is your responsibility to fully learn about Excel Pivottables from the excellent videos and articles that Microsoft provides on their website. We have included some helpful links to these Microsoft resourses in the "PulseIQ" Course Companion document on PACE.

Click anywhere to continue...

Click Box

This lesson will briefly demonstrate creating an Excel Pivot table. However, it is your responsibility to fully learn about Excel Pivot tables from the excellent videos and articles that Microsoft provides on their website. We have included some help full links to these Microsoft resources in the "PulseIQ" Course Companion document.

Click anywhere to continue.

EXCEL VERSION

PulseIQ requires Microsoft Excel version 2007 or higher.

Click anywhere to continue...

Click Box

PulseIQ requires Microsoft Excel version 2007 or higher.

Click anywhere to continue.
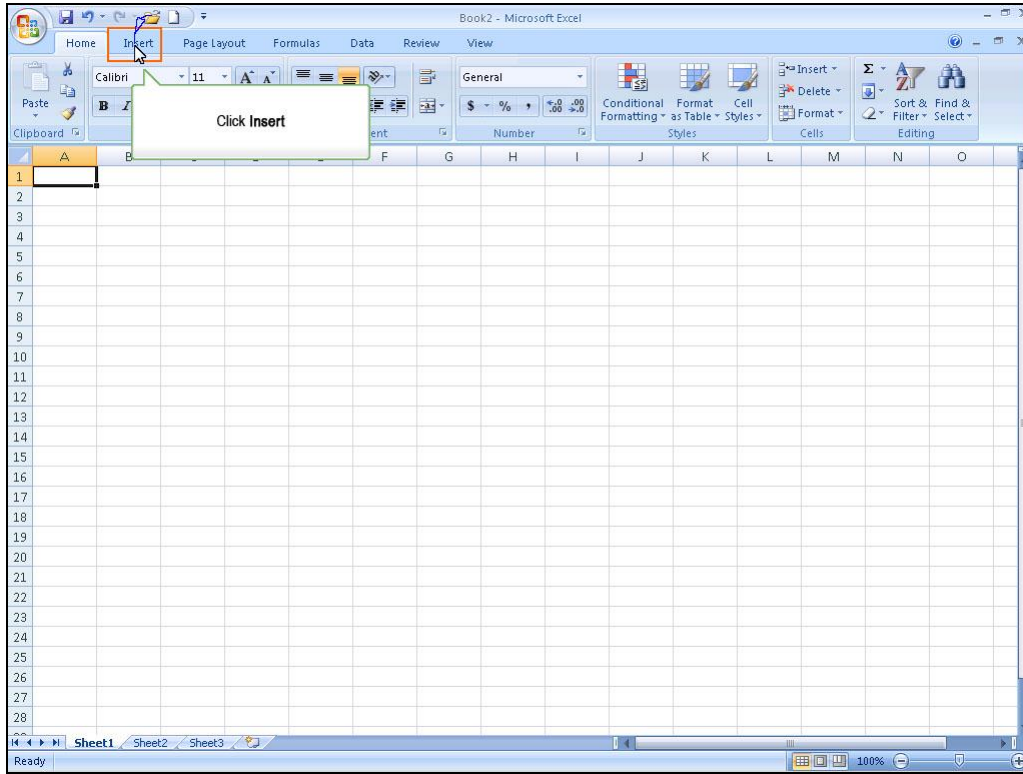
Let's demonstrate how to insert a pivot table accessing the transactions data cube to display the production figures for Dr. Bartow. Click insert on the ribbon.
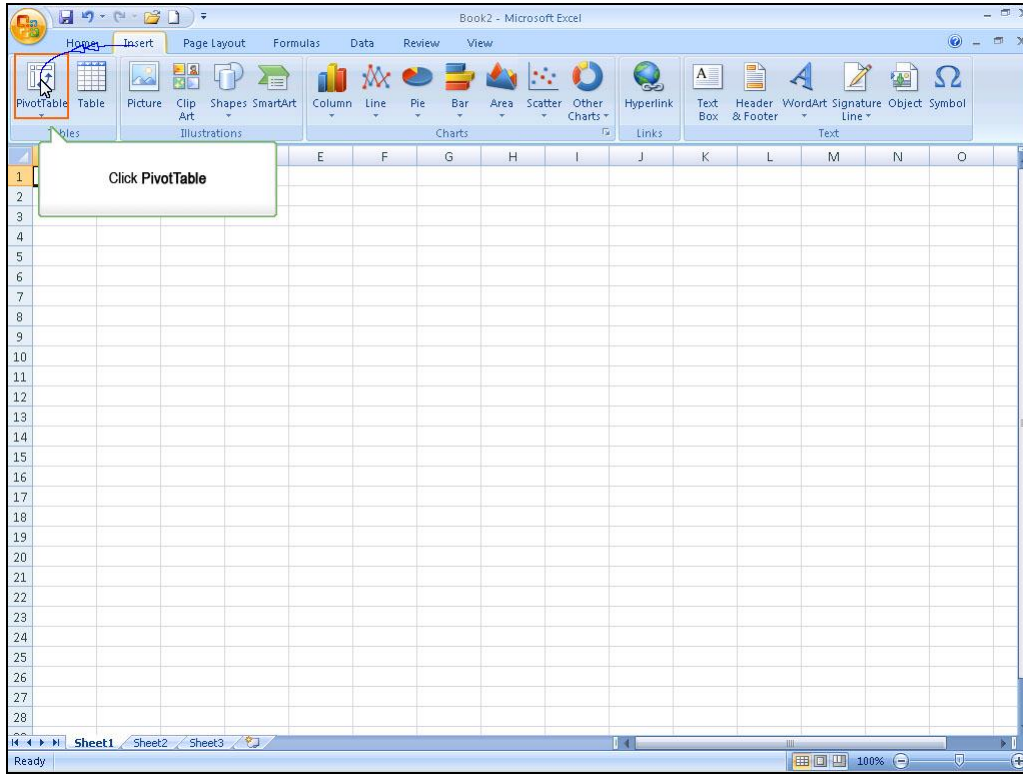
Click the PivotTable button on the ribbon.
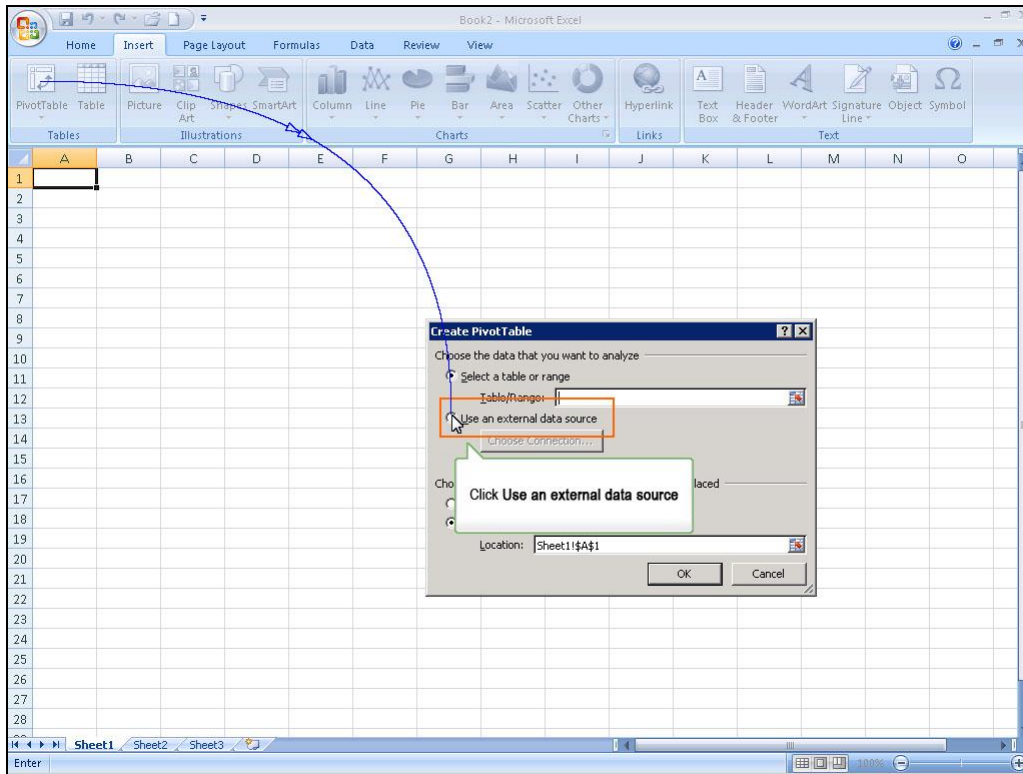
Click the Use an external data source radio button.
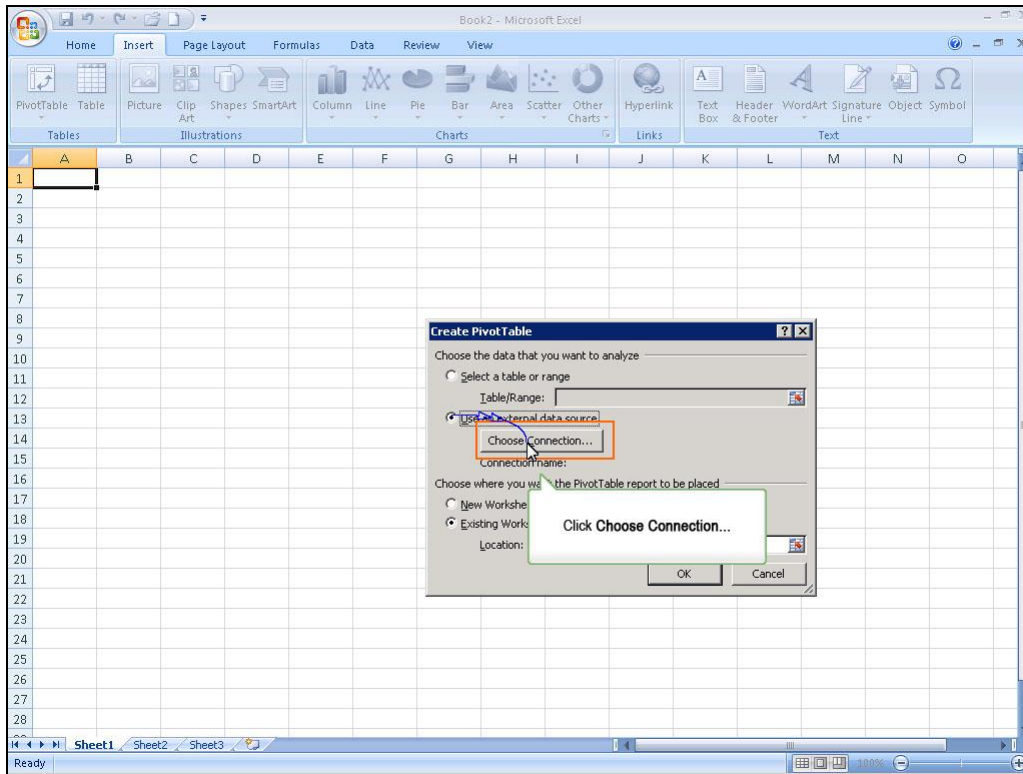
Click the choose connection button.
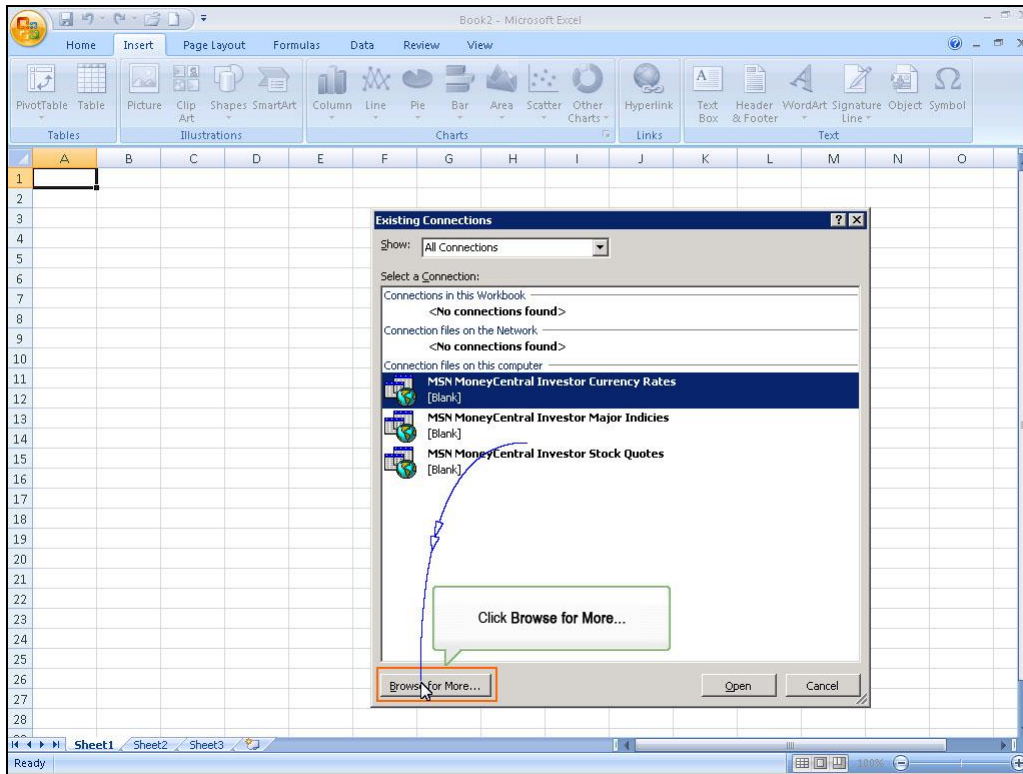
The existing connections window opens. If this is the first time to access PulseIQ cubes you will have to click the "Browse for More" button, otherwise the existing PulseIQ data connections will display at the top of the list.
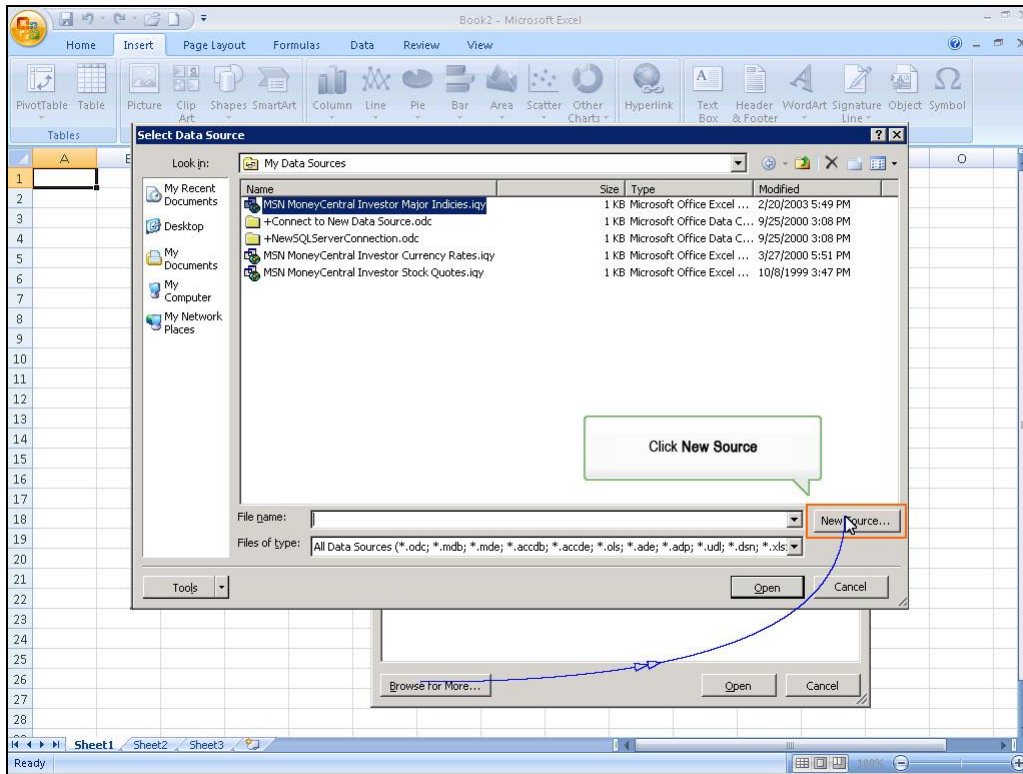
Click the New Source button.
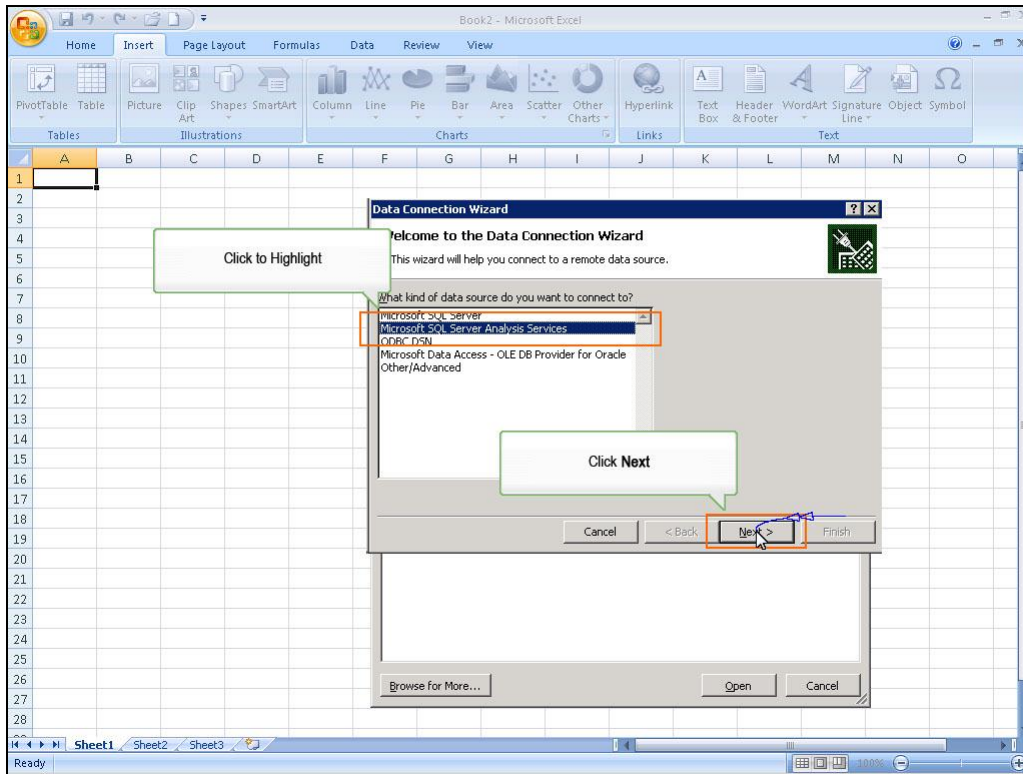
Click to highlight the Microsoft SQL Server Analysis Services in the list of data sources and then click the Next button.
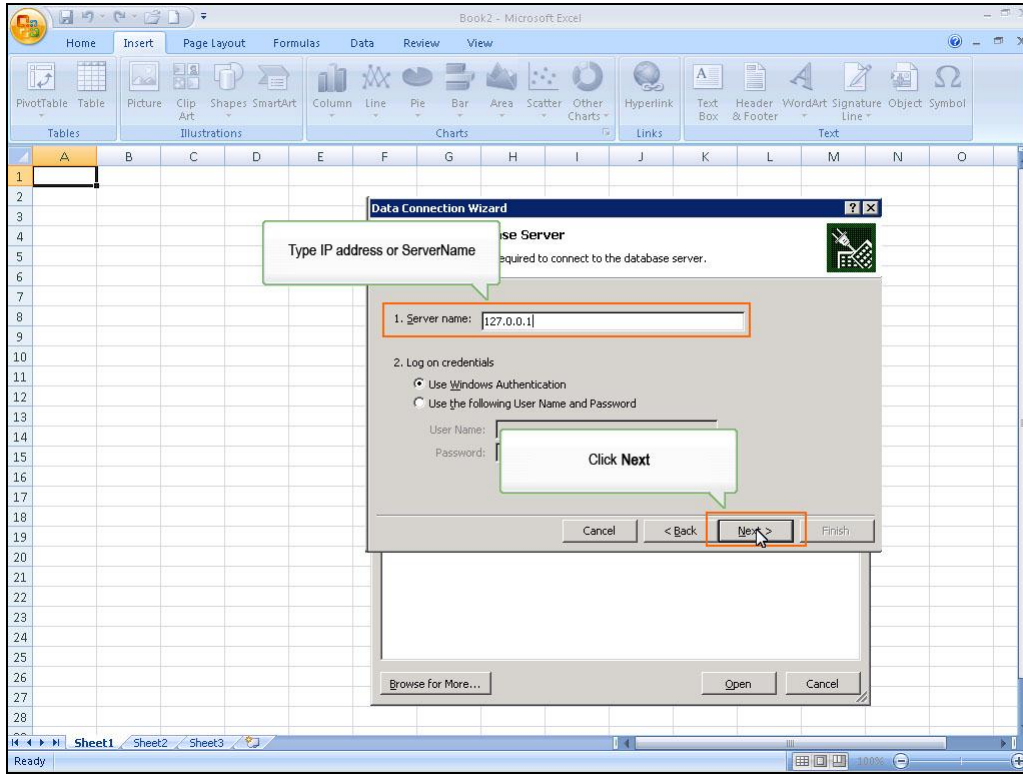
Type the IP Address or Server name for the SQL Analysis Server on your network and then click the Next button.
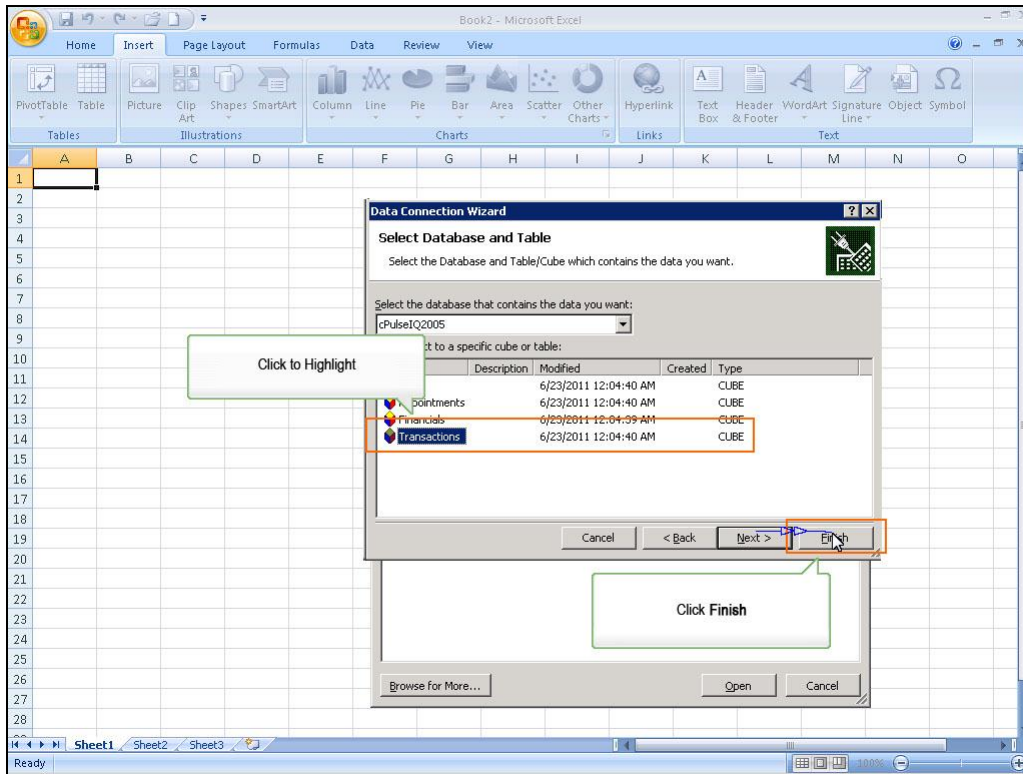
Click to highlight the desired data cube in the list and then click the finish button.
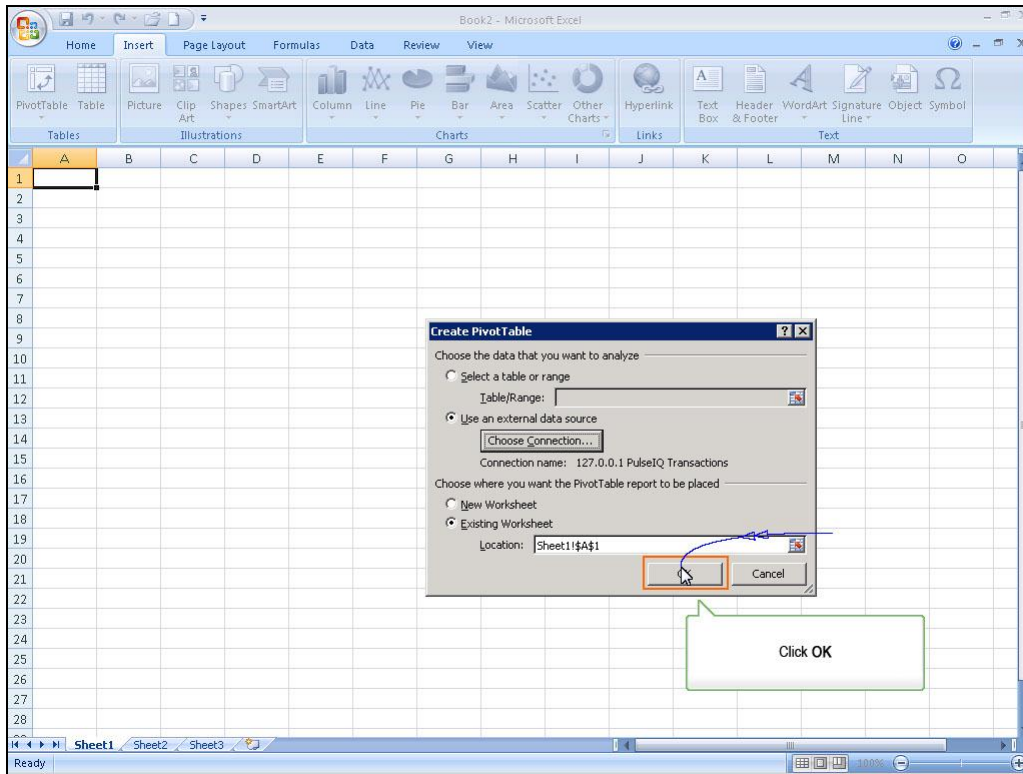
Click OK.
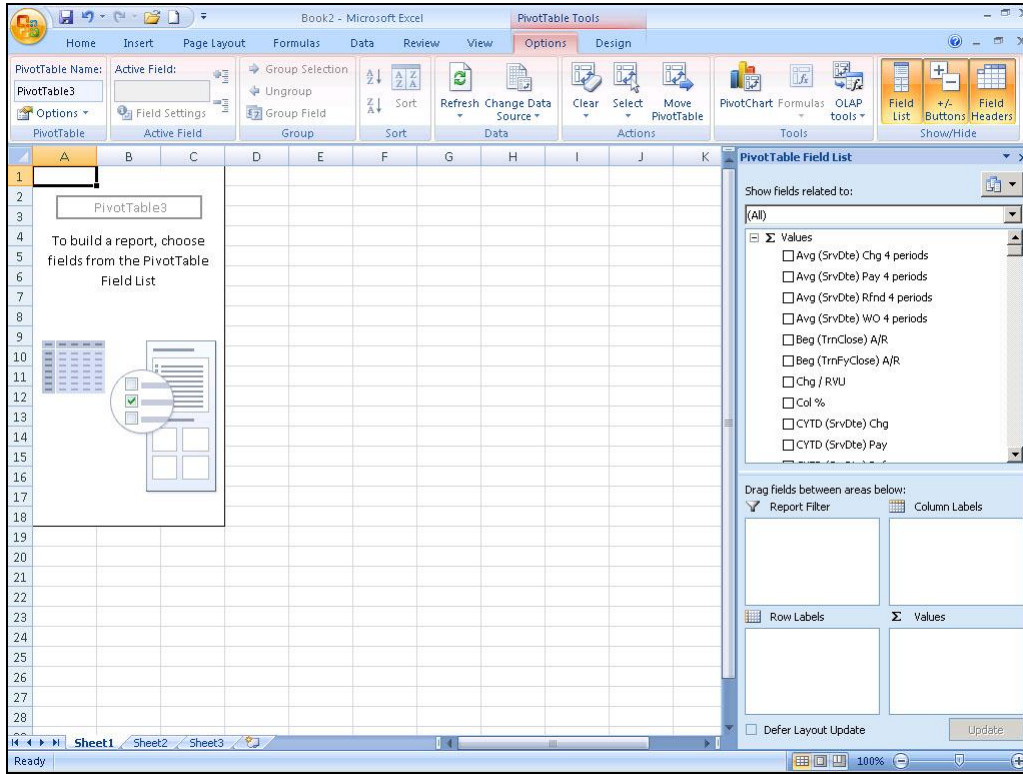
The pivot table displays in the spreadsheet and the pivot table field list opens in a separate window to the right.
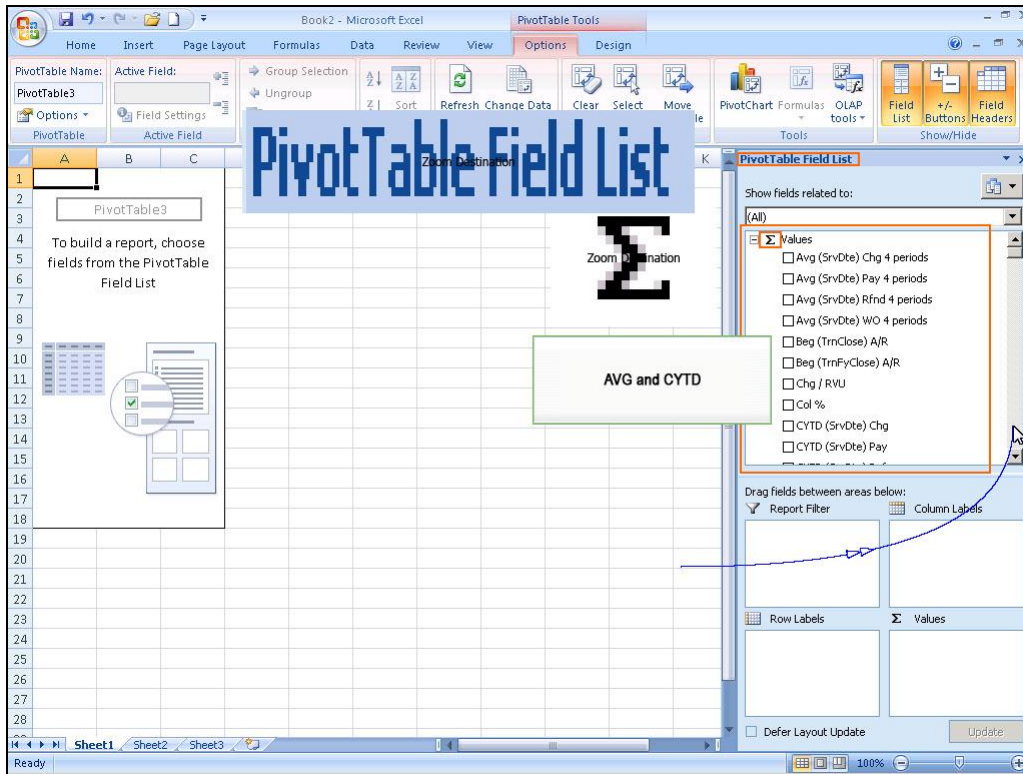
The pivot table field list contains Measure Values which are data that we report on such as productivity amounts and are identified by the summation icon. Some Measure Values are calculations such as Averages and Current YTD...
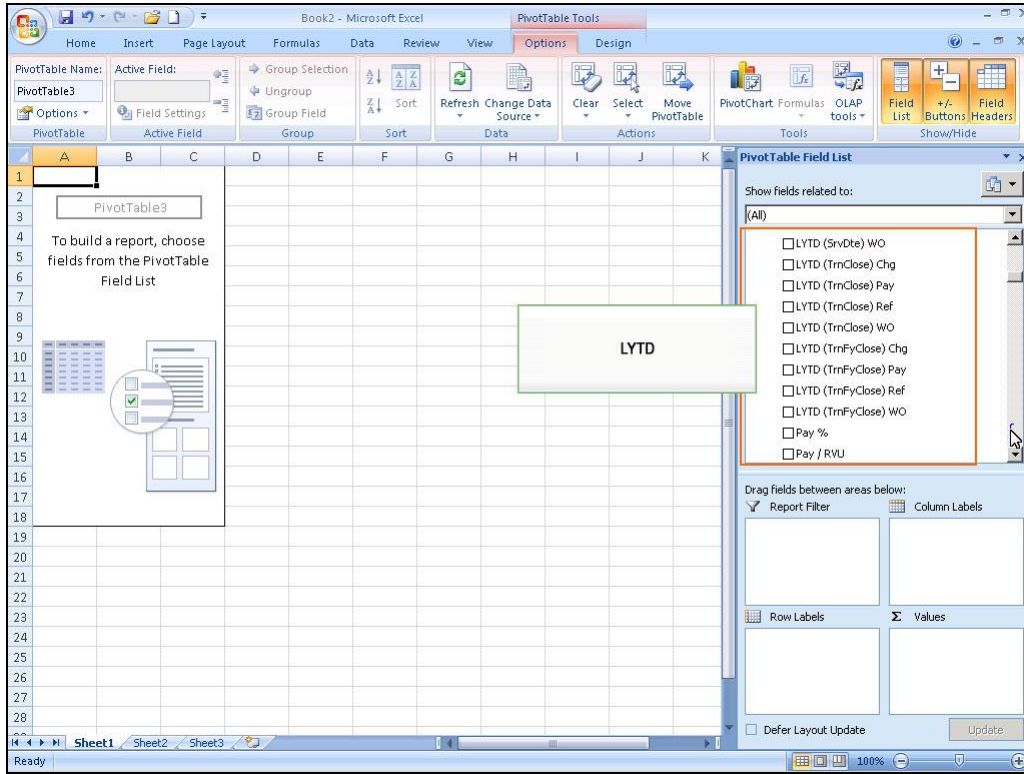
And Last Year to Date calculations
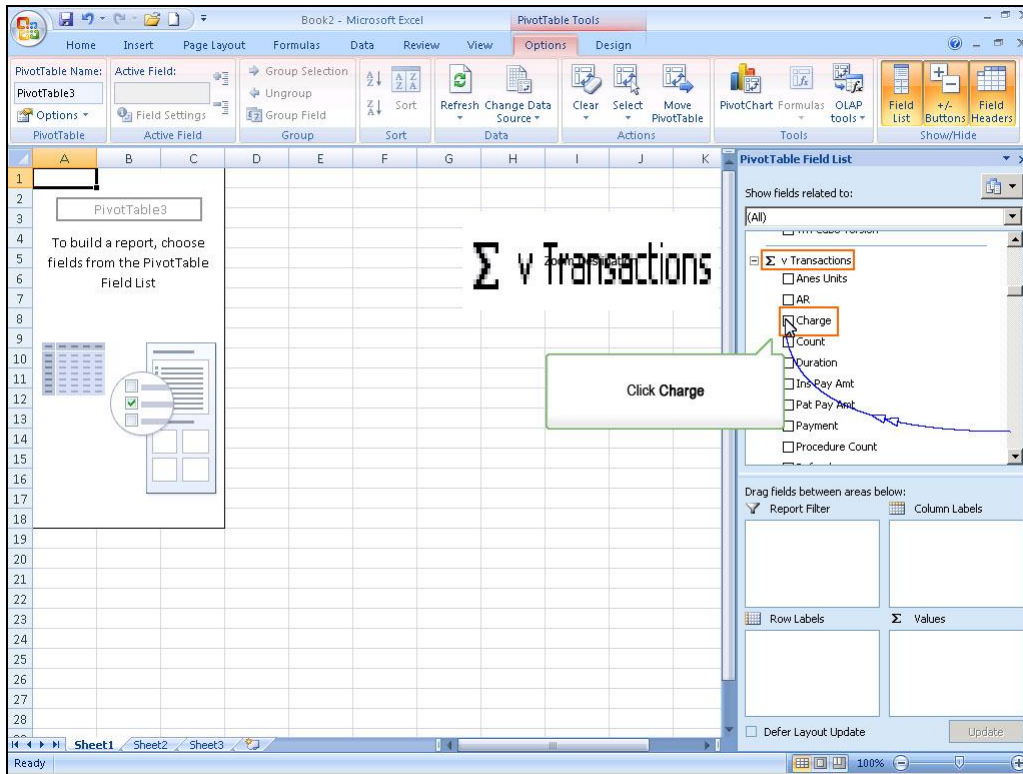
Or Measures are summary totals of specific fields in the data cube. These measures are defined in the PulseIQ course companion document on PACE. Let's select the charge, payment, write-off and refund measures to report on in this pivot table.
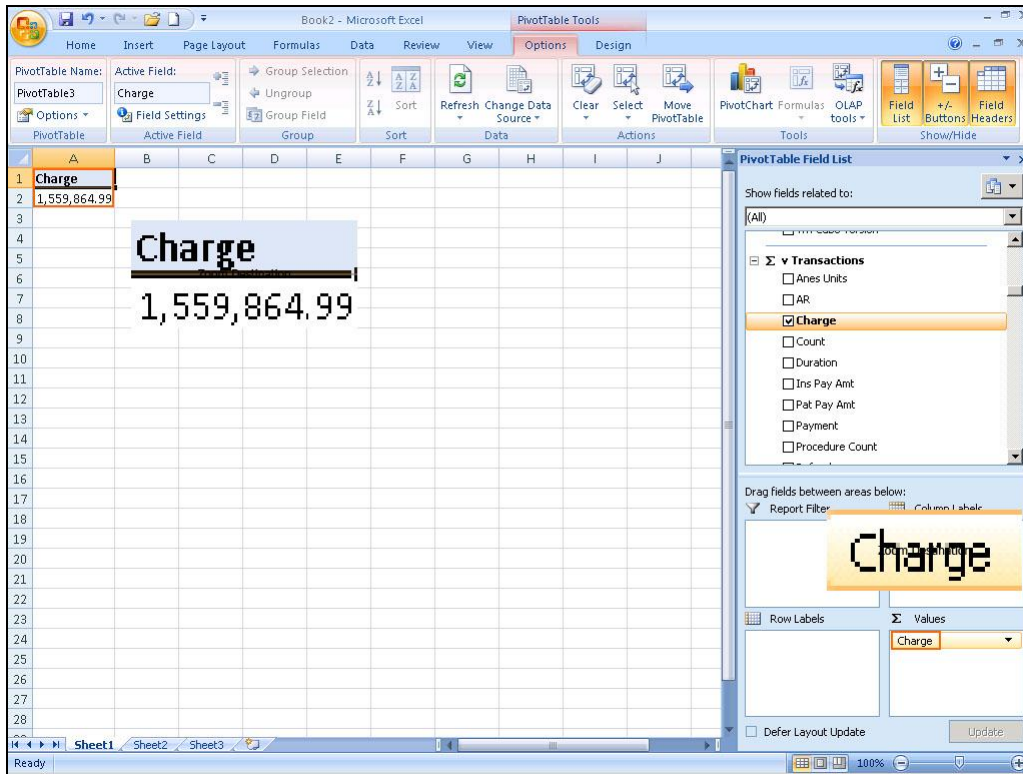
Checking a measure value puts the measure in the Values pane in the field list and displays the Charge Amount in the pivot table.
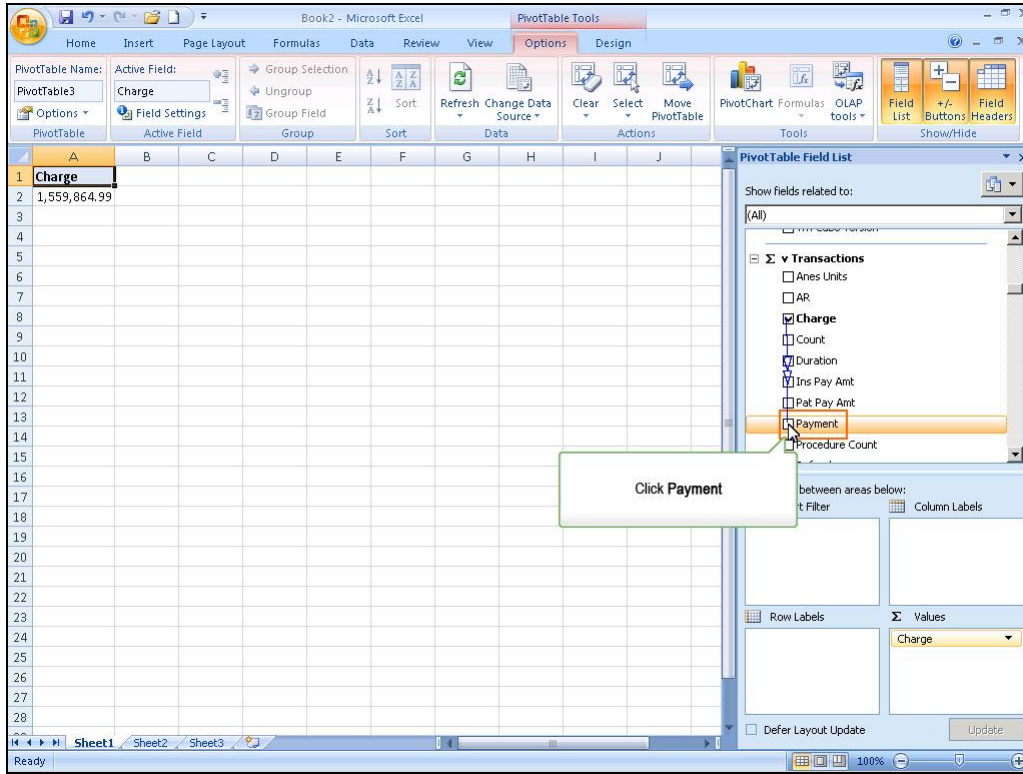
Now let's continue with the remaining production amounts. Click on the payment measure.
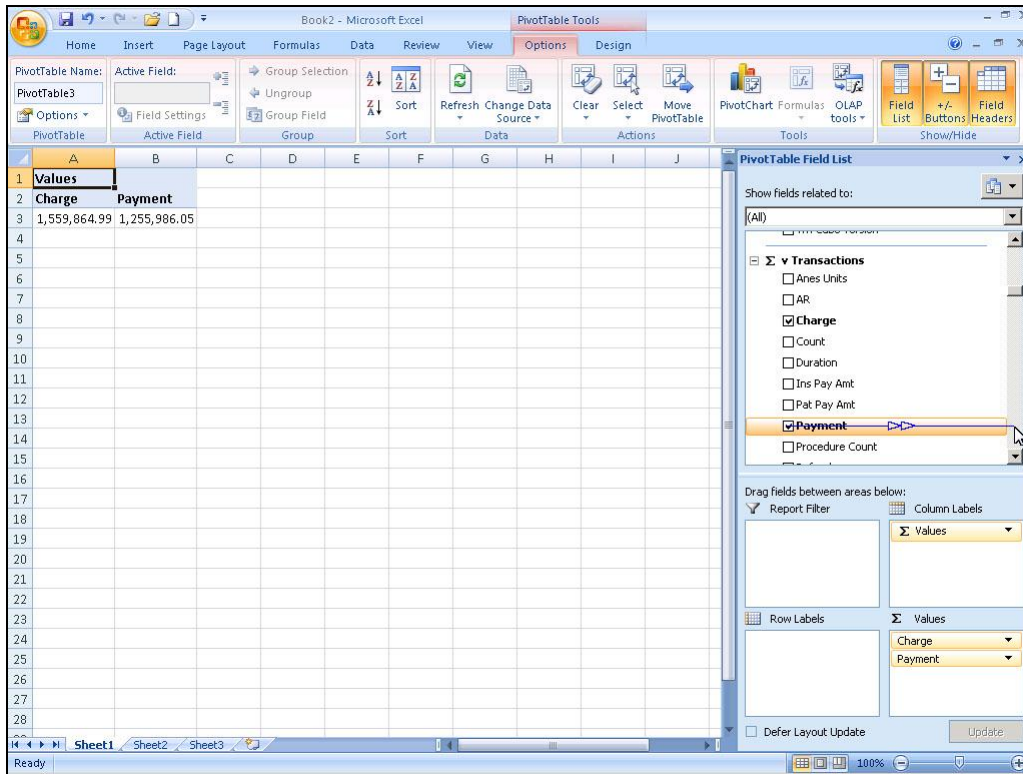
No audio
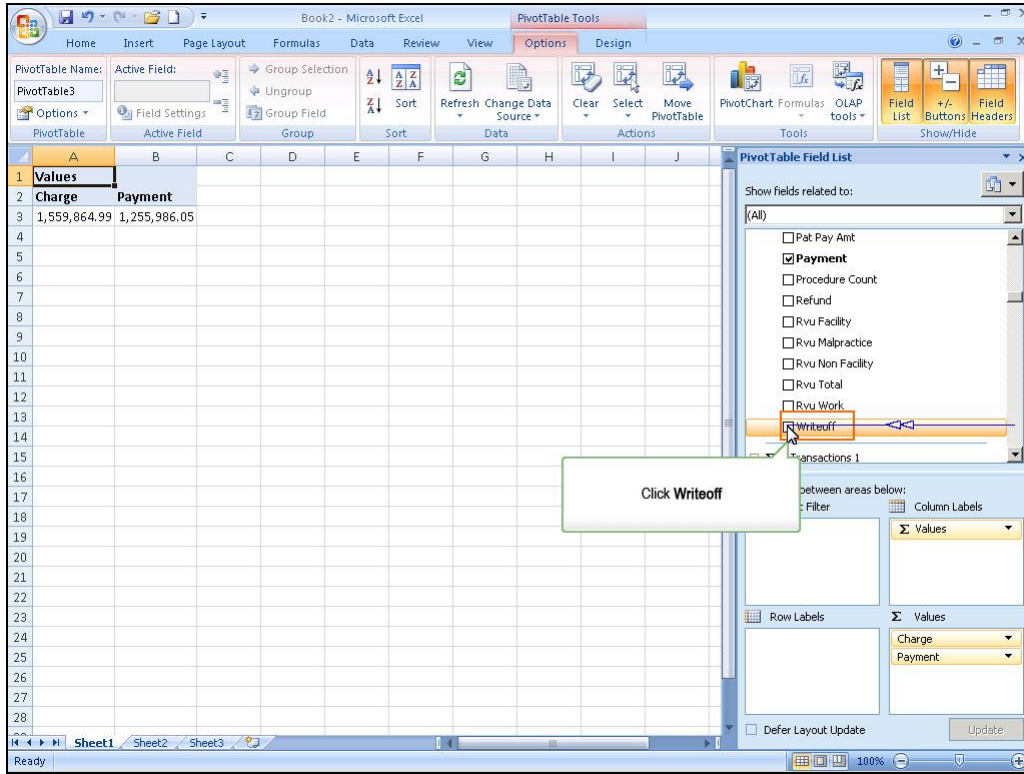
Click Write-off.

Click refund.

Now our pivot table displays the four production totals for the entire transactions cube. Now let's subtotal these amounts by the month close date dimension.
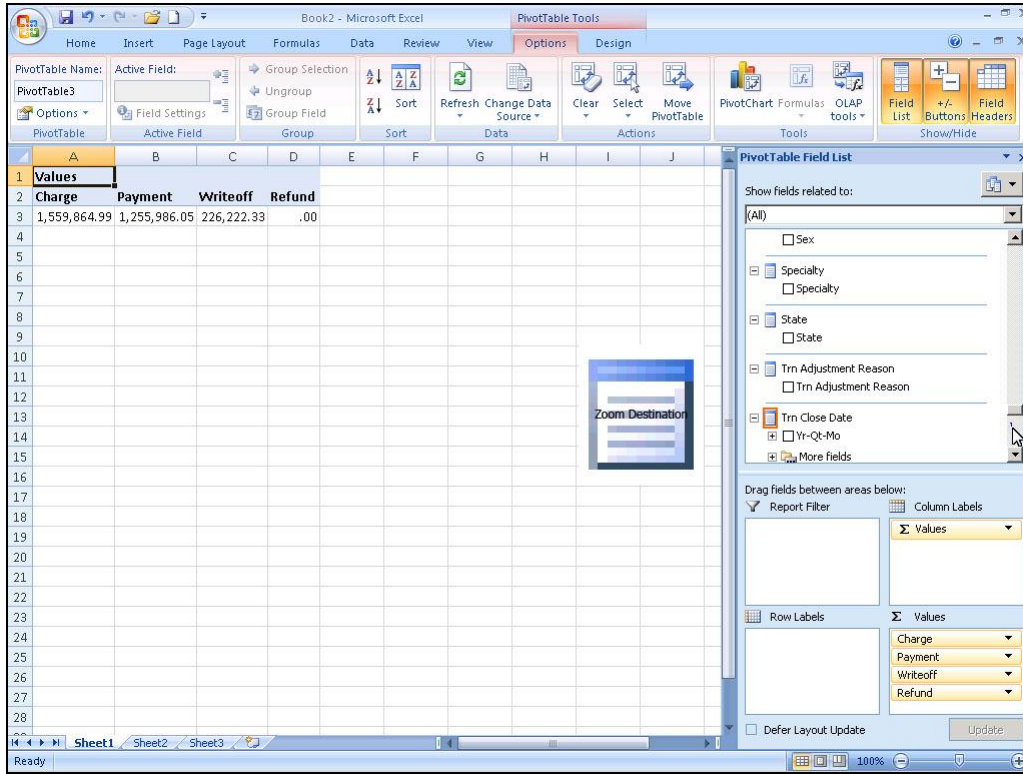
Dimensions are data elements that we can report by or subtotal by similar to the Filters and Groupings in the PulsePro Reporter. They are listed below the measures in the pivot table field list and are identified with the report icon.
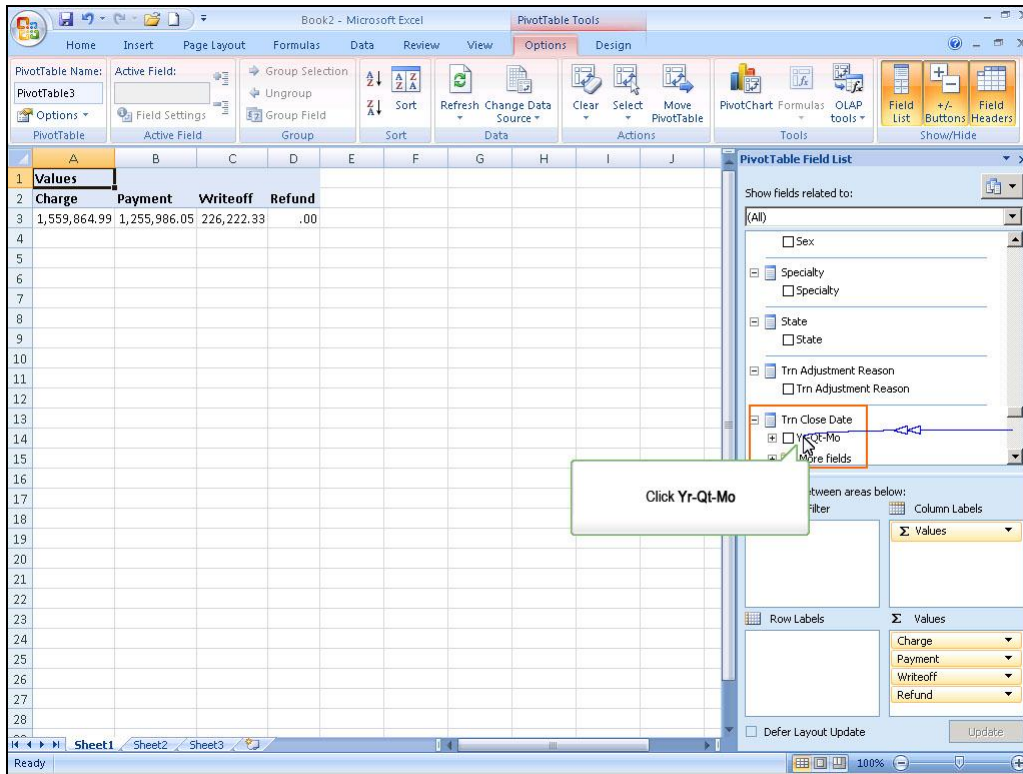
These dimensions are defined in detail in the PulseIQ companion document found on PACE.   Click on the Transaction Close date dimension.
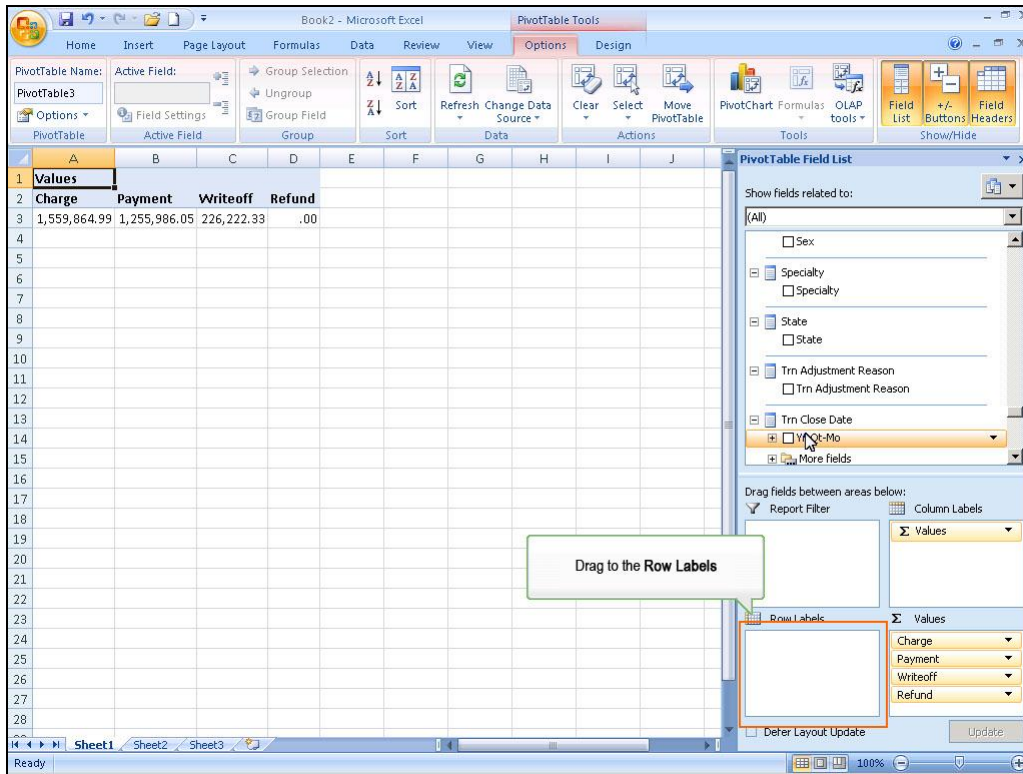
And drag it down to the Row Labels pane in the Pivot table field list.

No audio

Now the transaction close date displays as the row in the pivot table and the production figures are sub totaled by the close date.

Next, let's filter this pivot table for the billing provider Dr. Bartow.

Click on the billing provider dimension
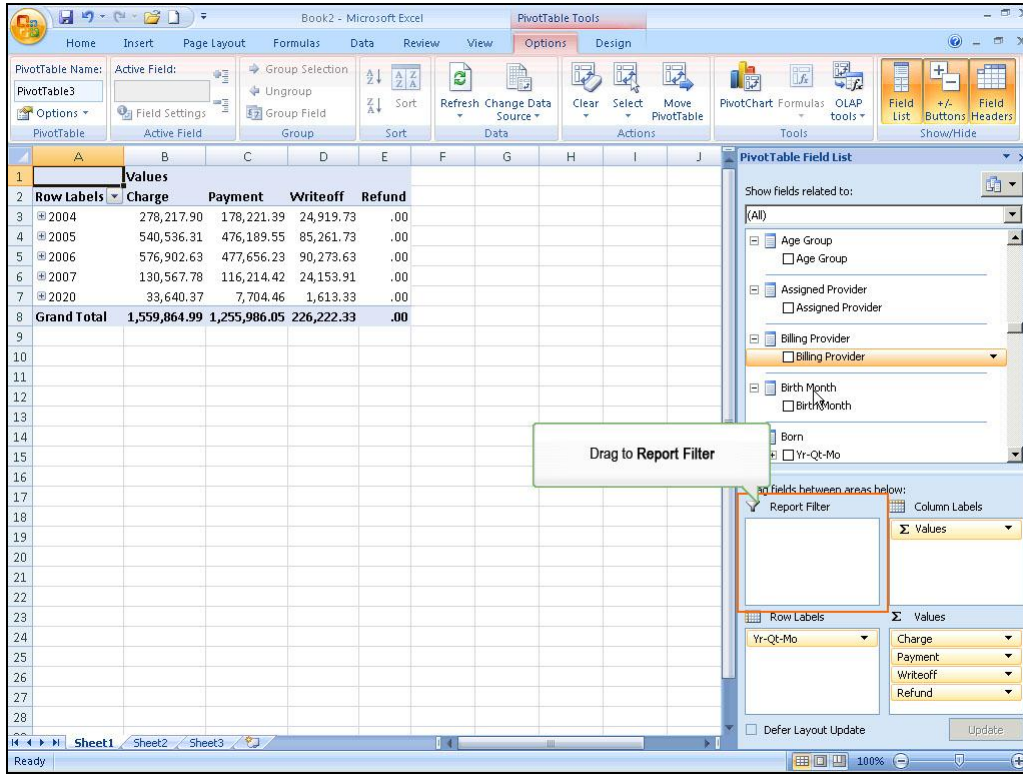
Drag the billing provider to the Report Filter pane in the Pivot table field list.

Now the pivot table contains a report filter for the billing provider.

Click the down arrow button on the report filter.
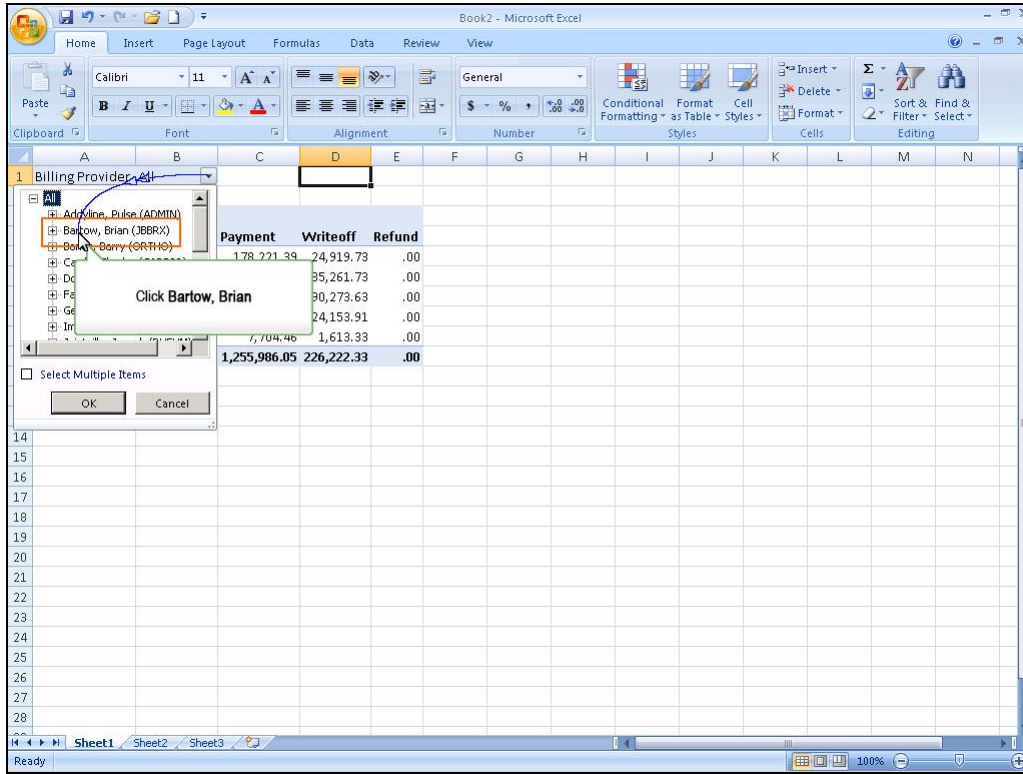
Click on Dr. Bartow in the filter list.

And the pivot table refreshes for just Dr. Bartow's production totals.
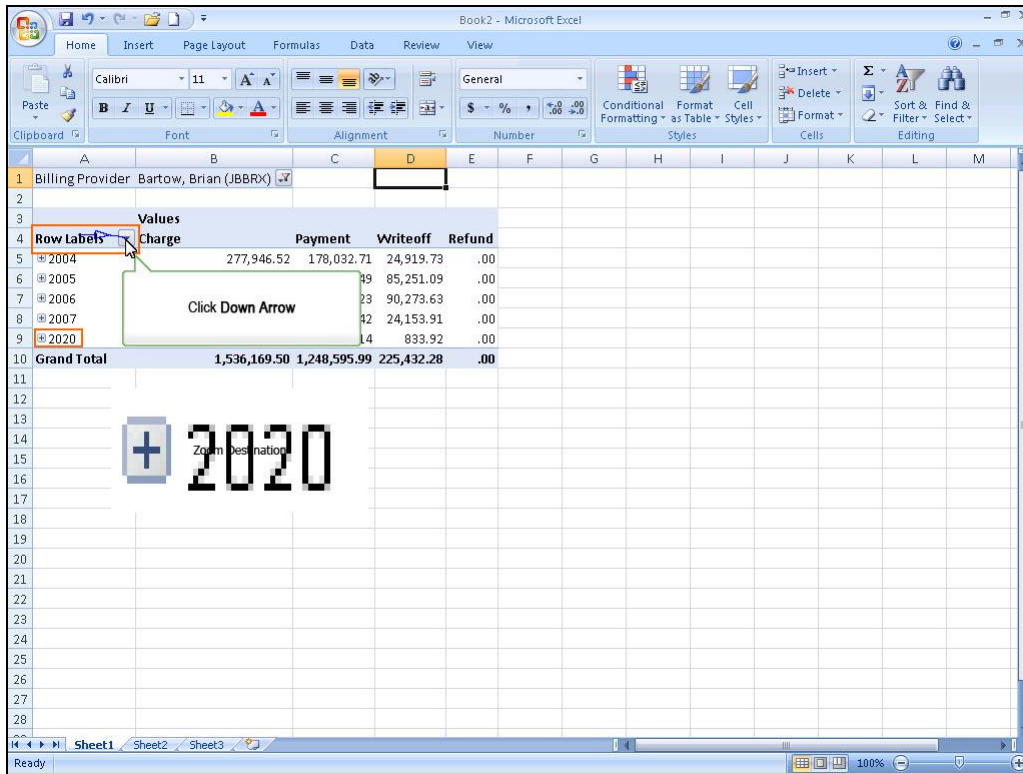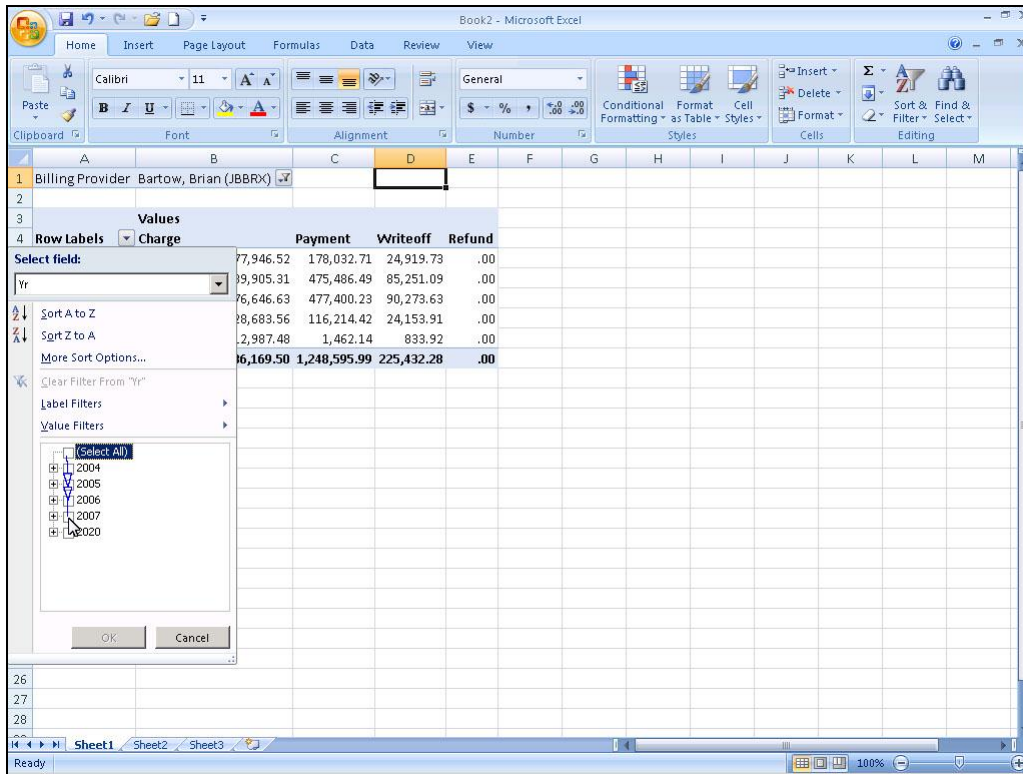
As discussed in the PulseIQ Course Companion document, any current transactions that have not been included in a Month Close will display with the date of 12 2020. Let's filter the row data for the year 2007. Click the down arrow button on the row filter.
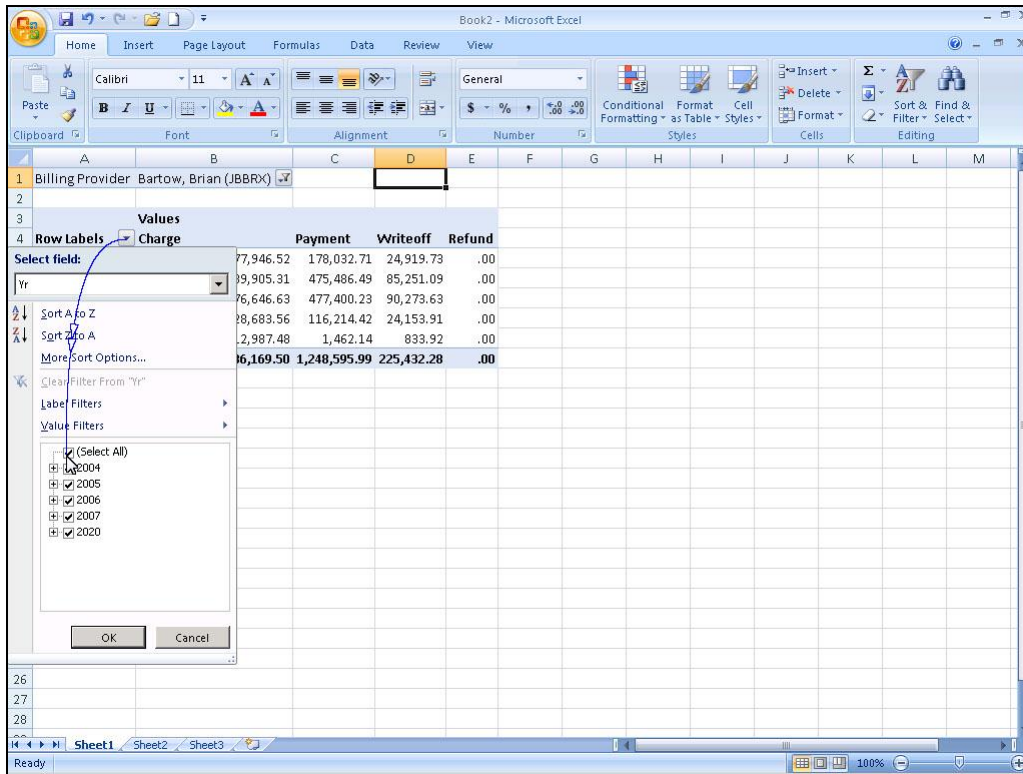
And select just the year 2007 by unrelenting all.

And check 2007.

Now our pivot table displays only 2007 month closed production for Dr. Bartow. Click the plus sign next to the year to drill down on the rows.

And drill down on the quarter.

The doctor would like to see all of the month closes for 2007 and he's not interested in the quarter subtotal. Right click on the quarter
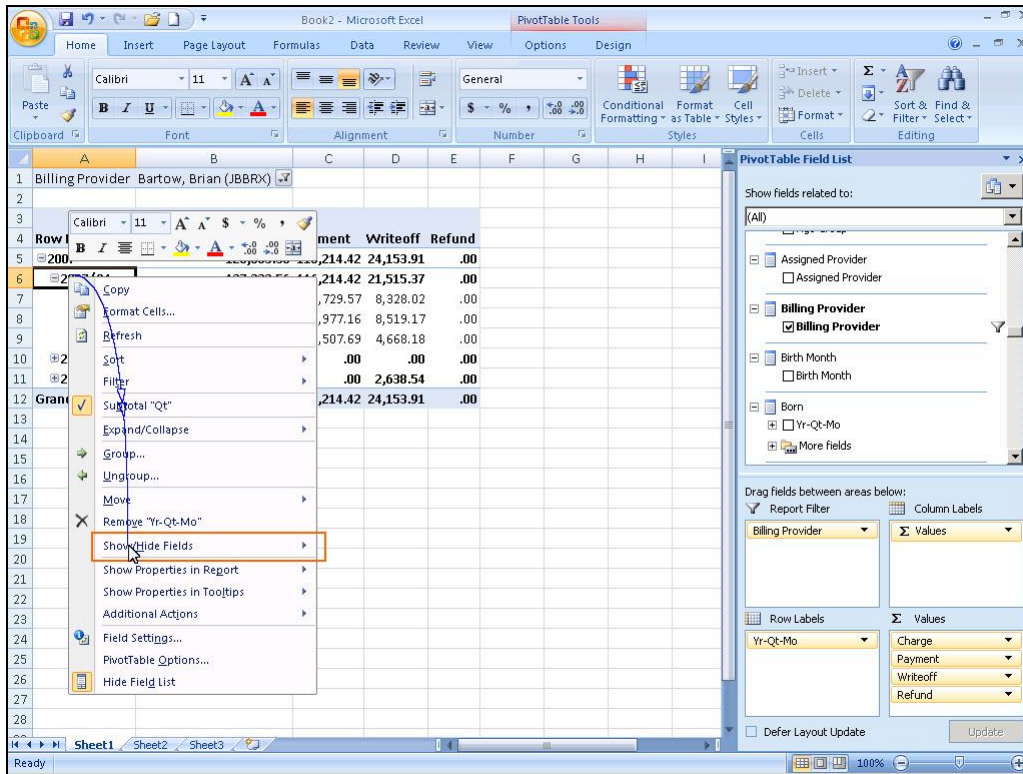
Hover the mouse over the Show/Hide Fields item.
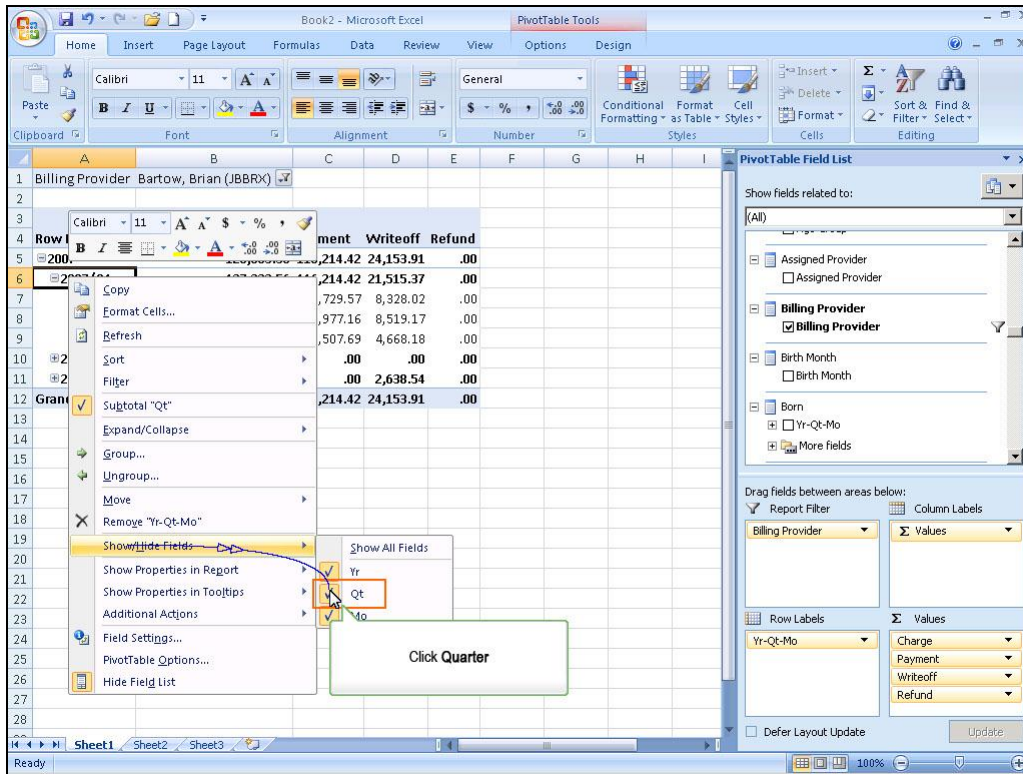
And uncheck the quarter in the list of fields.
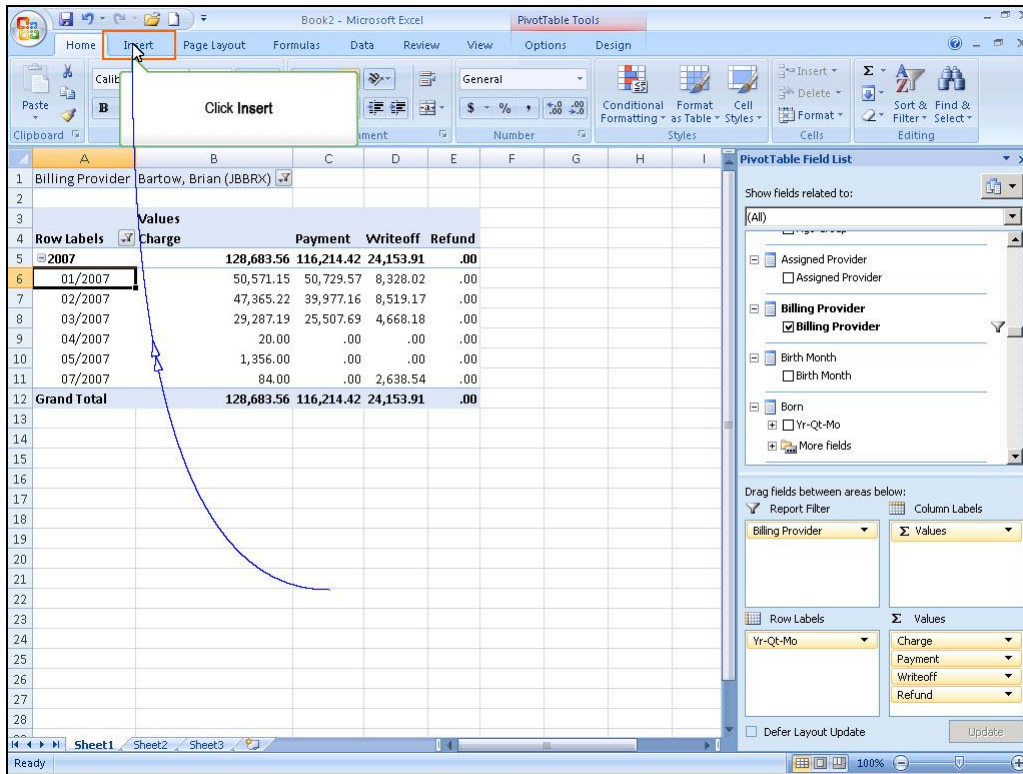
And the quarter is now hidden in the pivot table. Now that the pivot table displays the production figures as desired, let's create a pivot chart for the data. With the pivot table selected, click the insert item on the ribbon.

And click on the desired chart type in the charts area on the ribbon.

No audio.

And the pivot chart displays for the selected pivot table. Now let's return to the sample PulseIQ spreadsheet that is supplied when you purchase PulseIQ.
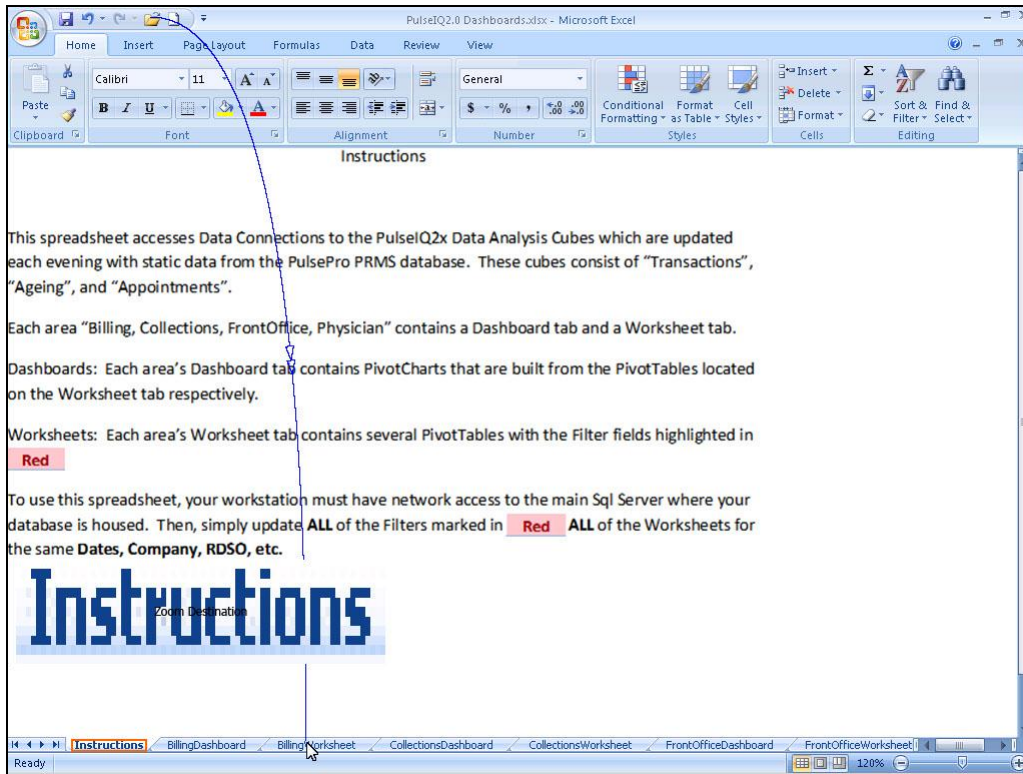
The first worksheet in the spreadsheet displays the instructions for using this spreadsheet.
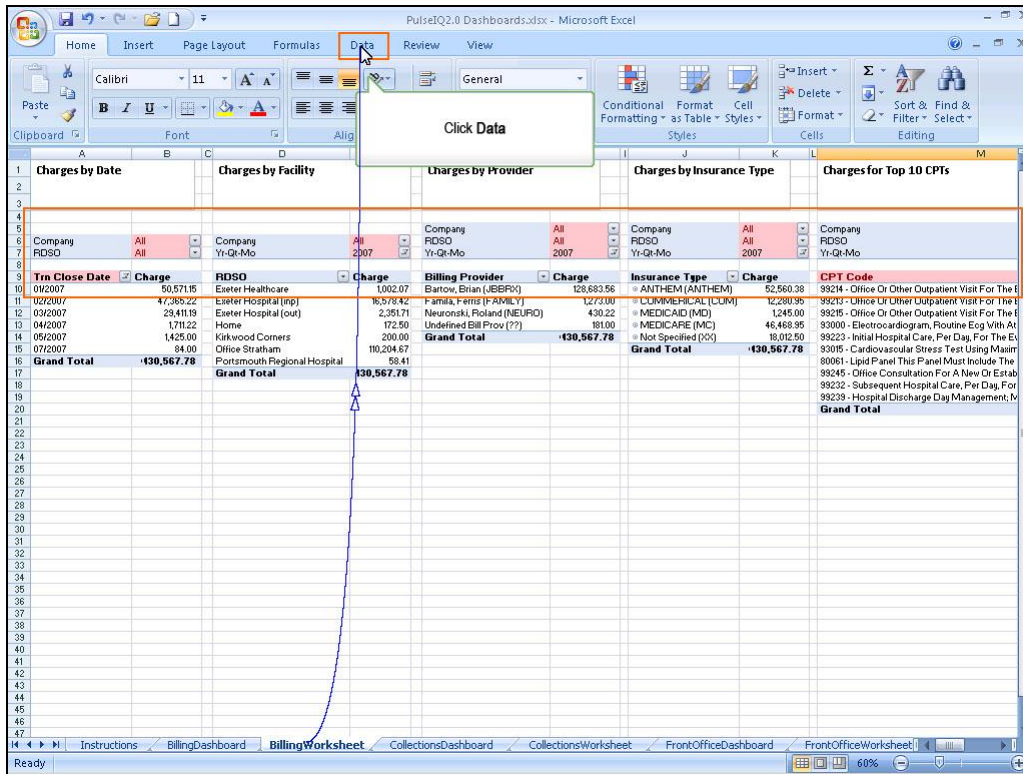
Each pivot table included on each area's worksheet tab contains filters that need to be adjusted for the dates and providers you're reporting on this month. Then click the data item on the ribbon.
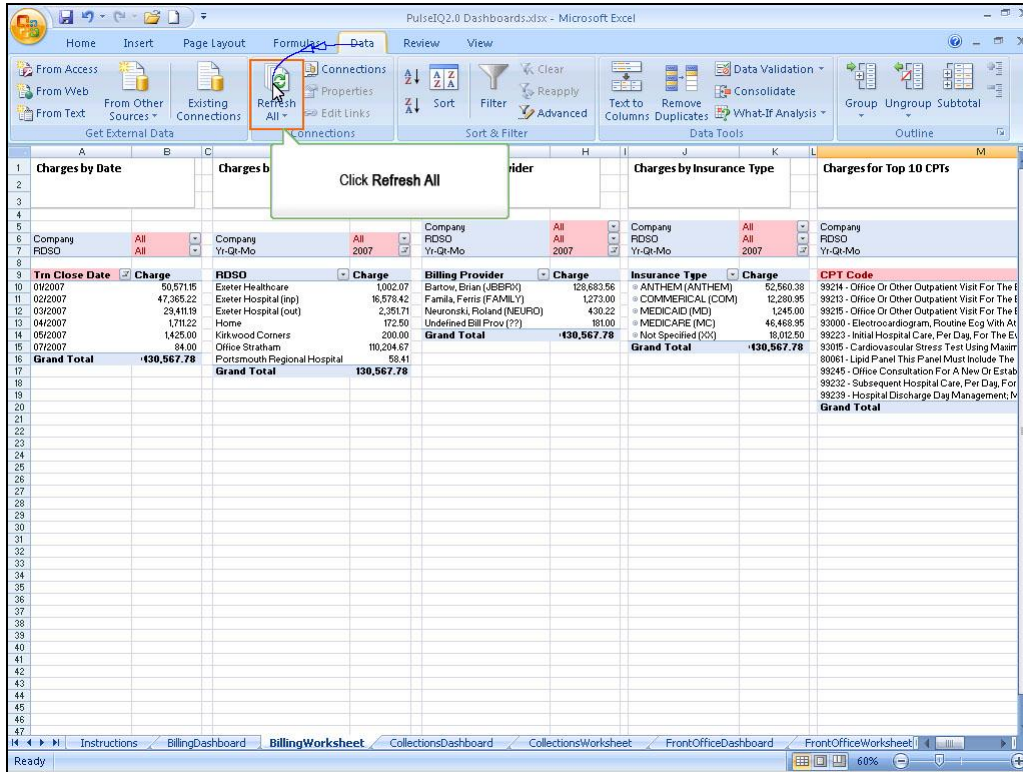
Click the refresh all button on the ribbon to update all of the pivot table's data contained in the spreadsheet. This process will re-connect to the PulseIQ warehouse and refresh all of the figures with the currently stored data as of the previous evening's build.
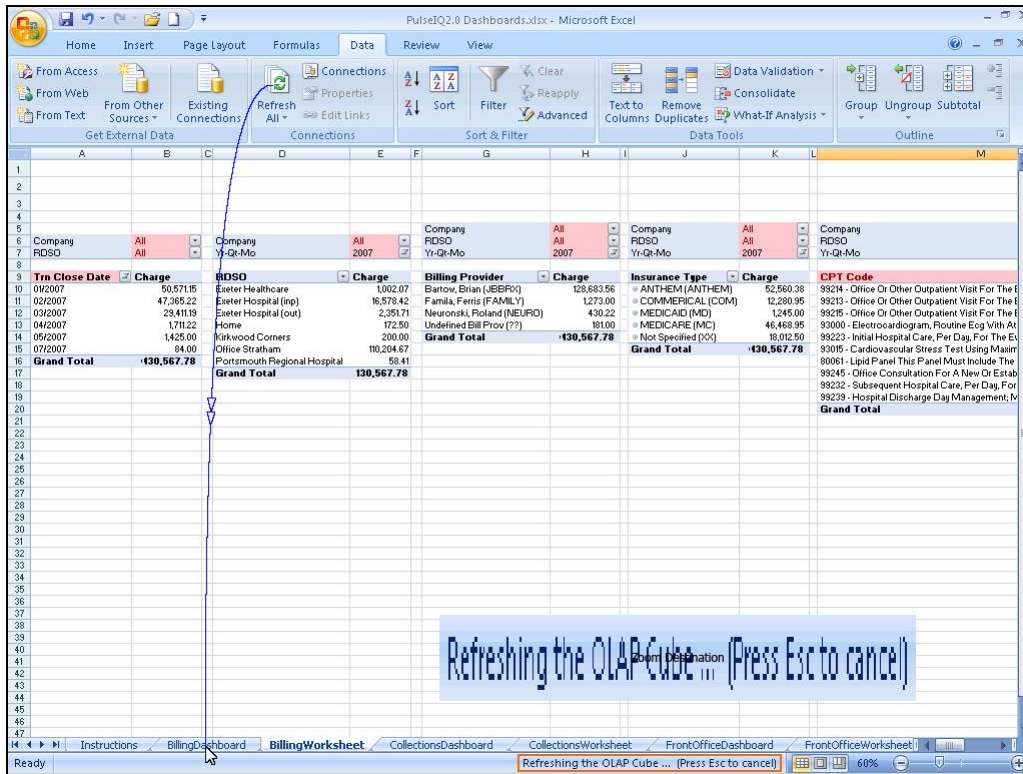
The refresh status displays as the processing occurs.
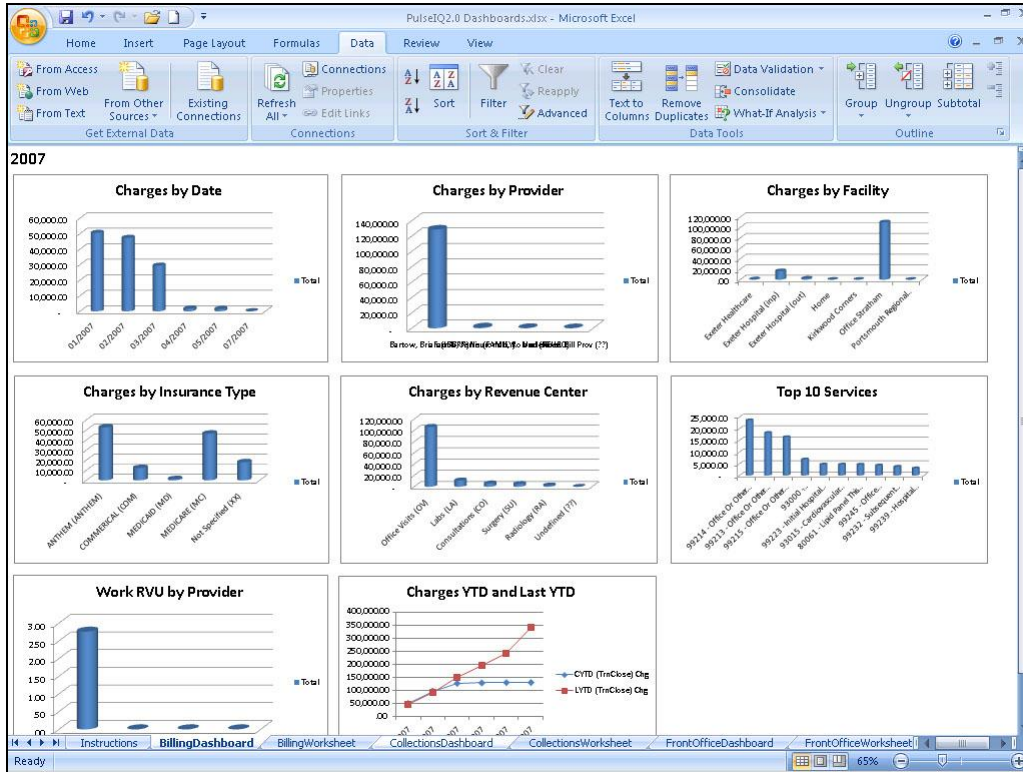
And when complete the pivot charts and pivot tables display the current data for the selected filters.

1.16 Microsoft Help and Tutorials for Pivot Table

It is your responsibility to fully learn Excel PivotTables. Listed below are some helpful links to the Microsoft Office 2010 website for learning Excel PivotTables.

Title	Create a PivotTable report
Description	Watch this video to see how you can analyze your worksheet data by creating a PivotTable report.
Time	2:28
Link	http://office.microsoft.com/en-us/excel-help/redir/va101809910.aspx

Title	Subtotal and total fields in a PivotTable report
Description	Learn how to use the PivotTables tab to change the options of the subtotal or total results.
Time	1:33
Link	http://office.microsoft.com/en-us/videos/redir/va102489120.aspx

Title	Repeat item labels in a PivotTable report
Description	Watch this video to see how you can help clarify your data by repeating item labels in a PivotTable report.
Time	1:29
Link	http://office.microsoft.com/en-us/excel-help/redir/va101812170.aspx

Title	Filter items in a PivotTable report
Description	Watch this video to see how you can analyze your worksheet data by creating a PivotTable report.
Time	2:59
Link	http://office.microsoft.com/en-us/excel-help/redir/va101812189.aspx

Title	Group items in a PivotTable report
Description	Watch this video to see how you can arrange your PivotTable data in grouped sets of items so that it's easier to view the data you want to analyze.
Time	2:11
Link	http://office.microsoft.com/en-us/excel-help/redir/va101812187.aspx

Title	Use Named Sets in an OLAP PivotTable Report
Description	Watch this video to see how you can quickly apply a specific field selection in a PivotTable report by saving it as a named set..
Time	2:11
Link	http://office.microsoft.com/en-us/excel-help/video-use-named-sets-in-an-olap-pivottable-report-VA101812172.aspx

You are now familiar with PulseIQ. Now, go to the Microsoft website to fully learn about excel Pivot tables.