

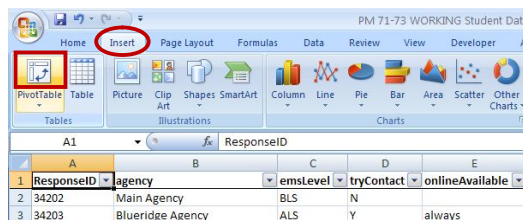
## Performance Measure 71: State/Territory Quality Assessment

Now that the analysis is completed for the Performance Measure 71 EHB entry, you may want to further explore your online medical direction data. For example, what percent of BLS agencies reported that online medical direction was rarely available; occasionally available; usually available? Who are these agencies, and how could we improve the availability of online medical direction in their area? What is the most common type of medical professional providing pediatric medical advice?

These instructions assume that the cleaning and analysis for the Performance Measure 71 EHB entry is completed, but it is not necessary to complete the cleaning and analysis prior to creating these frequency tables. Please refer to the [PM 71 Analysis](#) handout to review analysis steps and variable definitions.

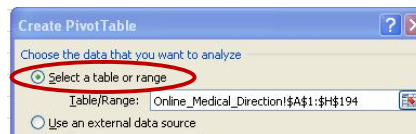
### I. Quality Assessment: Frequency Tables of onlineAvailable and trainingLevel

1. Clear all filters so that all data are showing in the Online\_Medical\_Direction tab.
2. Insert a pivot table in your online medical direction tab. We will use this pivot table to create frequency summaries.
  - a. Scroll to the top of your dataset.

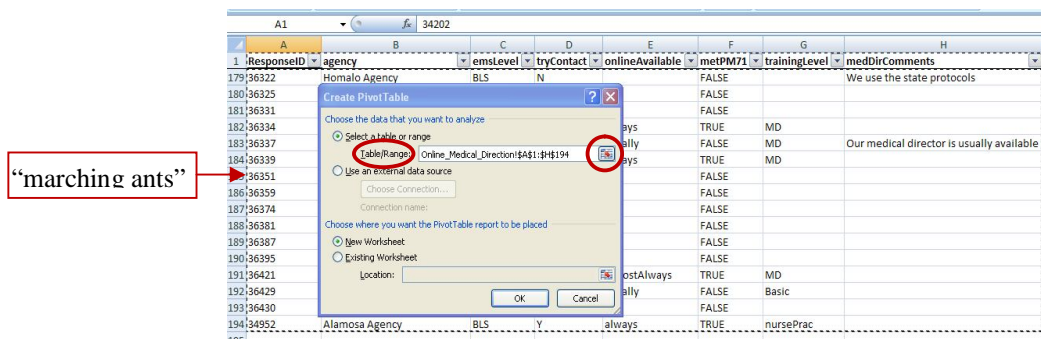


- b. In the *Insert* tab, click on the *PivotTable* icon.
- c. This will bring up the *Create PivotTable* dialog box. We need to specify the dataset we want to summarize and where we want Excel to insert the pivot table.
  - i. First, *Choose the data that you want to analyze*.

1. Verify that *Select a table or range* is selected.

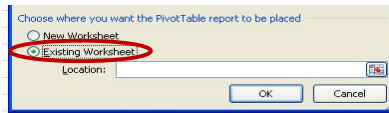


2. Excel should provide a guess for the *Table/Range*. The “marching ants” around a group of cells identifies the table/range Excel has chosen. Verify that this *Table/Range* is the entire dataset, and that it does NOT include empty rows/columns. If needed, click on the icon in the *Table/Range* field to select your entire dataset.

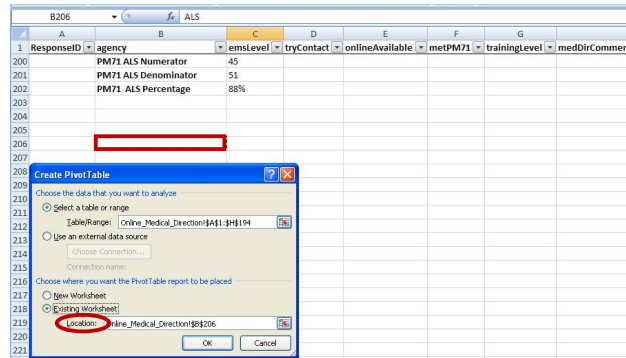


ii. Second, *Choose where you want the PivotTable to be placed.* We will place the pivot table at the very bottom of our online medical direction worksheet.

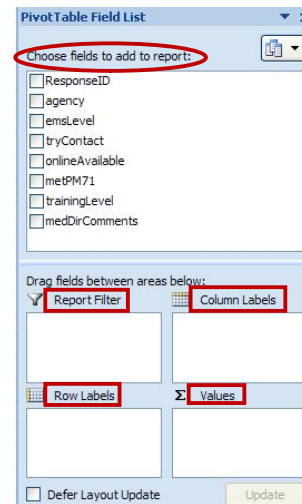
1. Choose *Existing Worksheet.*



2. For the *Location*, choose the cell at least 4 rows below your last label.



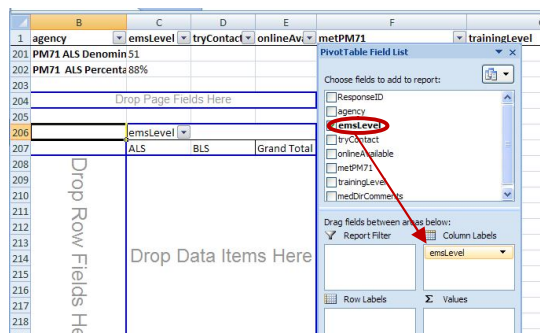
3. Now we have inserted an empty pivot table! You will see the *PivotTable Field List* menu on the right side of the screen. (Note: If you click outside of the pivot table then the *PivotTable Field List* menu will disappear. Simply, click back in the pivot table area and the *PivotTable Field List* menu will appear again.)



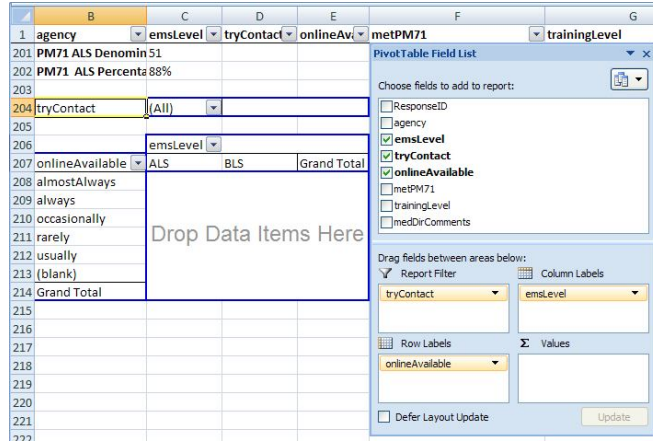
The top part of the *PivotTable Field List* menu contains all of the variables in your dataset (e.g., **ResponseID**, **agency**, **emsLevel**). To build the frequency table, we will drag and drop these variables to different areas (*Report Filter*, *Column Labels*, *Row Labels*, *Values*) in the bottom part of the *PivotTable Field List* menu.

4. Our goal is to create a frequency table with EMS levels (ALS, BLS) across the columns, and the options for online available (almostAlways, always, usually, occasionally, rarely) down the rows. We will also want to filter on **tryContact**=**"Y"** to exclude the respondents who weren't asked how often online medical direction was available.

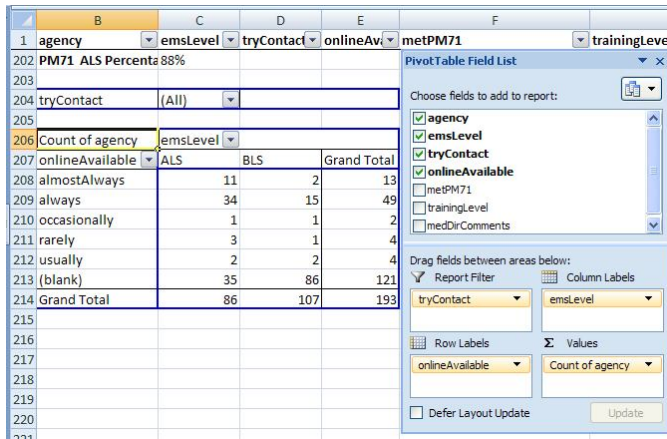
a. Click on **emsLevel** in the *PivotTable Field List* menu, and drag it down to the *Column Labels* area.



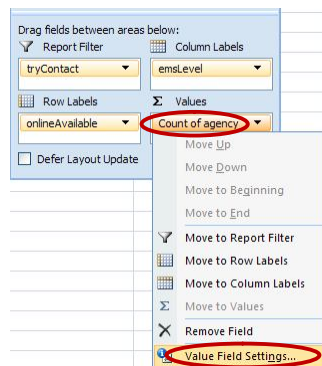
- b. Click on **onlineAvailable** in the *PivotTable Field List* menu, and drag it down to the *Row Labels* area.
- c. Click on **tryContact** in the *PivotTable Field List* menu, and drag it down to the *Report Filter* area. Now, you can see the shell frequency table (no summary data yet) taking shape in the Excel spreadsheet.



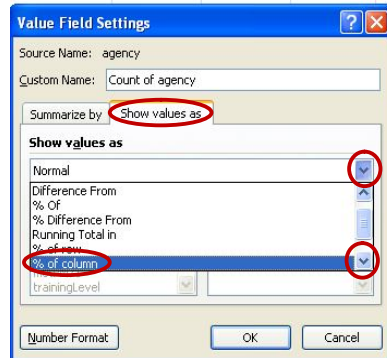
- d. To add the summary data to our table, drag **agency** to the *Values* area to tell Excel that **agency** is the identifier for each record in our dataset.



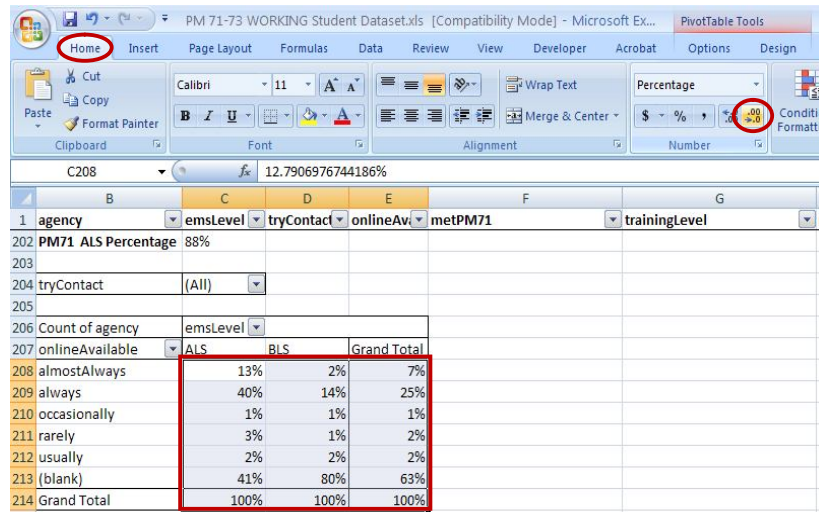
- e. Excel is currently counting the number of agencies in each category. However, we want to summarize the percent of agencies.
  - i. Click on *Count of agency* in the *Values* area, and select *Value Field Settings*.



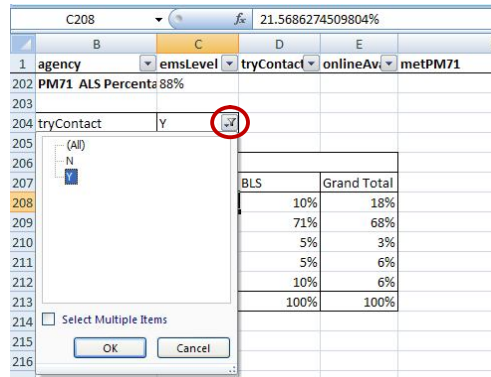
- ii. This will open the *Value Field Settings* dialog box. In the *Show values as* tab, use the *Show values as* drop down box to select *% of column*. You may need to use the scroll bar to navigate down to the *% of column* option.



- iii. Format the percentage to remove the decimal places by selecting the percentages and clicking on the icon to decrease decimal in the *Home* tab.



- f. Currently, the frequency table includes all agencies. We need to exclude the respondents who weren't asked how often online medical direction was available.
  - i. Filter on **tryContact="Y"** using the filter in our pivot table.



- g. Now we can examine the percent of BLS (and ALS) agencies who reported that

online medical direction was rarely available, occasionally available, and usually available.

- i. For example, in the student dataset 6% of ALS agencies and 5% of BLS agencies reported that online medical direction was rarely available to their providers.
- ii. Suppose we wanted to work with the ALS agencies who reported online medical direction was rarely available to develop an action plan to improve medical direction in their area. To identify these agencies, double click on the percentage in the ALS column and rarely row (e.g., 6% in the student dataset). This will create a new tab showing ONLY the records that answered "rarely".
- iii. We need to re-format the dataset so the contact information is readable.
  1. Make the **agency** column wide enough to fit all the contact information on 4 to 5 lines. To adjust the column width, place your mouse at the right edge of the **agency** column until you see the black cross with arrows, and drag your mouse to the desired width.

	A	B	C	D	E	F
1	ResponseID	agency	emsLevel	tryContact	onlineAvailable	trainingLevel
2	35894	Sharon@myemail.com Delta Agency 2217 Shadow Road, Newell, 99758 Sharon Willey , EMT, 5555555653,	ALS	Y	rarely	DNK

2. Next, adjust the width of all the rows. First, select all of the cells in the worksheet by clicking the rectangle in the top left corner, by column A and above row 1. Then place your mouse between any two rows until you get the black cross with arrows and double-click to resize the preferably row height.

	A	B	C	D	E
1	ResponseID	agency	emsLevel	tryContact	onlineAvailable
2	35894	Sharon@myemail.com Delta Agency 2217 Shadow Road, Newell, 99758 Sharon Willey , EMT, 5555555653,	ALS	Y	rarely

5. Recall that we also wanted to summarize **trainingLevel** to review the common types of medical professionals who are providing pediatric medical advice throughout our state. Luckily, pivot tables make it easy to change the variable we are summarizing.
  - a. Go back to the Online\_Medical\_Direction tab. Simply uncheck **onlineAvailable** and check **trainingLevel** in the *PivotTable Field List* area.

trainingLevel	ALS	BLS	Grand Total
Basic	2%	5%	3%
DNK	2%	10%	4%
Intermediate	2%	0%	1%
MD	73%	52%	67%
Nurse	14%	19%	15%
nursePrac	0%	5%	1%
PA	4%	10%	6%
Paramedic	4%	0%	3%
Grand Total	100%	100%	100%

- b. Now we can examine the types of medical professionals who provide medical advice to the providers in our state. For example, in the student dataset physicians are most likely to provide medical advice to providers from both BLS and ALS agencies.
6. Pivot tables are dynamic because the summaries you create will update when the survey data is updated in the spreadsheet. However, pivot tables do not update automatically. If you change any data due to follow-up, you need to instruct Excel to update the pivot table.
  - a. To update the pivot table, right click in the pivot table and choose *Refresh*.