



## How to Use Excel to Create a Visually Appealing Automated Report

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Good Afternoon and welcome to this final break out session of the day. My name is Kimberly Clark and I am the CQIR Systems Analyst with One Hope United.

Just a few housekeeping issues:

If you signed up for this workshop you should have received an email with the documents/spreadsheets that we will be working with today. If you did not receive this please sit next to someone who has them. All of the materials today will be available on the Conference web page. I will also include the Powerpoint slides with my notes...so you don't have to worry about taking too many notes. (just please excuse any spelling and grammatical errors).

Also, before we begin I would like you to open up the word document entitled Most Used Formulas. As we are working today it will be easiest at times to copy and paste the formulas from this document.

Finally, I just want to acknowledge that for this session today we only have 1 hour and we have a lot of material to get through rather quickly. I will need to request that you save questions until the end. Since we have a variety of skill level in the room it will be best that if you do not have at least a beginning skill level in excel to try to sit next to someone who might be more advanced than you. I will be limited in going around the room to assist. Ruann will be able to walk around a little bit to assist where needed.



## About Me

- I received my Bachelors Degree and Masters Degree in Social Work.
- I became interested in doing CQIR work while attending University of Chicago.
- I ♥ Data!
- Don't need to be an Excel Expert to do this work.

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Poll of room – How many people thought that when they went into the Human Service/Social Work Field that they would be using EXCEL A LOT? .... Neither did I

Growing-up I knew that I wanted to get into the Human Service field. I always thought I was going to be a School Social Worker --- but I quickly realized while interning that it wasn't for me. I was never going to be the master clinician I imagined. I was more interested in Policy, Program Improvement, and Research. I first started in the CQIR field through an internship while I was attending University of Chicago. At this internship I worked on a project doing a program evaluation of Community School Programs. I was very fortunate to then move on to a job doing the same work for a different organization for a little over 4 years before I joined One Hope United. Through these various positions I quickly learned that I LOVE DATA specifically using data to show program impact.

I am not an Excel Expert, and I do not claim to be one. I bet there are people in this room that know more about excel than I do. However, I believe that you do not need to be an excel expert to do this kind of work.

My first exposure to Excel was through some business/finance classes I took as part of a Business Minor (honestly it made my Dad feel better that I had something to fall back on if the Social Work thing didn't work out). Other than that limited exposure in a class or two I primarily learned excel through trial and error, sweat and tears, going to workshops/webinars much like this one, and seeing examples of work done .... and manipulating them to meet my needs. Today I will be sharing with you some of my most used formulas and showing you how to manipulate them so they meet your needs. One thing that I have learned about excel over the years is that there are multiple ways to do the same thing. The formulas I show you today may not be the only or best way to get the same results, but they are the formulas that I use pretty regularly and they are easy to understand.



## About One Hope United

- Multi-State Child Development/Child Welfare Organization.
- Today we operate in a Line of Service Model:
  1. Child Development and Early Learning
  2. Placement
  3. Community Based Family Services
- As the CQIR Analyst I manage all of the CQIR data for all the programs throughout the organization.

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Really quick I want to share a little bit about One Hope United. We are a Multi-State Child Development & Child Welfare Organization. We have locations throughout the Chicagoland area, Southern Illinois, St. Louis Missouri, Florida, and one program in Wisconsin just over the Illinois border. We have a very rich history because we have been around for over 100 years.

Today we operate in a Line of Service Model. We have 3 lines of Service. Our first LOS is Child Development and Early Learning (CDC/Day Cares and Home Visiting Programs), second is our Placement Line of Service which is Foster Care and Residential, and finally our third is Community Based Family Services which is our counseling, mental health program, and youth services. We serve an average of 10,000 clients and families a year. It adds up to just about 100 programs when you consider locations, multiple teams etc... throughout the organization. As the CQIR Analyst I manage all of the CQIR data; which includes things like Peer Record Review data, Outcomes, Incidents, and information on the Clients we serve for all of our programs throughout the organization.

Effective CQIR reporting is about delivering the ***right information*** to the ***right people*** at the ***right time***.



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Today we are here to talk about how to build a report in excel. I wanted to start off by sharing a few best practices in reporting. All of us in here know that effective CQIR reporting is about getting the right information to the right people at the right time.



## Questions we Need to Ask when Preparing a Report

- Who is the target audience of the report?
  - Supervisors/Directors
- What information do I want to present to this audience?
  - Peer Record Review (PRR) Results
- How often is the information needed?
  - Quarterly – After each Record Review
- What happens to the information once it is shared?
  - Celebrate Quality Work/Correct Deficiencies

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So before we even begin to create a report there are a few questions we should ask ourselves beforehand.  
First, Who is the Target audience for the report  
Second, What information do I want to present to the audience  
Third, How often is the information needed  
Fourth, What happens to the information once it is shared

In the example today our Target audience is primarily Supervisors and Directors of our various programs. The information that we are going to present is our Peer Record Review Results – as we go through the exercise today you will see how we go about doing this. The information is needed on a Quarterly basis-because we review every program every quarter and we want to share the results of the record review pretty quickly after each record review occurs. Once the information is received first and foremost it's always important to celebrate the quality of the work done which is very visible as you review the record. Secondly the information is used to correct any deficiencies in the file and/or implement any recommendations for future services that may have been given by the reviewer.

- Build a Template for a Peer Record Review Report
- Using Excel
  - I will show you 4 of my most used formulas
- Share some resources for Data Visualization
  - (aka building some nice looking graphs)

## Today

We are going to build a Template Peer Record Review Report. We will be using Excel and I am going to share with you 4 of my most used formulas not only in this report, but I also use many of these in other reports that I create.

Finally, we won't have a lot of time to spend on this but I will also share with you some resources for Data Visualization ---aka build some really nice looking graphs

A word of warning, What I am going to show you is a lot of work on the front end, but once the template is built.....all that is done throughout the rest of the year...or until a record review tool changes is copying and pasting data into the template so that the report comes together instantly. This comes in handy when you have as many programs as we do at One Hope United. I pretty much set these templates up during the summer and there is very little maintenance throughout the year – other than simple copying and pasting.



## Let's look at OHU's PRR Report

Open Excel File called "Report"

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Let's begin by opening up the excel file entitled Report

When you open up this workbook you will notice that there are 4 worksheets

1. Main – Where the data goes – this probably looks very familiar to you. Imagine the rows filled out with some written information like dates and names and then when you look at the Question #s you may see Numbers ----which stand for certain things (in our world at OHU 1 is Yes, 2 is No, etc...)
2. Program List – OHU's Program List – This is something we use regularly and it helps us ensure some consistency with data that is entered – we will talk more about this in just a bit.
3. Tables – Where some behind the scene Math Happens which is used to Create our Graph
4. Report – Where the Report comes together – this is what we send to Supervisors & Directors after the Record Review as a PDF. We will talk more about this later too.

## Our First Formula: Look-Up

```
=LOOKUP(1,1/EXACT(I2,'Program  
List'!$F$2:$F$5),'Program  
List'!$B$2:$B$5)
```

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So I would like everyone to go back to the Main Worksheet. This is where we are going to learn about our first formula. Our first formula is a LOOK-UP Formula.

As I mentioned earlier we like to control some of the data fields that are entered to ensure consistency. To do this we use the Look-Up Formula. As you can imagine if we didn't do this we could end up in a situation where a Supervisors Name is typed in different ways multiple times. For instance Katy Smith could be typed in as Smith, Katy, KS, just Katy, a mix of lower and upper case, the possibilities are endless. By it not being consistent it makes it more challenging to sort and filter the data at a later time.

So we have our Look-Up Formula and I first want to show you what it does before I explain the formula. So please find Column I which is highlighted in Green on the Main Tab. Now in cell I2 please type in 123 then hit enter. You will see that the N/As are replaced with some information. Under Service Center it now says Orlando, LOS says Placement, our Subcategory of Foster Care appears as well as our Supervisors Name.

Ok. So let's talk about what's going on here with this formula. The formula in your word document that I have for you is specifically for the Region Column which is highlighted in Blue. First you will see it begins with =Lookup(1,1/Exact ---this is Excel language and I learned a while ago that sometimes it is best not to question Excel for why Excel uses the language it does -- I know it is looking for an Exact Match based on our criteria -- why we have to say 1,1/Exact ---I do not question I know it works and it saves me energy by not questioning it (again I am not an excel expert but an excel manipulator). Next in the formula you will see I2 this is our criteria that we are looking-up. Remember you typed 123 in cell I2, the next part of the formula is telling excel to look at the worksheet entitled Program List and it is basically saying find an exact match for I2 in Cells F2-F5. You will see that in our program list all of our program #s are located in column F. The next part of the formula says to return from Program List what is in Cells B2-B5 -- you will see that is where our Regions are.

One thing you will notice about the formula is sometimes you see Dollar Signs (\$) before a cell reference and sometimes you don't. The \$ freezes the cell references -- in other words no matter where we put the formula we always want it to look at F2 F5 or B2 to B5 when we are looking for Region. You will notice that I2 does not have the \$ because we don't always want to reference cell I2 when we enter a second line of data we want it to reference cell I3. You will see the \$ in some other formulas we use today.

Ok now, from your word document Please Copy Formula 1 and paste it in Cell D2 so we can have the Region Displayed. Make sure you copy the = sign and after you paste it hit enter. You will see that the Region of Florida appears.

I am now going to show you how to manipulate this formula to have the Program Name Appear (that column is also highlighted in Blue). Please copy from word Formula 1. Then Paste it in cell H2 -- remember that Formula is for Region that is why Florida appears but now we want Program Name. Does anyone want to guess what needs to be changed for it to display the Program Name. To get it to display we need to change the Bs in the formula to the column on Program List that is for Program Name which is A. Let's take a moment and make that edit. "A" needs to be changed in both places. Once you do this hit enter. You will now see that our Program Name of Foster Care\_123 appears.

**Really quick let's copy and paste our formulas from columns D and H. An easy way to do this is to click cell D2, move your cursor to the bottom right hand corner until you see what looks like a plus sign, when you get the plus sign hold down the left button of the mouse and drag it down. Do the same with H2.**





## Our First Formula: Look-Up: Let's Practice

Type in the following on the Program List Worksheet

Program Name – Awesome RTx Program\_999

Region – Northern

Service Center – Joliet

Line of Service – Placement

Subcategory – Residential

Program # - 999

Supervisor – Your Name

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I want to show you a few more ways to manipulate the formula with another example. Let's say we need to add another program to our Program List.

On Program List where it is highlighted in Yellow please type in the following. Under Program Name type in Awesome RTx Program\_999, Region Northern, Service Center Joliet, Line of Service Placement, Subcategory Residential, Program # 999, Supervisor type in your name.

In cell I2 replace 123 with 999 ... you will see that everything goes back to N/A

We need to manipulate our formulas to read more data from our program list. Does anyone know what needs to change in our original formula (the first one on your word document)? Remember our original formula was only reading from cells f2 to f5 and b2 to b5. We now have data in row 6...so we need to change the formula to read more lines of data from our program list. Let's go ahead and change it to 10. it will need to be changed 2 times in the formula. Go ahead and change the F5 to F10 and the B5 to B10 in excel and hit enter. You will now see that Northern appears. If we were to continue doing this for our 5 other auto-fill formulas you will see that all of the information we just typed in appears. When you change your formula remember that you would have to re-copy and paste it down so all the cells have the updated formula. If the N/As change to 0s don't worry about it it is not important.

In my processes I keep a Master Program List in a separate file that I copy and paste into my Excel Report Templates...since I have multiple it saves time from having to make updates when changes happen. In my formulas for my Autofills I extend the formula out pretty far into the hundreds since we have so many program.



## Survey Monkey

One way we use Survey Monkey is with our PRR data.

[https://www.surveymonkey.com/r/CQIR\\_Presentation](https://www.surveymonkey.com/r/CQIR_Presentation)

After the data is entered, the data is exported and converted so that it works with our reporting format.

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As the Report Excel File is now, we could start manually entering in data from a record review and have a report generated. However, one trend that we noticed is that a lot of people are using Survey Monkey for data entry. Is anyone in the room currently using Survey Monkey? We are too, and one of the many ways that we use it is for PRR data entry. Specifically we are having our Peer Reviewers enter the data as they are reviewing the file so we can have the results back to them pretty quickly. When I first started with OHU CQIR staff and some office staff were manually entering the data from paper into our Excel Templates.

Now with Survey Monkey we can be more efficient by having the reviewers enter the data. In a perfect world we could have results back to the program the day after the Record Review occurs. However, things don't always go perfectly. A reviewer forgets their laptop, there are internet connection issues, data that is entered needs to be edited because during the Exit Interview it was determined that a response could be changed. Regardless of the "extremes" we have really come to LOVE using Survey Monkey for Record Reviews. Really quick I would like to show you the Survey Monkey Form that I used for this example. I was going to have everyone enter data into here; however, we don't have time. So I already entered some fake data into this Form. This is what all of our OHU PRR forms look like at the basic level...we obviously have some that are much longer than the example here. We ask some basic information about the review and the case and then we go into our Record Review Questions. You will notice that we have the Reviewers answer with Yes, No, N/A and Inc. and that we require answers to all questions so something is not missed. We put comment fields after each question so the reviewer can explain why they put a No or an Inc this helps us build our plan of correction and if we were to print the Survey Monkey form all of the comments would be there for the Case Manager or Therapist that may need to make some corrections. We also add some question logic at the end especially with Questions we classify as "Closing" questions. This way a reviewer doesn't accidentally answer a questions that they shouldn't. Now I want to show you what we do with the data once we get it out of Survey Monkey to make it compatible with our Report template.

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## Survey Monkey: Converting the Data

Open file: "SMRawData"

Then Open file: "SMConvertedData"

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First please open the excel file called SMRawData (make sure to enable all editing or content if this message appears.)

This file is what we get when we Export the data from Survey Monkey. I do not have time to show you how to export the data, but Survey Monkey has some great resources on their website to show how to do this. The first 9 columns are meaningless, they are all things that Survey Monkey puts in, like the IP address or when the data was entered. Our record review data really starts with Column J or Review Date. If you scroll through the Raw Data file you will see the answers to all of the questions we asked and the comments that were entered. It matches our Survey Monkey Form

This file is linked with SMConvertedData. This is a spreadsheet that I created to convert the data to match the report template. Please open this file now. Again please enable any content or editing if that message appears.

The Converted data file should look familiar...it is identical to the Main Tab on our Report Template. You see highlighted in Green the information that will autopopulate in our template with our look-up formulas. Notice Program number begin in I2 just like in the Report Template Main Tab. As you will see some of our cells did not produce any data. We are going to work on filling in the blanks now.

Converting some of the information is easy. We just need to do a simple cell reference.

When I am building this I like to view my files side by side so that I don't have to keep toggling back and forth. To do this click on View click on View Side by Side select the SMRawData file, click OK (you may need to click on ReSet Window Position if nothing happens). I then always turn off Synchronous Scrolling.

Since I don't need those first 9 columns I move my file so I don't see them.



## Survey Monkey: Converting the Data

For Review Date, Fiscal Year, Quarter, Program #, Client, Status, and Open/Closed Date we just need to reference the cells in the Raw Data File.

Example: Review Date

1. Click on **A2** on SMConvertedData
  2. Type =
  3. Click on cell **J3** on SMRawData
  4. Click F4 3 times to delete the \$
  5. Copy the formula down the column
- PRACTICE: Follow these Steps for Client Name

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In the Converted Data File, for Review Date, Fiscal Year, Quarter, Program #, Client, Status, and Open or Closed Date we just need to make a formula to reference the appropriate cells in the Raw Data file.

First we will do this with Review Date.

On the Converted File (the top one) Click on Cell A2 type = and then find the cell in the raw data for the review date for our first line of data ---- it is cell j3. Select J3 on the Raw Data file (do not hit enter yet) Now remember what I said about the \$ signs. In this case we do not want to freeze the data, when we did this formula excel automatically put them there. We want to get rid of them. The easy way to do this is to hit f4 three times. You will notice the \$ disappearing. You can now hit enter. We didn't want to freeze it because we want to copy and paste the formula to the rest of column A. In line three we no longer reference cell J3 in the Raw Data but we want it to move to our second line of date. Again to copy and paste. Select cell A2. Move your cursor to the bottom right hand corner, click the left button on your mouse and drag the formula down. You will see that it collects all the data from the Raw Data file. Now Practice really quick on your own for Client Name.

## Our Second Formula: Nested IF

### Question #1

```
=IF([SMRawData.xls]Sheet1!Q3="Yes",1,IF([SMRawData.xls]Sheet1!Q3="No",2,IF([SMRawData.xls]Sheet1!Q3="N/A",3,IF([SMRawData.xls]Sheet1!Q3="",3,IF([SMRawData.xls]Sheet1!Q3="Inc",4))))))
```

#2 = S3

#3 = U3

#4 = W3

#5 = Y3

#6 = AA3

#7 = AD3

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So again all we did for the first 7 Questions about the review and basic file information were Cell References. For our 7 Questions about the content of our files we need to turn the Yes's, No's, etc.... Into our numeric data so we can analyze it in our Report. In this example Yes = 1, No = 2, N/A = 3, Inc = 4

To do this we use our Second Formula the Nested IF formula.

This Formula is saying If on RawData Sheet 1 cell Q3 says Yes, turn it into a 1, if Q3 says No turn it into a 2, if Q3 says N/A or is Blank put a 3, if Q3 says Inc put a 4. We put turn blanks into 3s because of the Question Logic that we build for our Closing Questions. Since 6 of our files were Open files – those responses should be N/A.

Again notice in the formula there are no \$ signs to freeze the cell reference. When we copy and paste we want the formula to read the next line of data in our Raw Data file.

Let's go ahead and copy and paste the formula from our Word Document to cell N3 on the Converted Data File. After you copy and paste it hit enter.

You will see that a 1 was put in cell N3. You will notice if you look down on your Raw File there was indeed a Yes in cell Q3. Now we want to again copy and paste the formula down in Column N on the Converted file. All of our data populates. If you click on cell N4 you will see that it is getting the data from cell Q4 from the Raw Data file.

Now we are going to quickly practice how to manipulate the formula to get the responses for Question 2. So again please copy and paste the formula from your word document and hit enter. You will notice a 1 comes up again but we are not wanting the answer to question 1 found in column Q of raw data. We want question 2 which is in column S of the raw data. To fix it we simply need to change all the Qs to Ss. We will change it in 5 places. After we change it you will see that a 2 appears because in question 2 no was the response. Again now we copy and paste the formula in column S and all of our data populates.

As a best practice in my converted file I keep a crosswalk of all of my cell references and the formulas I used. This is helpful if I ever need to retrace my steps or if a future predecessor ever needs to learn how I did this.

## Putting the Data into the Report

Let's look at the Report Tab....this is where the magic happens.

- We have our 7 Questions from the Record Review
- Each Question is Classified
- All the responses are summarized

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We are now done with the SM Raw Data file so go ahead and close it. We now want to get our Converted Data into our Report Template. To do this we are just going to copy and paste the data. However, we need to do it in 3 sections because of our Look-Up Formulas we did earlier. I always just paste the values so all the formulas don't paste into my report template...it's cleaner that way. After you are done copying and pasting the data you can close the converted file. The only excel file that needs to be opened is our Report file.

We now have all of our Data in our Main Tab. Let's now look at our Report Tab to see what's happening. You will see that we have some results populating in our report.

Now let's talk about what our Report is analyzing. At OHU we analyze our results based on the types of questions they are – which are related to the Case Life Cycle. In this example it's Intake, Assessment, Treatment Planning, and Closing (as a footnote we also look at Service Delivery and we also delineate between Compliance type questions and Quality type questions) – our example only has Compliance Questions. So each question you will notice in Column A is classified IN for Intake A for Assessment, etc...). The first part of the report is just giving a summary of the responses. (Survey Monkey reports can give you the same thing, but Survey Monkey – at least from what I have learned at this time – does not give you overall results). The 2<sup>nd</sup> part of our report gives the overall results by Intake, Assessment, Treatment Planning, and Closing – those are the graphs. Now lets fill in the missing information in the first part of our report – the summary of each question.

## Our Third Formula: COUNT IF

Cell C7

=COUNTIF(Main!\$N\$2:\$N\$16,1)

What do we need to change for the following cells:

D7 =

2

E7 =

3

F7 =

4

C8 =

O

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This brings us to our Third Formula. A Count IF Formula. This Formula is saying Count If Main cells N2-N16 says 1. This will count the Yes's. Let's copy and paste this into cell C7 on the Report Tab. Now let's manipulate the formula so that it counts the Nos, N/As and Inc. This time when we copy and paste let's use the drag method. Click on Cell C7 go to the bottom right hand corner, find the plus sign, left click and drag across. You will see that 10 comes up in all the cells which is incorrect. To manipulate the formula we need to change the 1 to a 2 to count the Nos, to a 3 to count the N/As and a 4 to count the Incs. Now the Counts are correct.

Now let's do one more manipulation. Now we want to get our formula to count the Yes's for question 2. So let's copy and paste our Count IF formula above into cell C8. 10 comes up which is incorrect because it is still looking in cell N2 to N16 because we froze the cell reference with our \$. We want it to read question 2 which is in Cell O. So let's change the N's to O's and hit enter. Now its correct. Our summary information is now complete.



## Our Fourth Formula Formula: SUM IF

In Cell B3

=SUMIF(Report!\$A\$7:\$A\$13,"IN",Report!\$C\$7:\$C\$13)

What do we need to change for the following cells:

C3 =

\$D\$7:\$D\$13

D3 =

\$F\$7:\$F\$13

B4 =

"A"

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Ok....so what I just showed you before is the Summary of the Questions...Now we want analyze the data to see how we did overall on the Record Review for the Foster Care Program. The product we want to create to show our analysis is a Graph that we can have at the bottom of our report.

This is where the Tables worksheet comes into play and where we are going to learn about our Fourth Formula...a SUM IF formula which is very similar to the CountIF formula; however, instead of counting we are telling excel to do addition. Please look at the 4<sup>th</sup> formula on your word document.

The Formula is saying Add Array C7-C13 if in array A7-A13 it says "IN" for intake. Let's copy an paste the formula on your word document to Cell B3 which is where our Counts Table is. You will see that the result is 18...which is correct if you go and eyeball it really quick on the Report worksheet. Now what do we need to manipulate in order for it to Count the No responses for Intake Questions. We need to change C7-C13 to D7-D13. To count the Incompletes we need to change C7-C13 to F7-F13. Now we want to look at how to change our Formula in Cell B4. We want to count the Yes's for Assessment. To do this we change the "IN" to an "A". Let's go ahead and copy and paste our formula. And make this change. You will see the correct response of 10.

The Percents Table located below the counts table is just calculating the %s based on our Counts Table. It is from the % table that our Graphs on the Report Tab are built.



## Creating the Graph

### Clustered Column Graph

- It's trying to show everything
- It's generic
- Our eyes are moving all over the place to understand the chart

### Bar Graph

- It's more focused
- It's not generic – it's more customized (Title, Color Coded)
- Our eyes are primarily moving from left to right

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Now that we are done filling in all of our formulas, we are very close to having our PRR report completed. If you look on the Reports Tab you will see that our Graphs are now completed too.

I do not have the time today to walk you through the steps of creating these two graphs, but I do want to spend some time talking about the differences between these two graphs.

Our first graph is a Clustered Column Graph. You will notice that it is a very "default" looking excel graph. There have been no customizations to it. You will also see that it is trying to show a lot of information. It is telling us our percentages of each response (other than N/A) for each area of the case life cycle. You will see that it has a very generic title...Peer Record Review Results, and finally in order to read all the information that the graph is telling you...your eyes have to move in several directions. Up down, left right, and right left.

Our 2<sup>nd</sup> graph is a Bar Graph. You will see that our 2<sup>nd</sup> graph is more focused and customized. It is telling us what I believe to be the main point of our analysis. That Intake is Meeting our Agency's target, and Assessment, Treatment Planning, and Closing are below the target. We will also see that Treatment Planning is closer to the Target (in the yellow) than Assessment and Closing. When you look at this graph our eyes primarily move from left to right...the way that we read.

I wanted to show you these two graphs to raise an important point. Sometimes when we automate reports, things become less customizable and more generic like the above graph. It is easy. Once our data is in our template we don't need to go to the graph to make any changes. In our second example some more customization is needed. I would need to change the title based on what program I am reviewing or the results. I may need to change the colors of my bars based on the results. I think the 2<sup>nd</sup> graph is the better graph so that is the graph I am going to move to my report. Overall, sometimes there is a tradeoff between automation and customization.

Now what we have here are the reports tab is what we print as a PDF and send to Supervisors/Directors after each Record Review along with any plans of corrections to correct deficiencies.

### Data Analysts for the Social Good

<http://dataanalystsfor-social-good.com/>

- Has helped me with excel and data visualization

### Ann K. Emery

<http://annkemery.com/>

- Great resource for data visualization
- Her and Stephanie Evergreen have a checklist of what Good Charts should have/look like
- I have learned some great ways to trick excel to make some great graphs.

### When in doubt...

<https://www.google.com>

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Since I don't have time to go into further detail about Data Visualization. I wanted to share some resources with you about the topic. First, for both excel and data visualization I refer to an organization named Data Analysts for the Social Good. They are a membership organization based out of Chicago. If you become a member of the organization you have unlimited free access to a lot of great webinars on excel, data visualization, tableau, and other data topics. You can either attend the webinars live or watch the recordings. If you are not a member there are fees associated with the webinars. Next I refer to Ann Emery's blog. Ann has her own evaluation consulting firm and she has done a lot with the topic of data visualization. She has a great blog with a lot resources. Her and Stephanie Evergreen have published a checklist for what Good Charts should look like. I have learned some great ways to trick excel to make some really great graphs. If you ever attend a conference where Ann or Stephanie are presenting, attend their workshops...I have seen them both speak a few times and I always come away with learning something new.

Finally, when I get stuck on anything in excel I usually turn to GOOGLE. In minutes I can find either written instructions or examples to solve my problem. Often I find a YouTube Video that will visually walk me through the steps. I then just manipulate what I read or saw to meet my needs.

## Useful Tips When Doing This on Your Own

- Create a Program List
- Create your Tools or Forms – the Data we are collecting
- Create a Code Book
- Create “Headings” in your Report Template – keep them consistent wherever possible
  - This was our Main Tab in the Report Template. The final report used the data from “Main” to generate the information on the report.
- Decide what you want to show in the Report and how you want to analyze the data.

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Finally,

I want to share with you some tips that you may use if you go about creating your own Reporting Template. The list

First – You will want to create your Program List – especially if you want to be able to control some of the Data Fields that are needed. I’m sure all of your organizations have a way to classify your various programs that you offer.

Second – Create your Tools or Forms. Today I showed you a Record Review Form but you can easily adapt it to a Report on Incidents, an Office Review report, etc.... (Our Tool Today was in Survey Monkey)

Third – Create a Code Book Yes = 1 , No = 2 , IN = Intake. As you begin to create multiple templates you will want your codebook to stay consistent when possible. So for a different PRR tool...you don’t want 1 to all of the sudden to stand for No, it will get confusing.

Fourth – Whether you use survey monkey or you do thing manually, you want to create your Headings in your template. I already had all those heading in there for you today. If you are starting from scratch you will need to do this step. Our Main Tab had all of our Headings – which coincides with the Reporting Tool/Form. The Main Tab is where all of our data was. It was the data entered on the Main Tab that generated our report.

Fifth – Decide what you want to show in the report an how you want to analyze the data. You may want to come up with a few different ways and ask your stakeholders which they prefer or what is most important to them.

That is all I have for today. I welcome you to take the template that we built today and use it is a framework in any of your own work. Thank you for your time and I am available for any questions you have. My email is also in the powerpoint which will be made available on the Conference website should you want to email me. Thank you all so much for your time.