CAREWareTraining Guide: Custom Reports
May 2014

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*Please note, the HRSA CAREWare manuals (available at: http://hab.hrsa.gov/manageyourgrant/careware.html) were used to help develop this guide.

Today we will discuss:

Before we get started, some helpful tips:

- Have a clear idea of the purpose of your report. For example, I need a list of clients' names, URNs, gender, and race.

- Make sure that the report is pulling the information you believe it is. One easy way to verify this is to add more fields in your report and then use Excel or another program to further manipulate the data. In addition, spot check your report; choose 5 or more observations at random, and then go into their client record to verify that the information matches.

- Creating any type of data report is a skill that takes time to develop. Make sure to set aside large blocks of time as you begin to work on your reports.

- **Be patient**. CAREWare is accessed through a remote desktop, and it takes time for messages to be transmitted. Wait for the Communicating light bulb symbol in the bottom right hand corner to clear before clicking any other buttons.
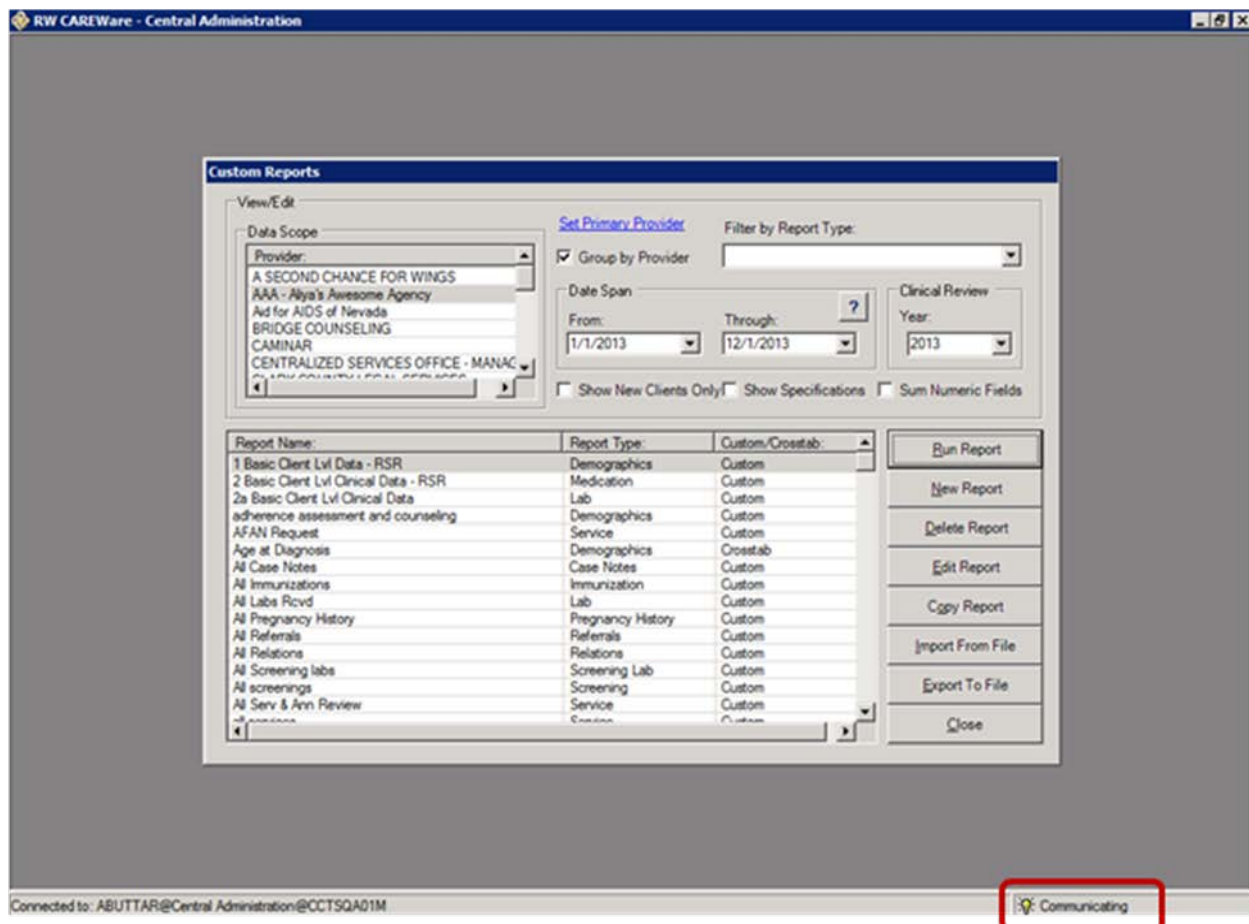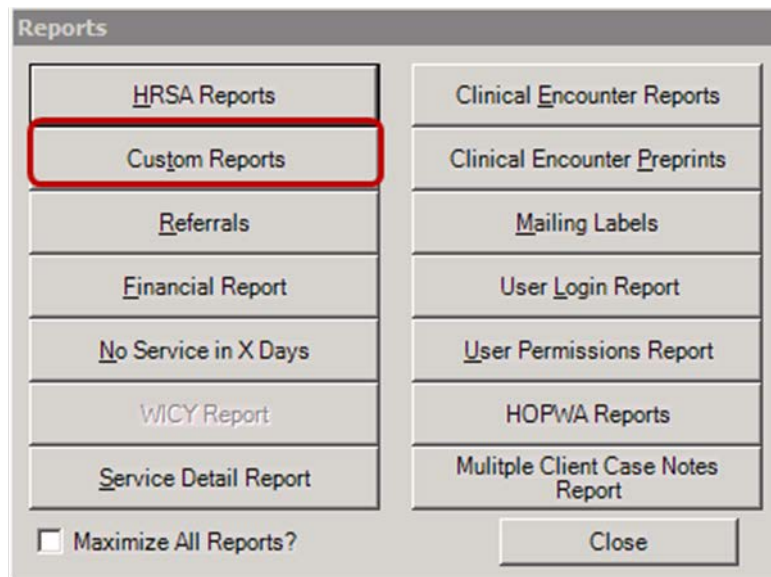
1. Accessing the Custom Reports Window:

Log in to CAREWare and on the first screen, click **Reports**.

In the next window, click **Custom Reports**.

In the Custom Reports window, you can select from a list of existing reports or create a new report. Below is an overview of the different fields in the Custom Reports window.

1. **Data Scope** – You can use the options to select specific records. When using this feature, spot check records to ensure that your report is truly pulling the data intended.

2. **Filter by Report Type** – If you have a large number of reports in your report queue, you can use this drop down menu to select the report type you want.

3. **Date Span** – Depending on the report type you select, the date span will refer to different variables. Please refer to the table below to determine which date variable each report type uses.

Date Range Selection for Custom Reports	
Report Type	**Client Records Included in Custom Report if Specified field within Date Range**
Custom subform	Custom subform date
Demographic	Includes clients with at least one service visit during the date range
Diagnoses	Diagnosis date (tab not commonly used in Las Vegas TGA)
Immunization	Immunization date (tab not commonly used in Las Vegas TGA)
Lab	Lab test date
Medication	No stop date or stop date within range
Pregnancy history	Estimated conception date
Referrals	Referral date
Screening	Screening test date
Screening labs	Screening lab test date
Service	Service visit date
Vital signs	Encounter date

4. **Clinical Review Year** – If you are reporting over 2 or more calendar years, the Clinical Review Year drop down menu allows you to specify which year's annual review data you want to use. (This is important if you are using annual review data in your report, such as income, HIV status, etc. which may change over time).

5. **Show New Clients Only** – When selected, will only show clients who became new clients in the specified date range, based on their enrollment year.

6. **Show Specifications** - When selected, will display the criteria the report is run on.

7. **Sum Numeric Fields** – When selected, will display the total of any numeric fields at the bottom of the report.

2. Run an existing report:

Select the report you would like to run from the report queue.

Choose the appropriate Date Span, and if the dates cross 2 or more calendar years, in the Clinical Review Year, enter the year from which you would like to use annual review information.

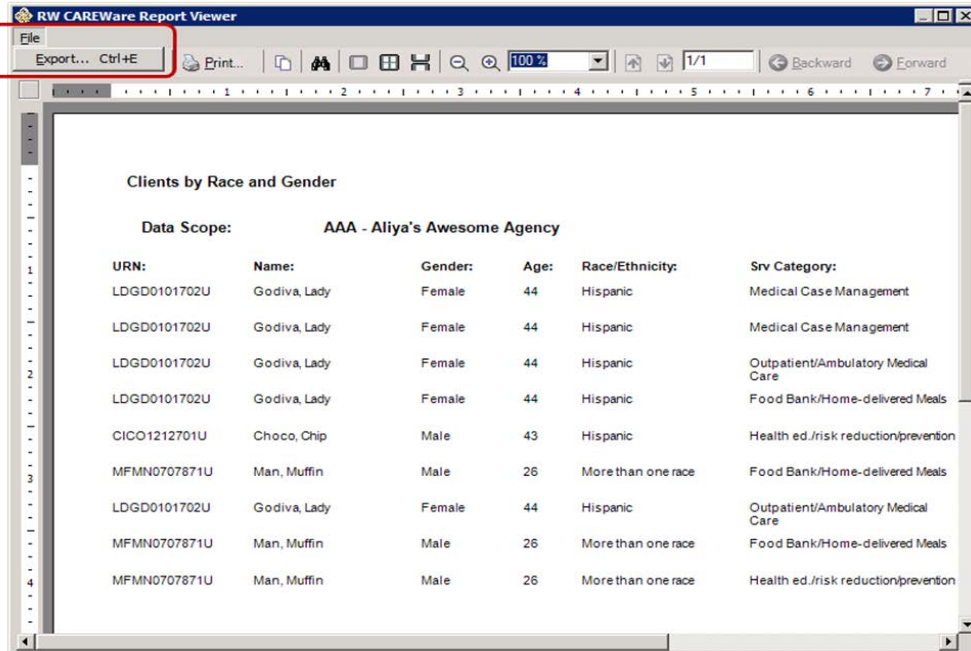When you have entered this information, click **Run Report**.

When the report is done running, a window like the one below will appear.

If you would like to export the report to your computer as an Excel file, click **File** in the top left hand corner, and then click **Export**.

The Export window will appear. From the Export Type drop down menu, select Microsoft Excel Format (XLS).
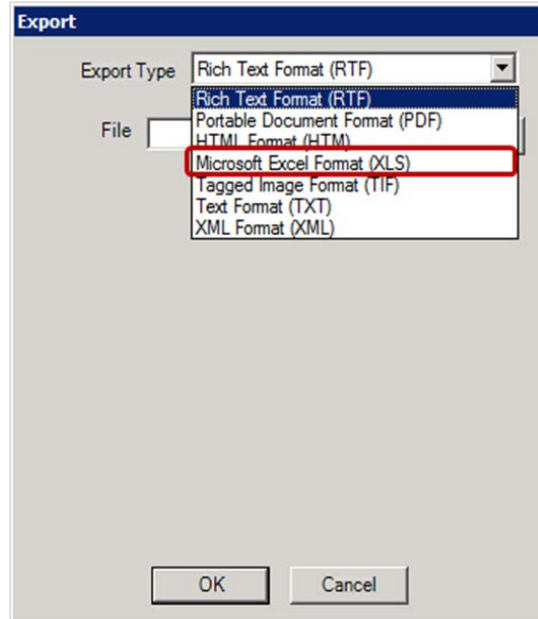
Then click the ellipsis next to **File.**
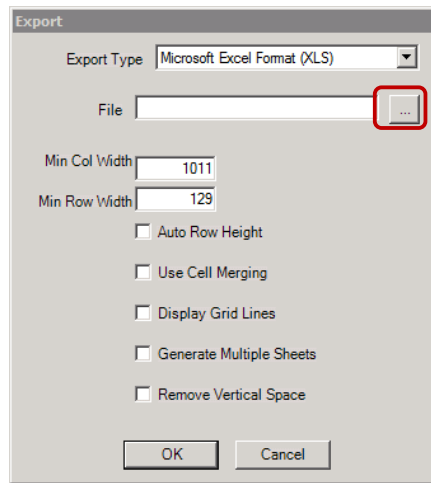
The **Save As** window will appear. Here you will indicate the name of the file and where it will be saved on your computer.
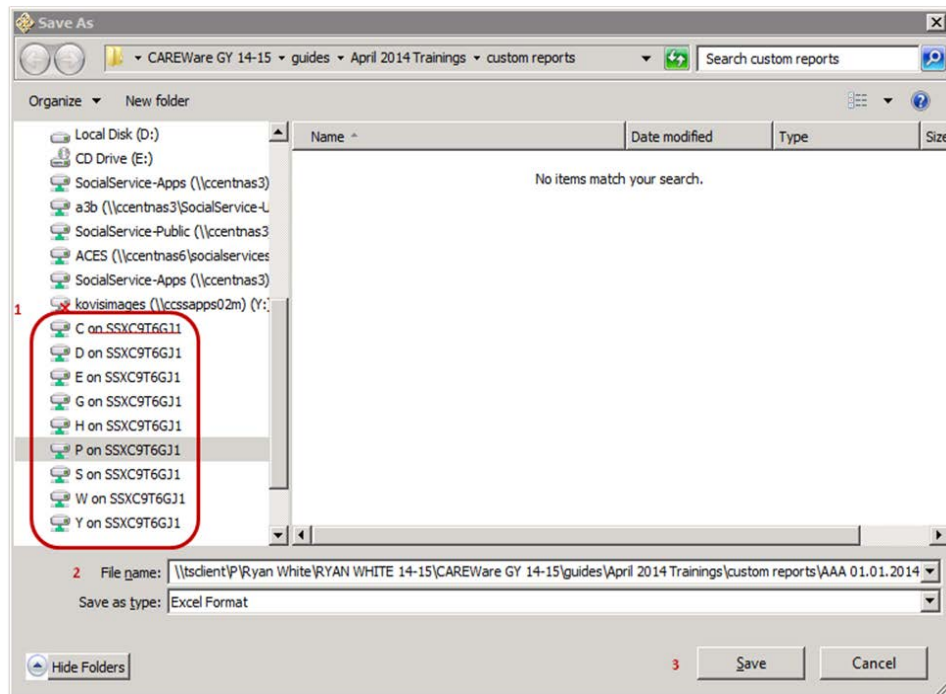

1. CAREWare is hosted on a virtual computer, so the first files that appear will be on the virtual computer. **DO NOT** save files to this location. Look for your computer's name, which will typically be a series of letters and numbers. Click on the folder locations and see if they look familiar. Once you verify that it is your computer, select which folder you would like to save the file to.

2. Use the **File Name** field to label the file with a name that helps you to easily identify its contents. It is good practice to include keywords and the date span in the file name.

3. When you have entered all this information, click **Save**.

You will be taken back out to the export window. Click **OK**, and wait for the file to export. Depending on the size of the file and speed of the connection, this may take several minutes. When the report is done running, the **Export** window will close. Go to where you saved the file and open it to make sure that it exported correctly.
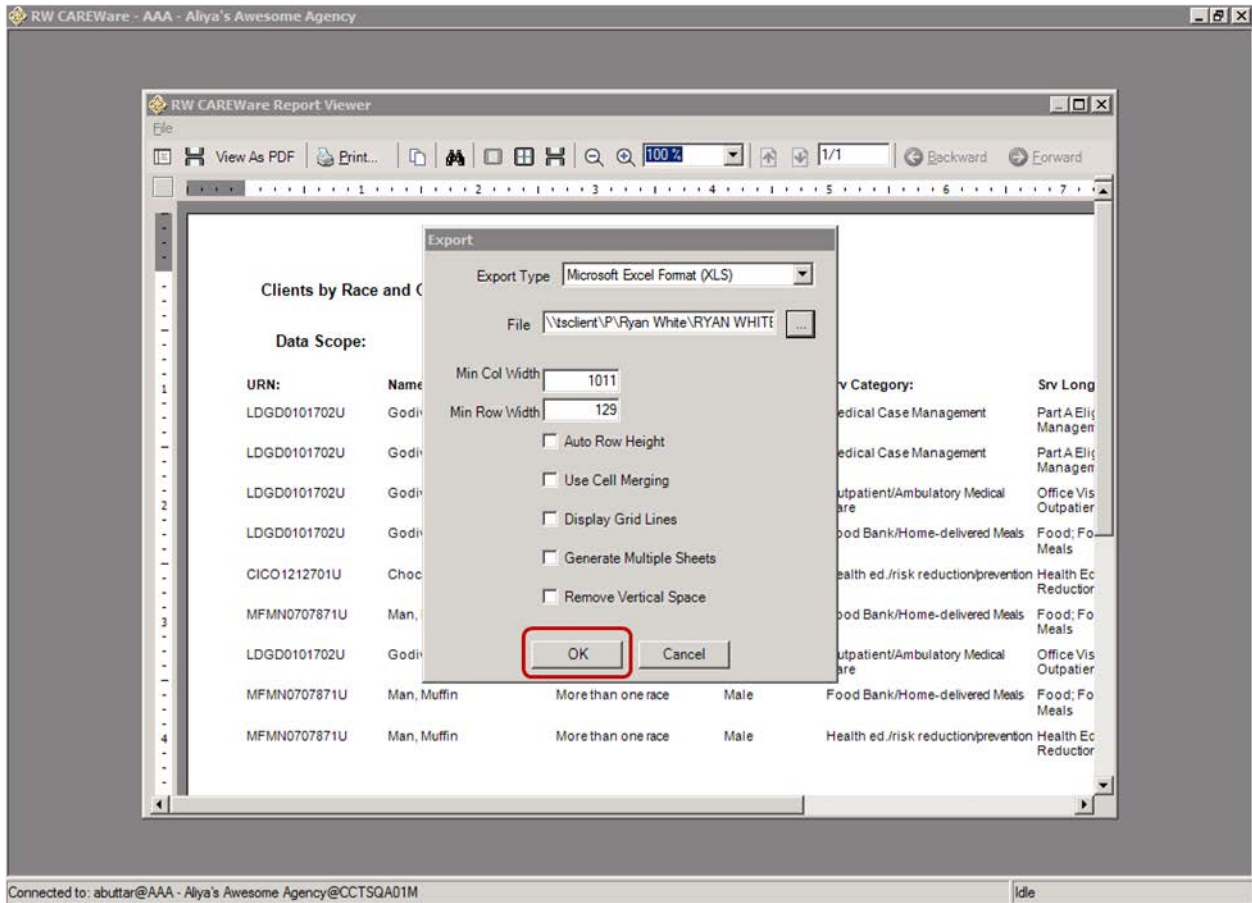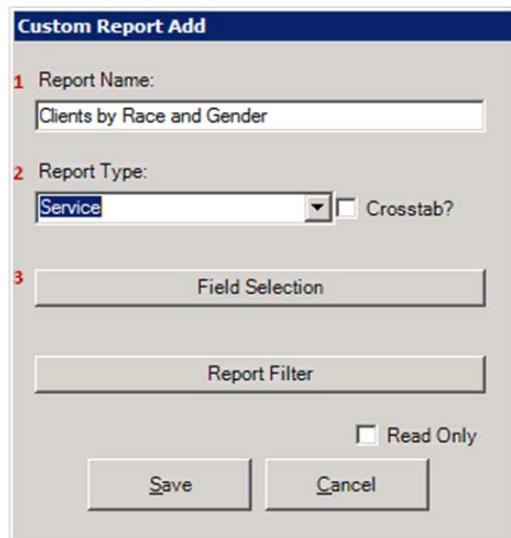
3. Create a new report:

To create a new report, click **New Report** in the Custom Reports window.
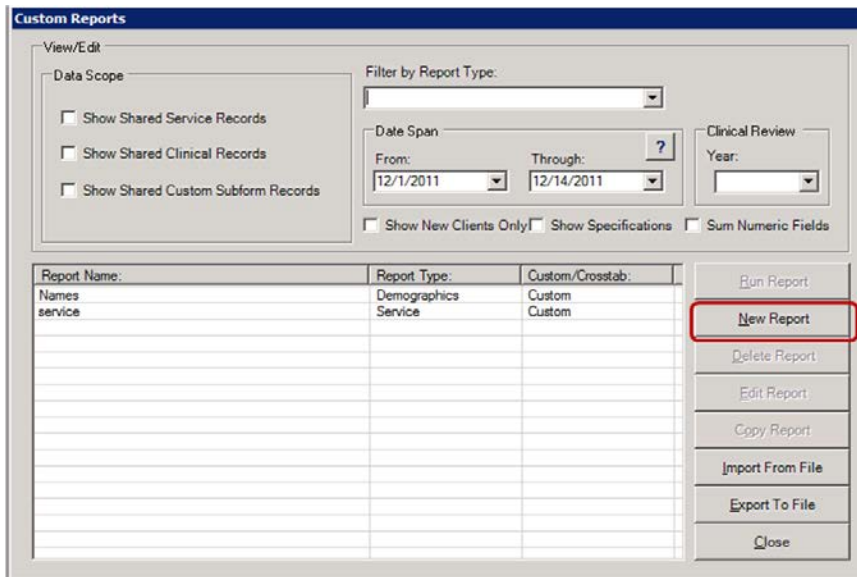

The Custom Report Add window will appear

1. Enter a name in the **Report Name** field that will help you easily identify the report in the queue.

2. Choose the type of report from the **Report Type** drop down menu. Certain fields are only available under certain report types, however, demographics fields are available within all reports.

3. Click **Field Selection** to choose which variables you would like to add. The following window will appear

Click **Add Field**.
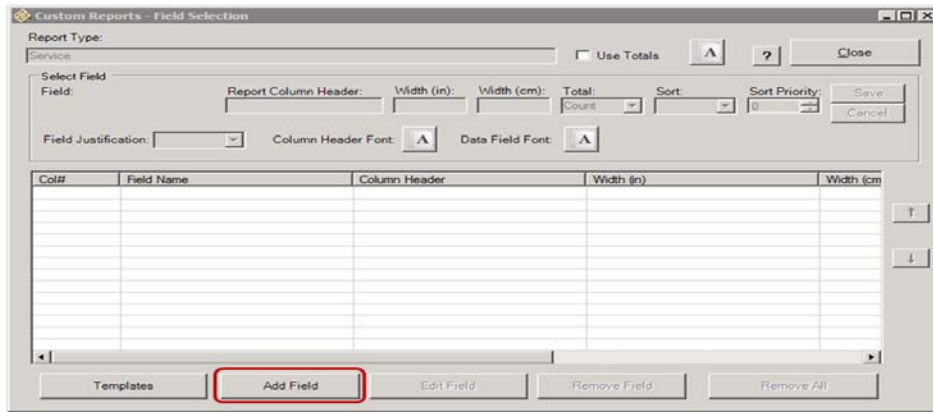
The Field Dictionary for Service Report window will appear.
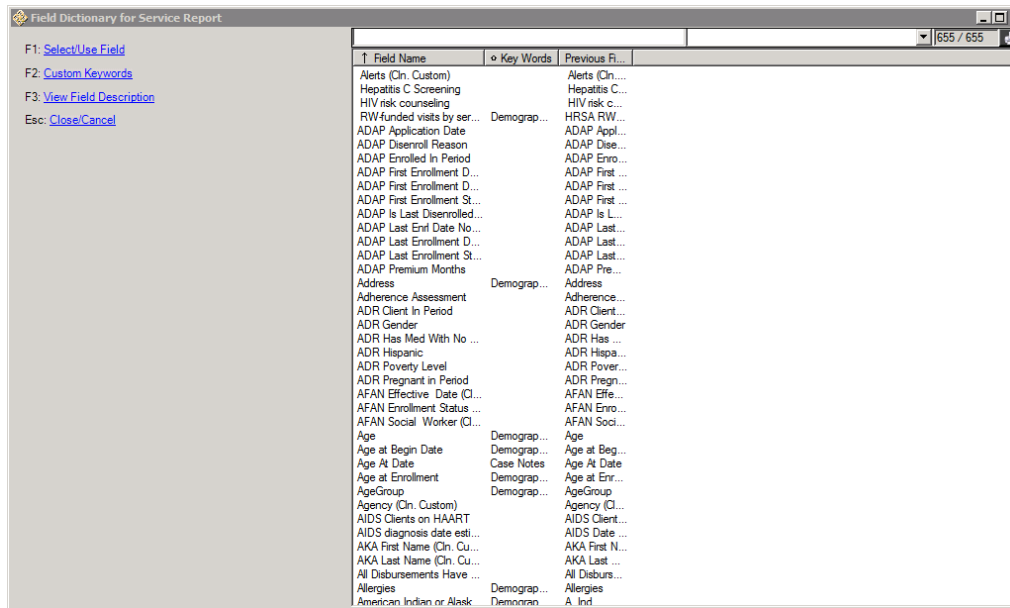
Look for the name of the field or type all or part of the name at the top to help narrow down the list. For example, if you want to include the client's URN in the report, you can type URN at the top, and only fields that have URN in their name will appear in the list.
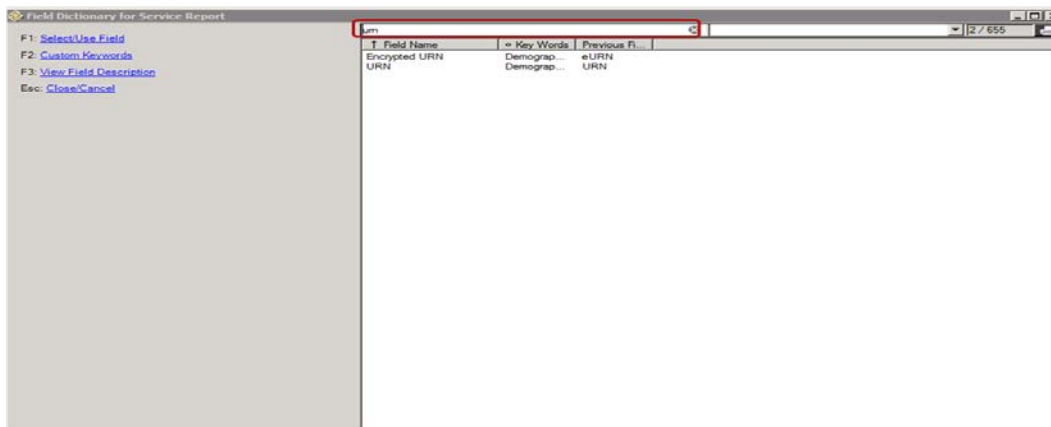
To get more information about a field you are interested in, highlight the field, and then click **View Field Description** at the left.
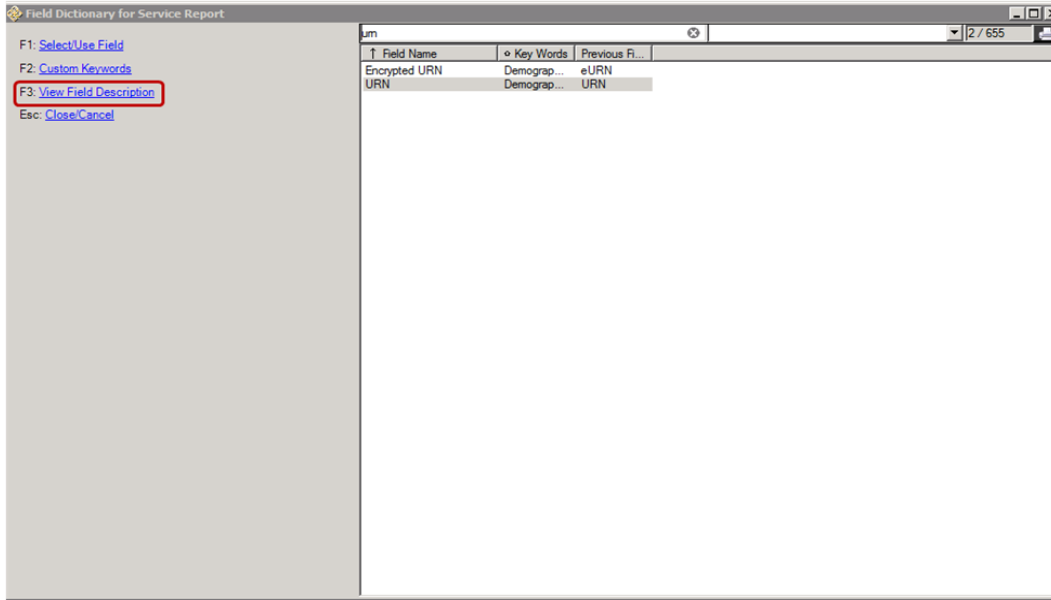
A Field Description window like the one below will appear. Not all fields have a field description, so you may need to conduct further investigation to better understand how the field relates to the data entered in CAREWare.
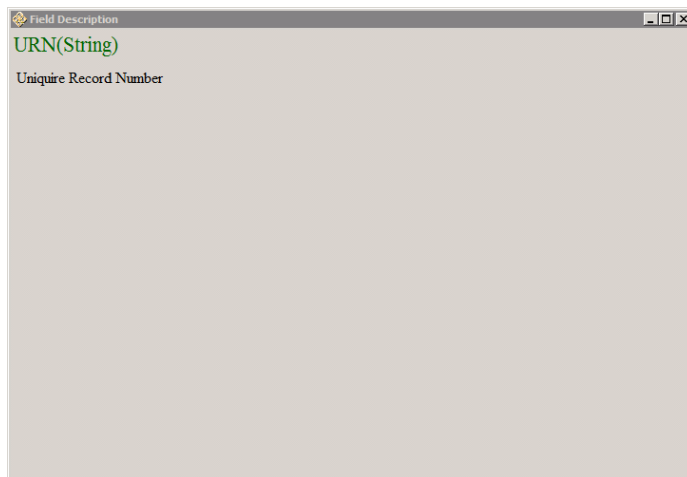
Once you determine that this is the field you want to use, highlight the field and click **Select/Use Field** on the left.
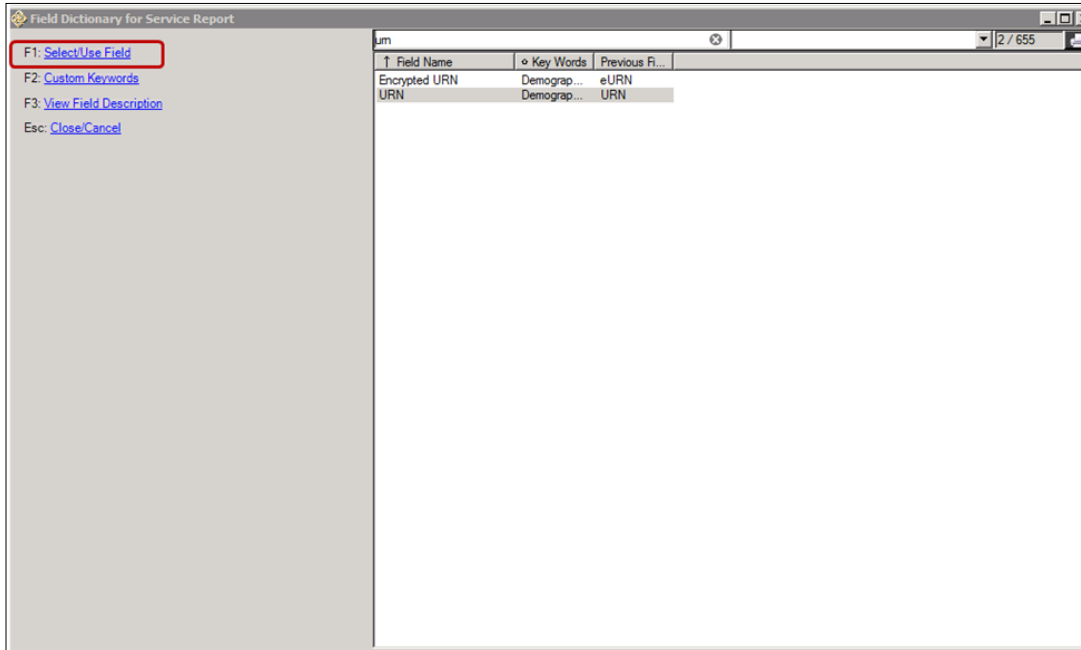
In the next window, you are given options for how to modify the format of the report. You can also make these changes later on in Excel or another program. Review the information in this window and click **Save** to add the field to the report.
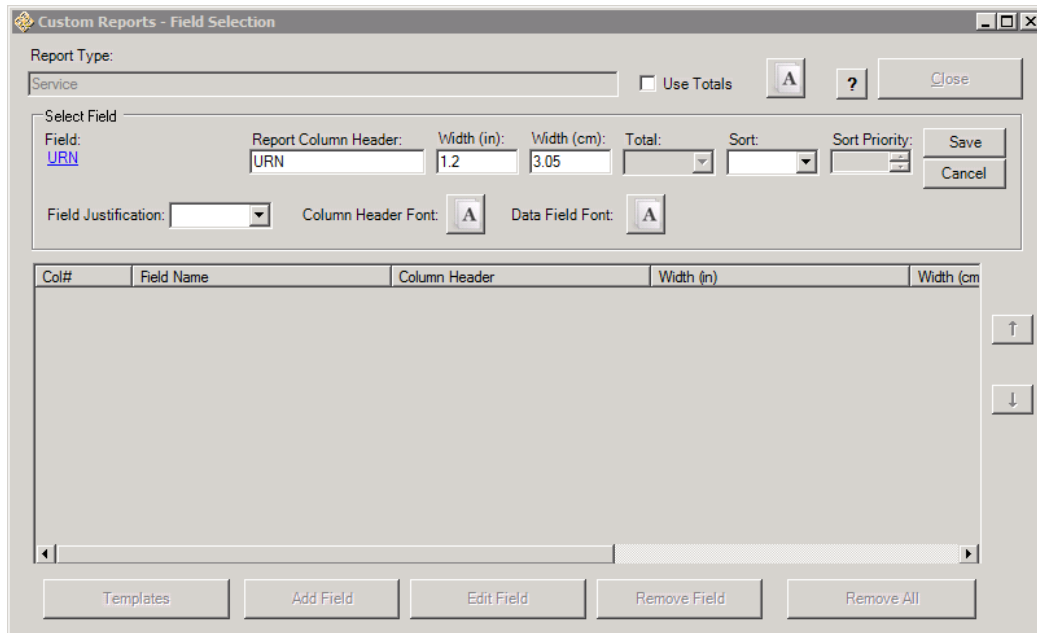
You will be taken back out to the Field Selection window. You can add more fields by clicking **Add Field** and following the same process.
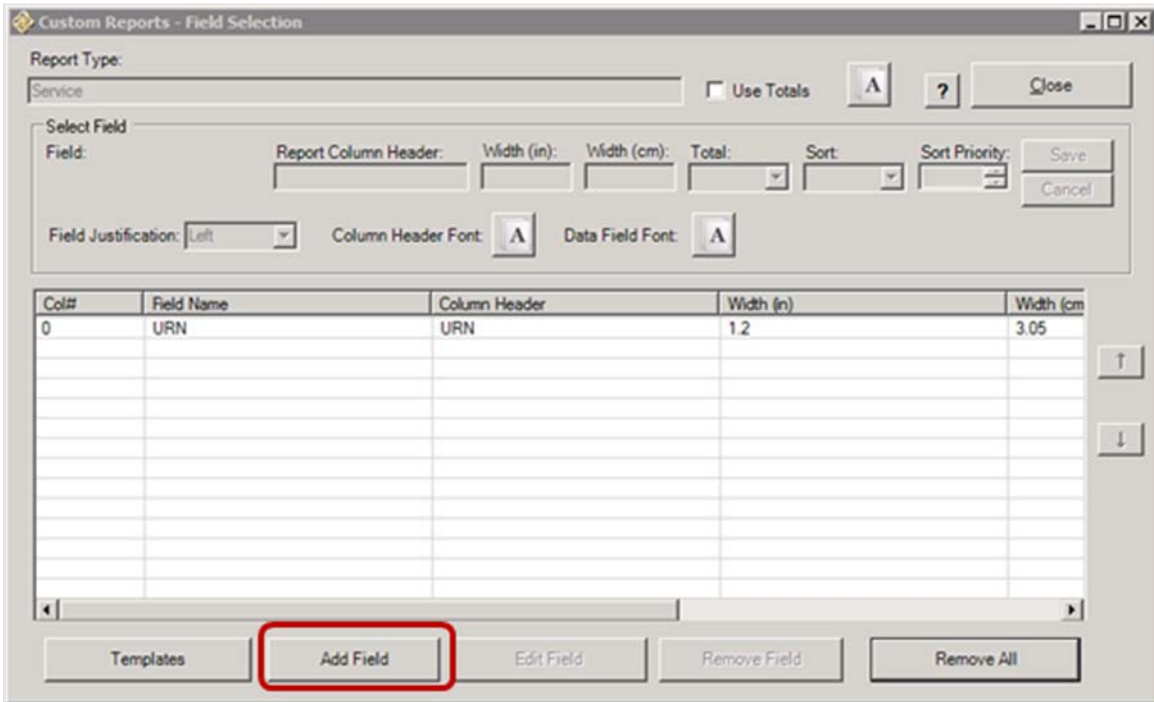
If you want to change the order of the fields, highlight the field you would like to move, and then use the arrows at the right to move it up or down.
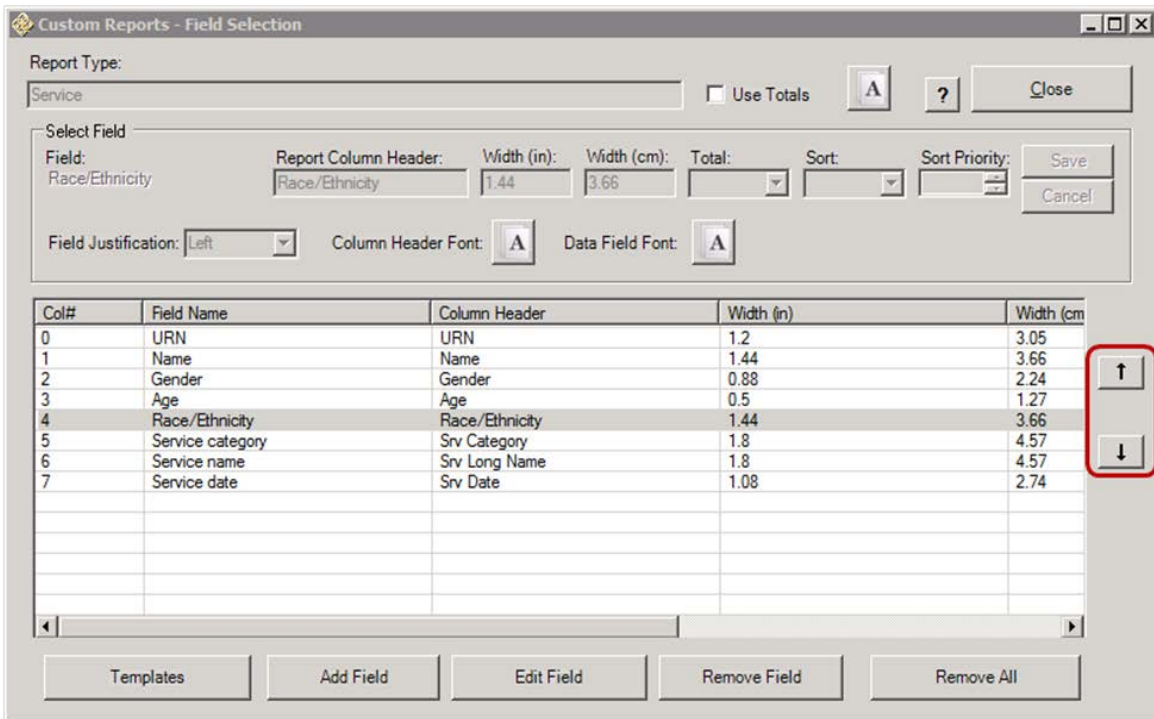
If you are ready to run your report, click **Close** in the top right hand corner.
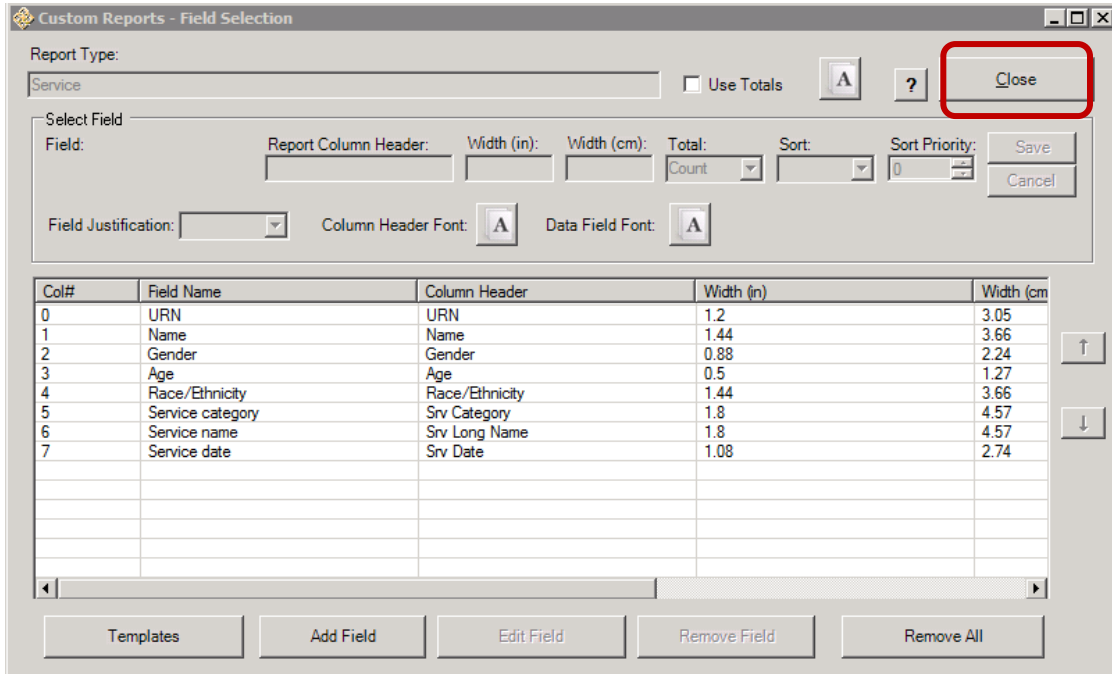
You will be taken out the Custom Report Edit window. Click **Save** in the bottom left hand corner.
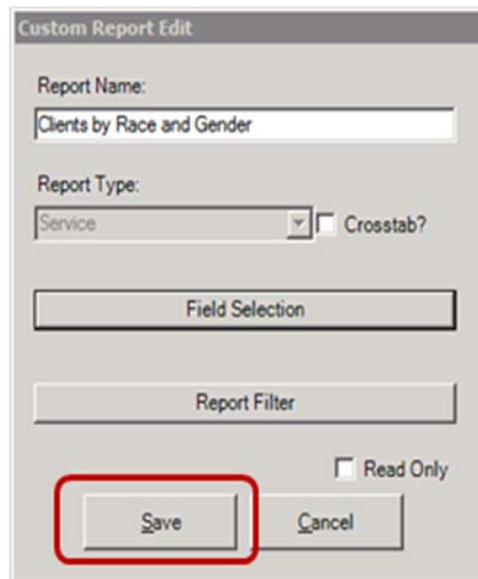
In the Custom Reports window, make sure the report you want to use is highlighted. Review the **Date Span** and **Clinical Review Year** to make sure they are correct, and then click **Run Report**.
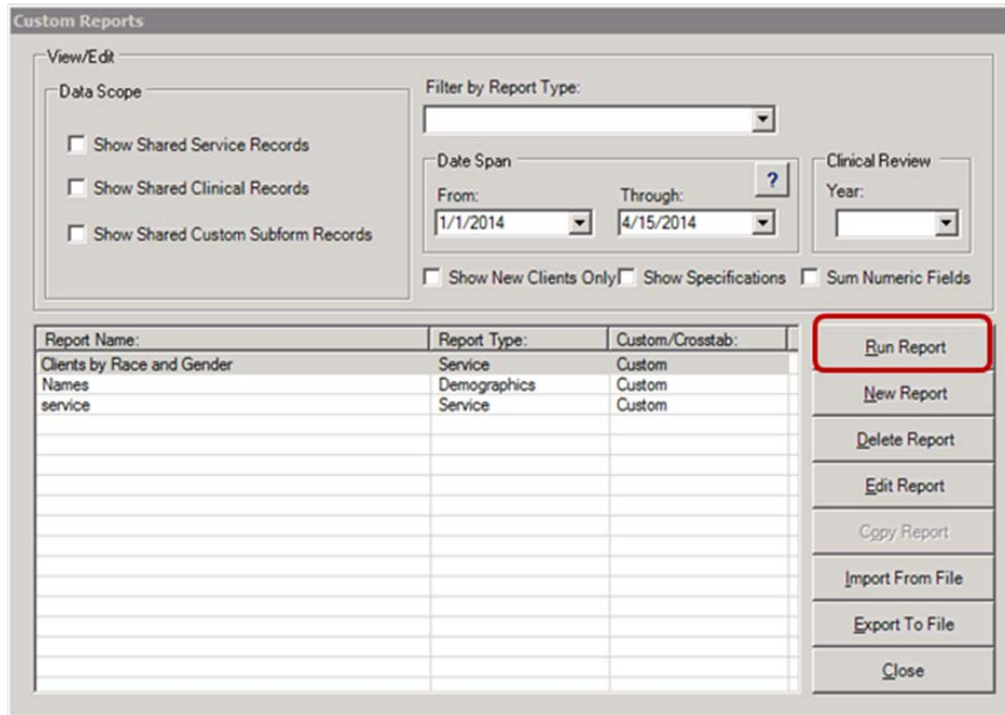
When the report is done running, the Report Viewer will appear. To export the report to your computer, follow the instructions on pages 8 - 10.
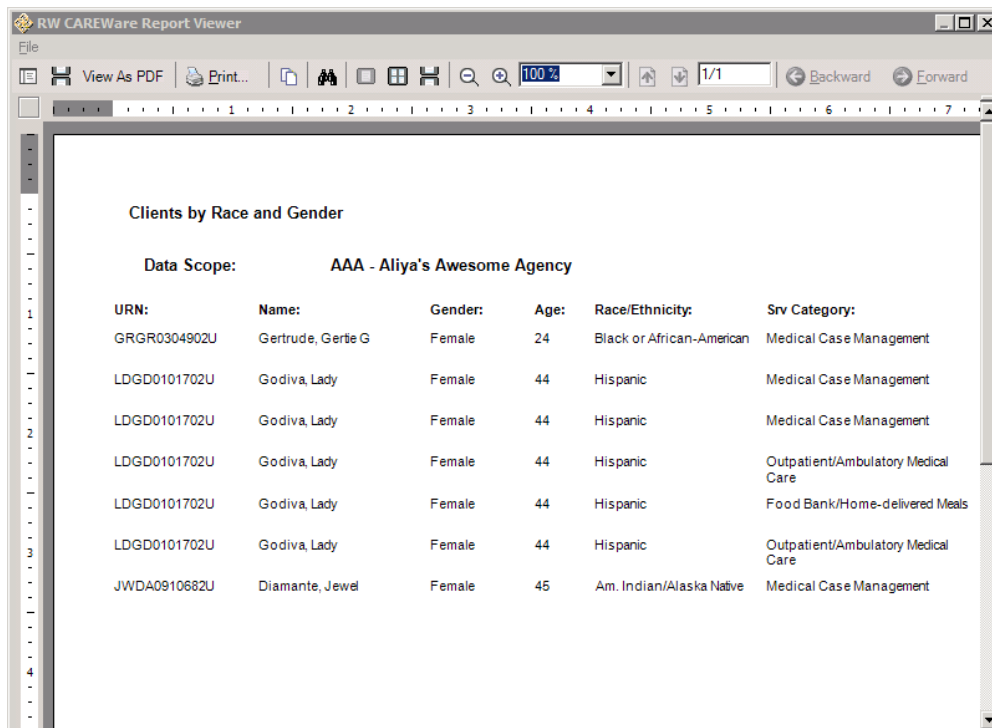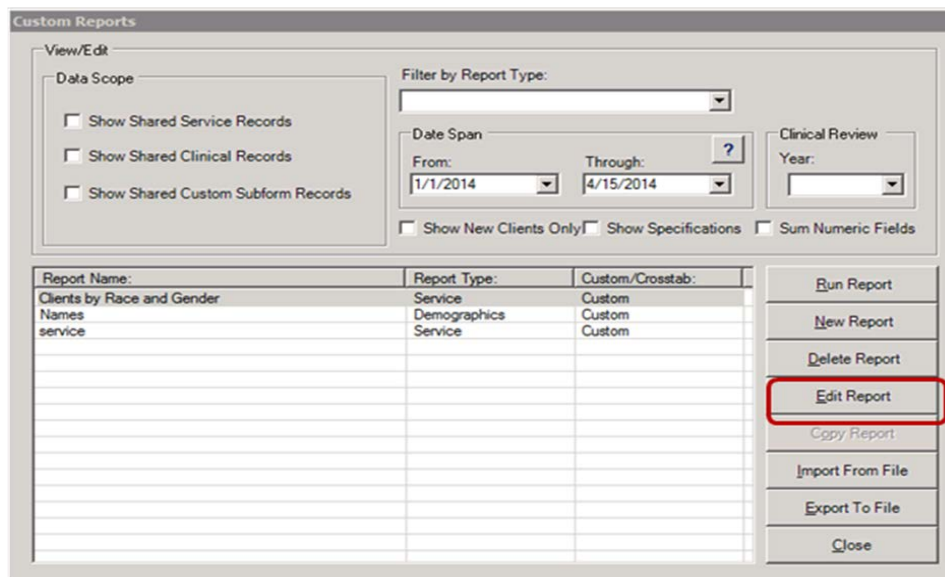
4. Add a report filter:

Use the report filter to filter your data. (It is a good idea to include field selections that will verify your filters are working as intended.) For example, if you filter your report to only include Females, you would want to include Gender as one of the fields in your report.

Generally, it is good practice to first run your report without any filters so that you can verify that the correct data are being pulled. You can then add filters to the report. It may also be more efficient to use Excel or another program to manipulate and filter your report.
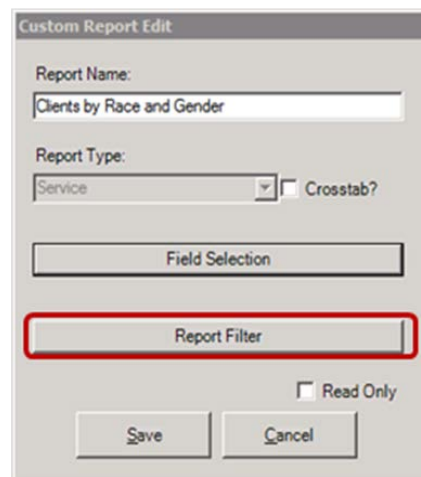
In the following example, we will use a filter to only include females in our Clients by Race and Gender report.

Highlight the report you want to add a filter to, and then click **Edit Report** on the right hand side.

Then, in the Custom Report Edit window, click **Report Filter**.

The Custom Reports – Filter window will appear. Click **Add Criterion** at the bottom.

The Field Dictionary window will appear. Find the field you would like to use, either by scrolling through the list, or entering part of the name of the field at the top. Once you find the field you want to use, click on it to highlight it, and then click **Select/Use Field** in the top left hand corner. If you want to know more about the field, click **F3: View Field Description** to see if there is more information in the Field Dictionary.

You will be taken back to the Filter window. Use the drop down menu to select which value you would like to use. In this example, we will choose **Female**.

Review the information in the Filter window, and click **Add Criterion** at the bottom to add the filter to the report.

If this is the only criterion you would like to add, click **Close** and then follow the steps on pages 7 – 10 to run and export the report.

You can also add additional criteria. For example, if you are interested only in women age 13-24, we can add a criterion for age. Click **Add Criterion** at the bottom of the page.
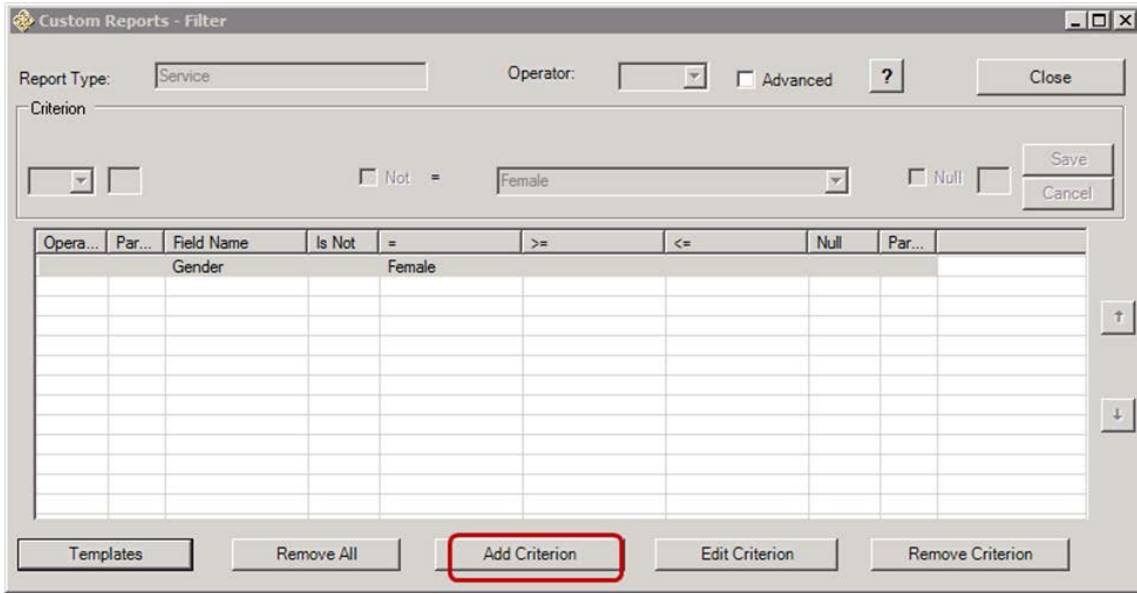
Select the **Age** field from the field dictionary, and click **F1: Select/Use Field**.
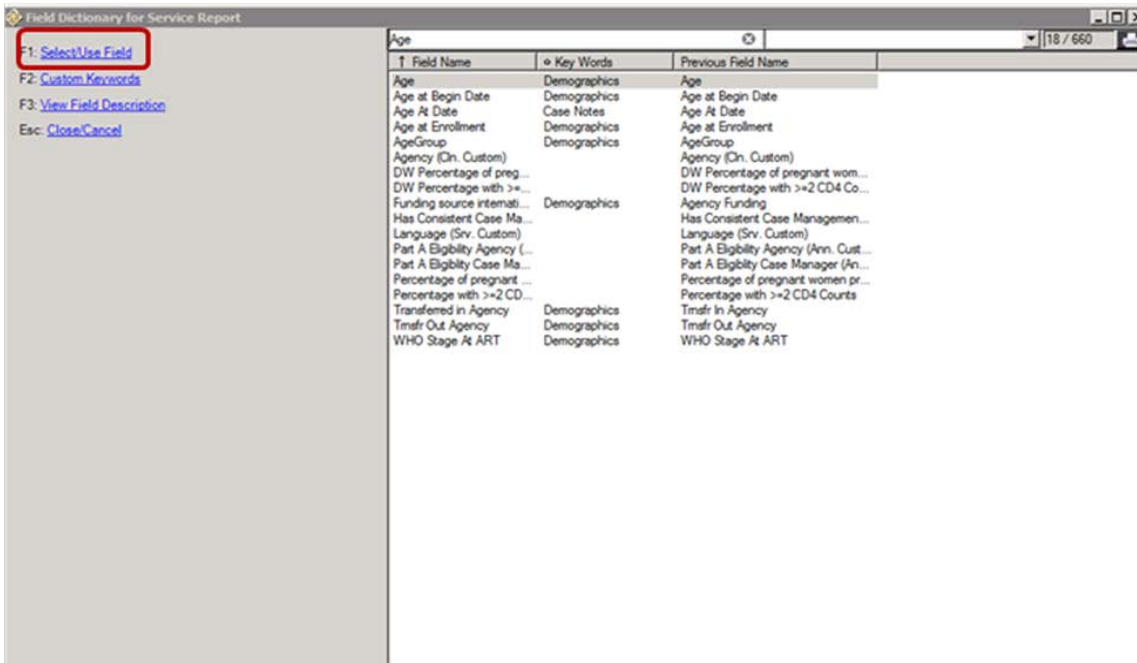
You will be taken to the Filter window.

1. Select **AND** or **OR** from the **Operator** list.
    - **AND** means that the outcome has to satisfy both conditions at the same time.
    - **OR** means that the outcome has to satisfy one condition, or the other condition, or both at the same time.
    Since we want to include only women who are 13 – 24 years old, we will choose **AND**.

2. Enter the lower limit of the age range in this field.

3. Enter the upper limit of the age range in this field.

4. Review the information in the window and click **Save**.

When you are done adding criteria, click **Close** and you will be taken to the Custom Report Edit window where you can save, run, and export the report.

4. Save a filter as a template:

You can save a filter you create as a template. This allows you to apply the filter you've created to any report type. For example, let's say we would like to easily apply the criteria of Female AND age 13-24 to other reports.

Click templates in the bottom left hand corner.

When you click on Templates, The Filter Templates window will appear. Click **Save to New Template** on the left.

Enter a descriptive name in the Name Template window and then click **Save**. The template is now available for you to use in other reports of the same type (e.g. this is a service report, so this template is only available for other service reports).

To apply this template to another report, edit the report you would like to use and click on Report Filter. Click **Templates** in the bottom left hand corner.
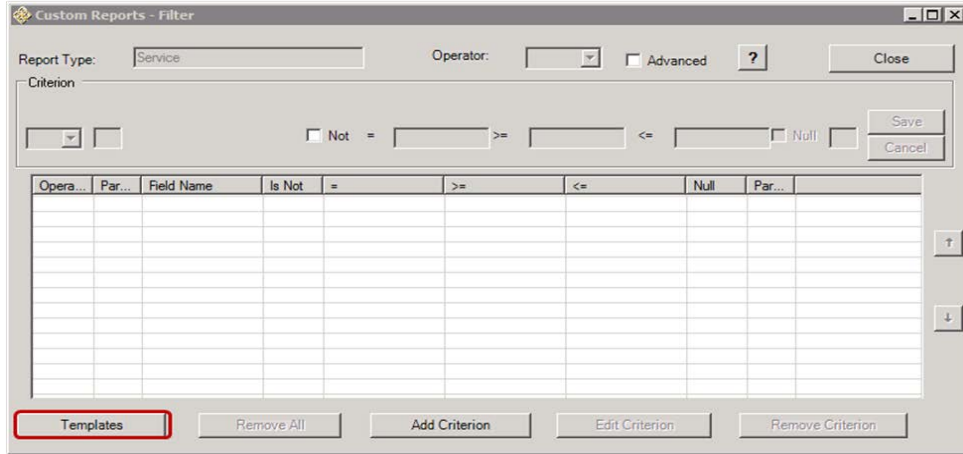
Select the name of the template you want to use, and then click **FI: Use Selected Template**.
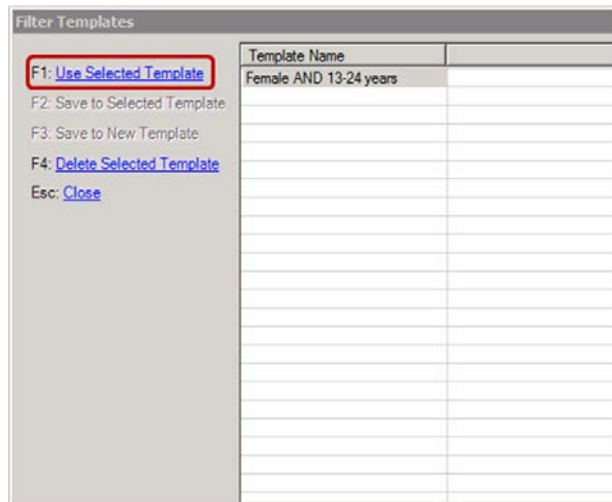
You will then see the criteria in the Filter window.
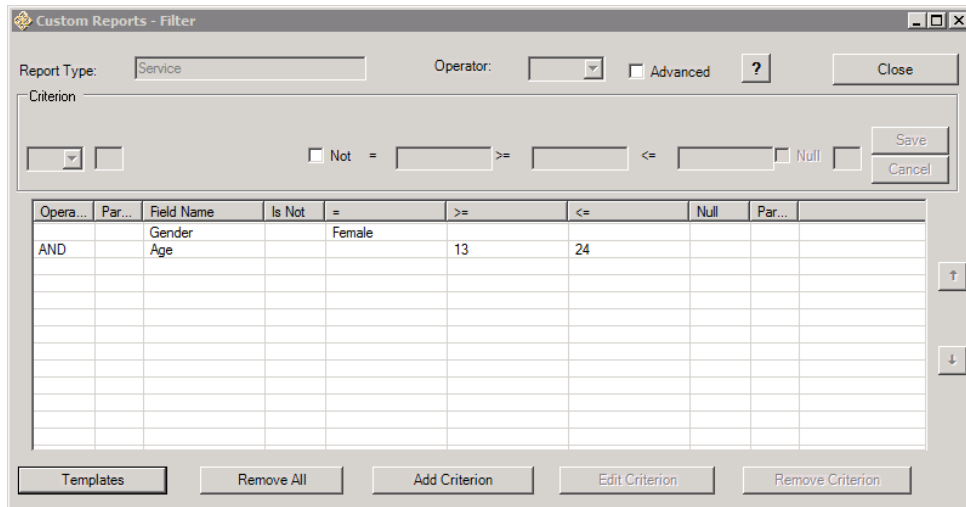
6. Using the Group Format Wizard:

The Group Format Wizard allows you to put any continuous, quantitative field into categories, for example, dates, lab results, etc.

If a field can have a group format applied to it, you'll see the **Format** link above the field name. You can use the Group Format Wizard from either the Field Selection or Report Filter windows.

Let's say that in the previous Clients by Race and Gender report, instead of including only 13-24 year olds, we wanted to group people into the following age categories: 0-12, 13-24, 25-34, and 35+.

From the report queue, select the name of the report you want to use. Click **Edit Report** on the right hand side, and then click **Field Selection** in the Custom Report Edit window.
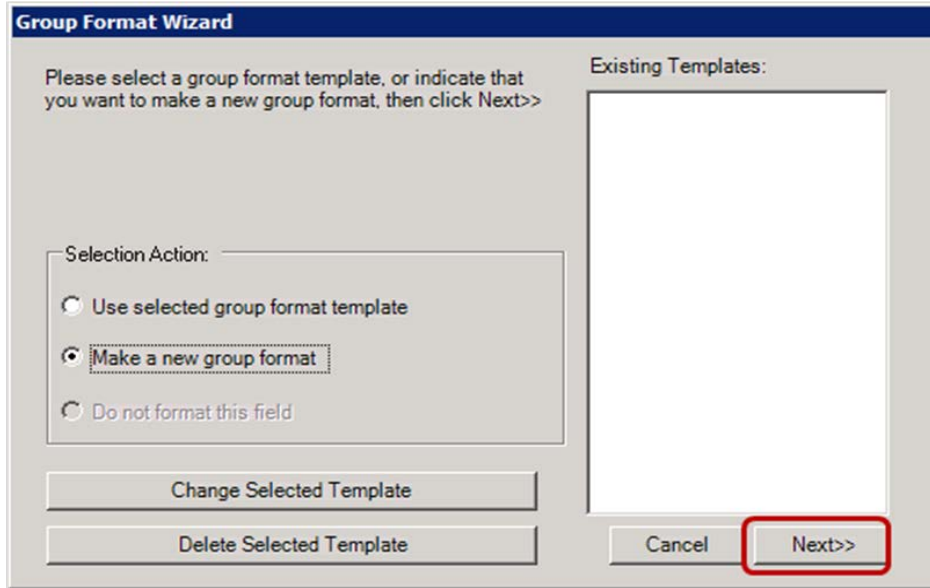
In the field selection window, click the field you want to format and then click **Edit Field**.
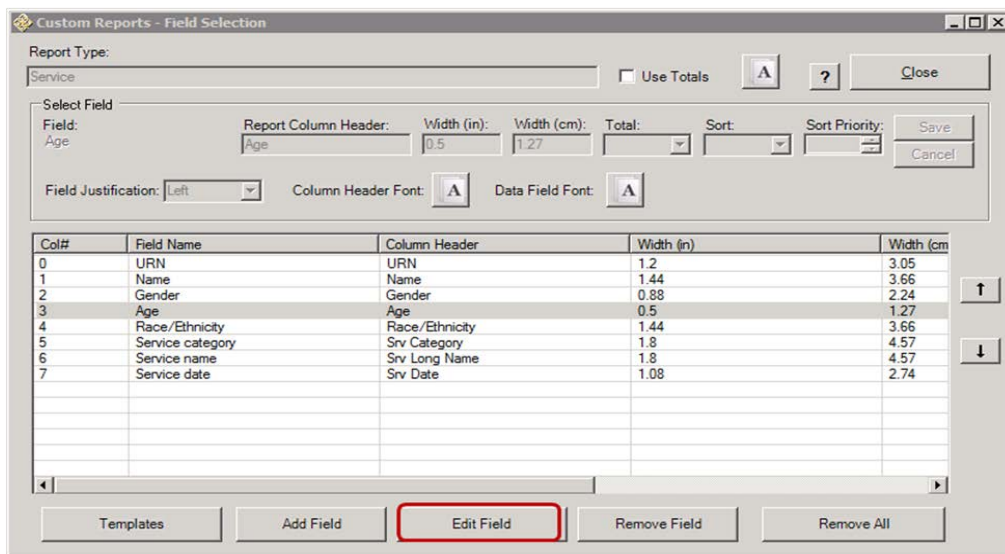
Click **Format** at the top left.
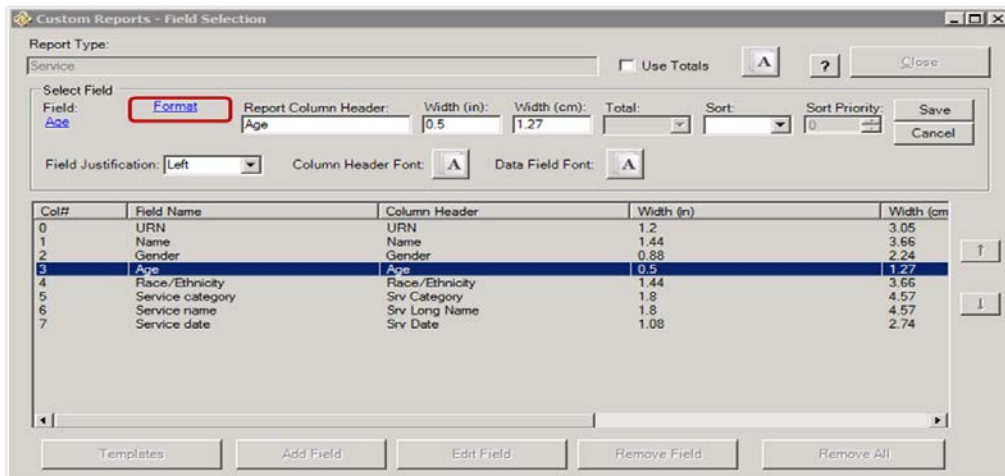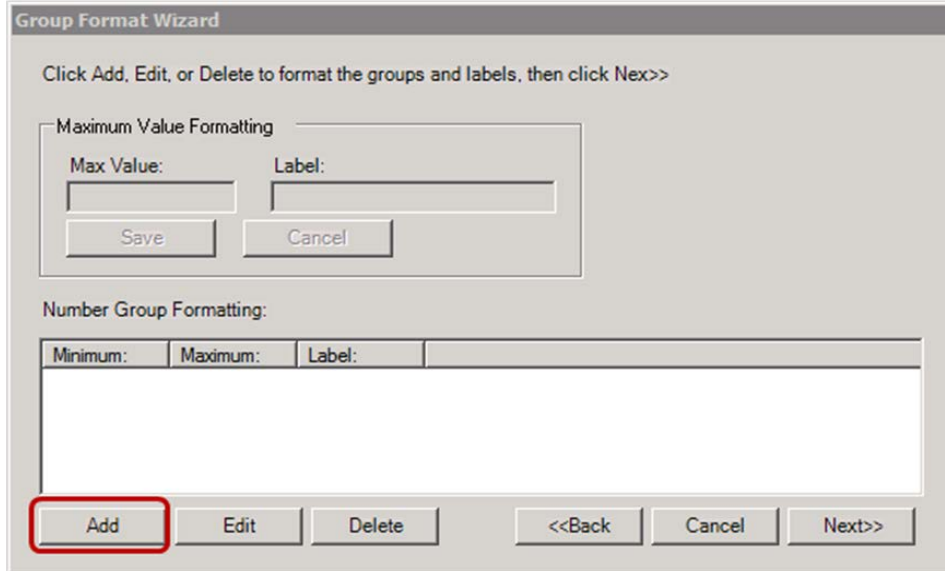
The Group Format Wizard window will appear. Select **Make a new group format** and then click **Next**.

In the next window, click **Add**.

For the first interval, enter the upper limit. Since our first interval is 0-12, enter 12 as the Max Value and 0-12 as the label. Then click **Save**.

Our next interval is 13-24, so we will enter 24 as the Max Value and 13-24 as the label.

Add additional intervals in the same way. You can edit the label of the last interval by clicking it and then clicking **Edit**.

You can then enter a more descriptive label such as 35+. Click **Save** when you are done.
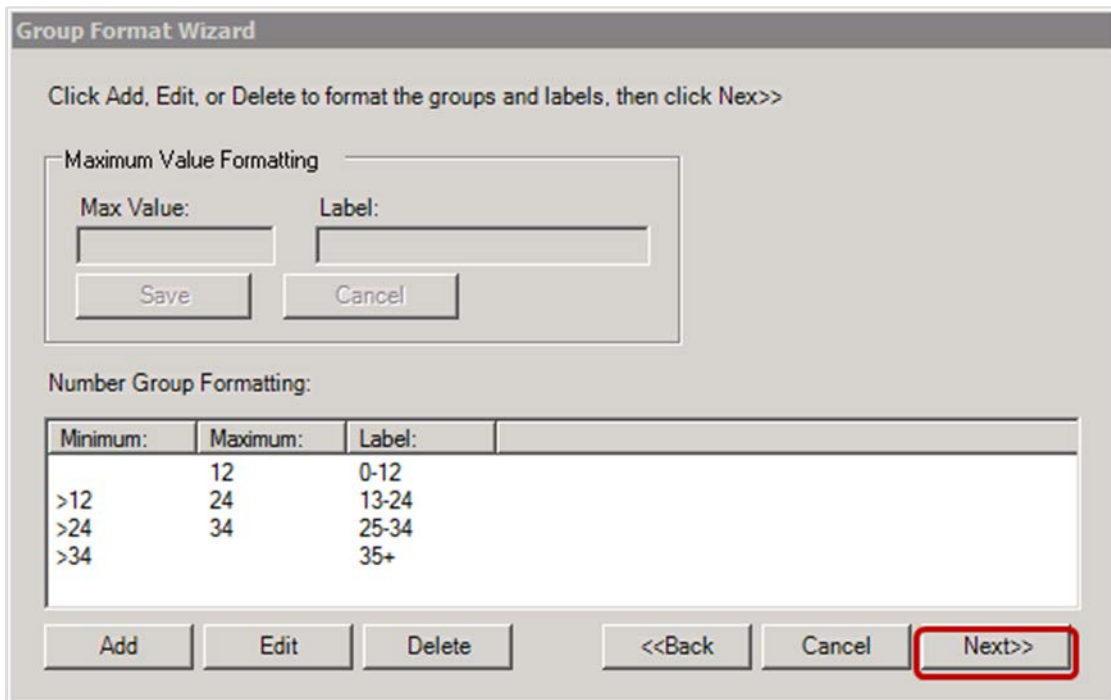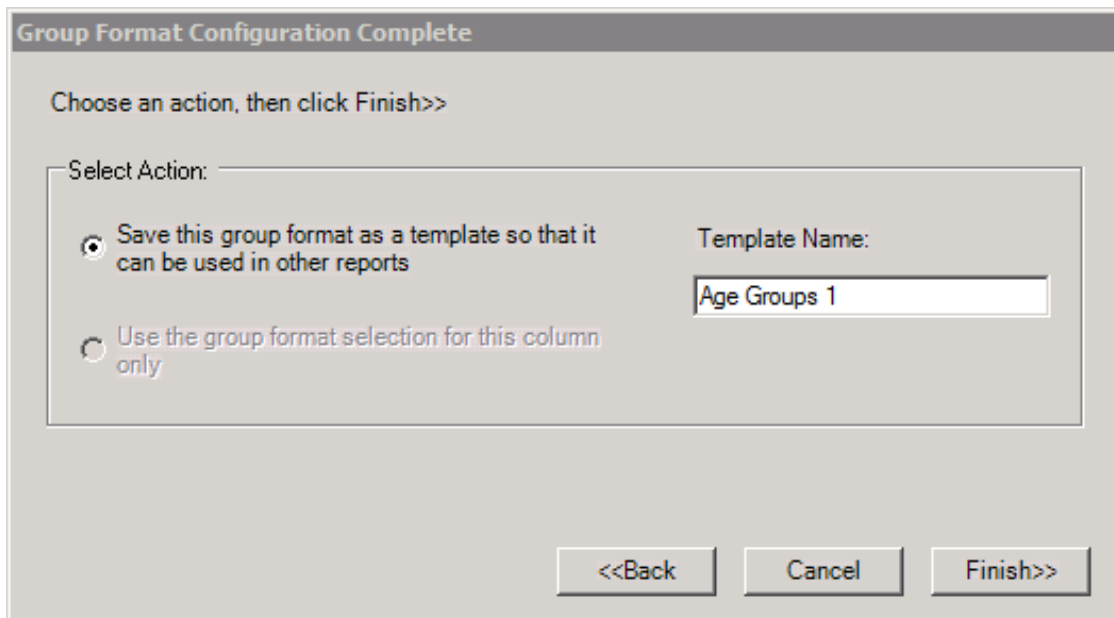
When you are done creating intervals, click **Next**.

If you would like, you can save the template so that it can be used in other reports. Enter a descriptive name, and click **Finish**.

To use the format once you have saved it, select the format name from the Existing Templates list, choose **Use selected group format template**, and then click Finish.
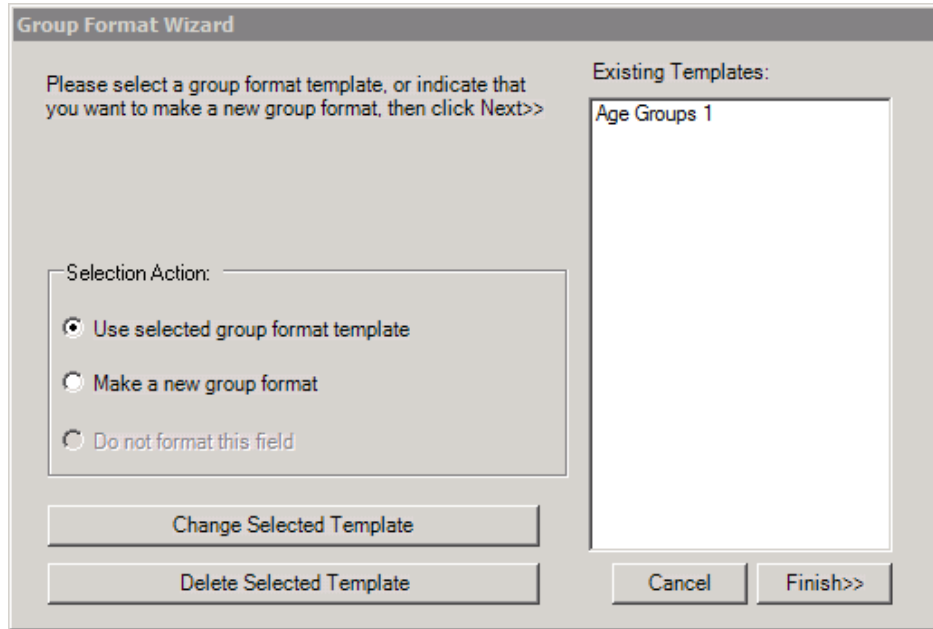
To remove a group format template, select and edit the field you are interested in. Then click **Format** in the top right hand corner.
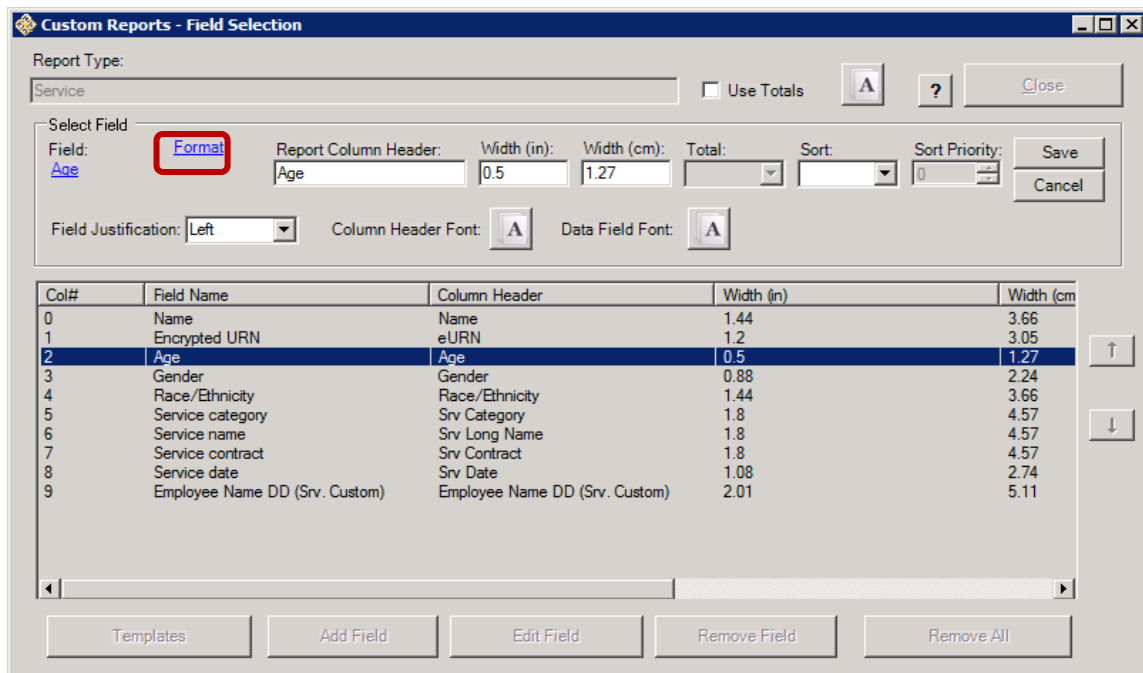
The Group Format Wizard will appear. Select **Do not format this field**, and then click **Finish**.
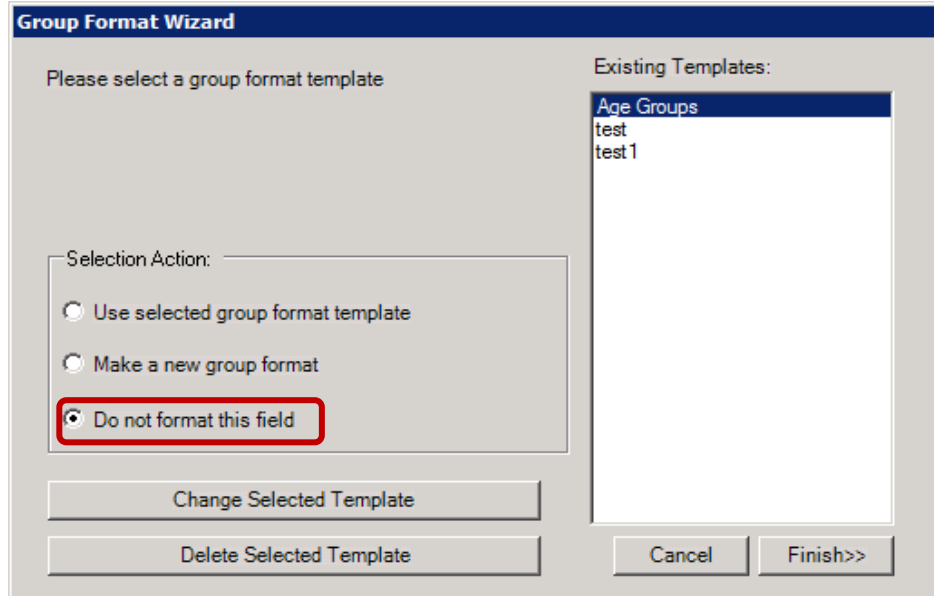
6. Microsoft Excel Tips and Tricks:

CAREWare has many features for manipulating the data in your reports, however, it is generally most efficient and accurate to use another software program to manage, manipulate, and analyze your CAREWare reports. Microsoft Excel is widely available and used, so we will review a few Excel tips and tricks.

We will use the following report to walk through some examples.

Before working with a report, it is good practice to back up your report by copying the file and then also creating a copy of the worksheet in your Excel workbook. You can do this by right clicking on the sheet's name, and then clicking **Move or Copy**.

The Move or Copy dialog box will appear. Make sure to check **Create a copy** and then click **OK**.
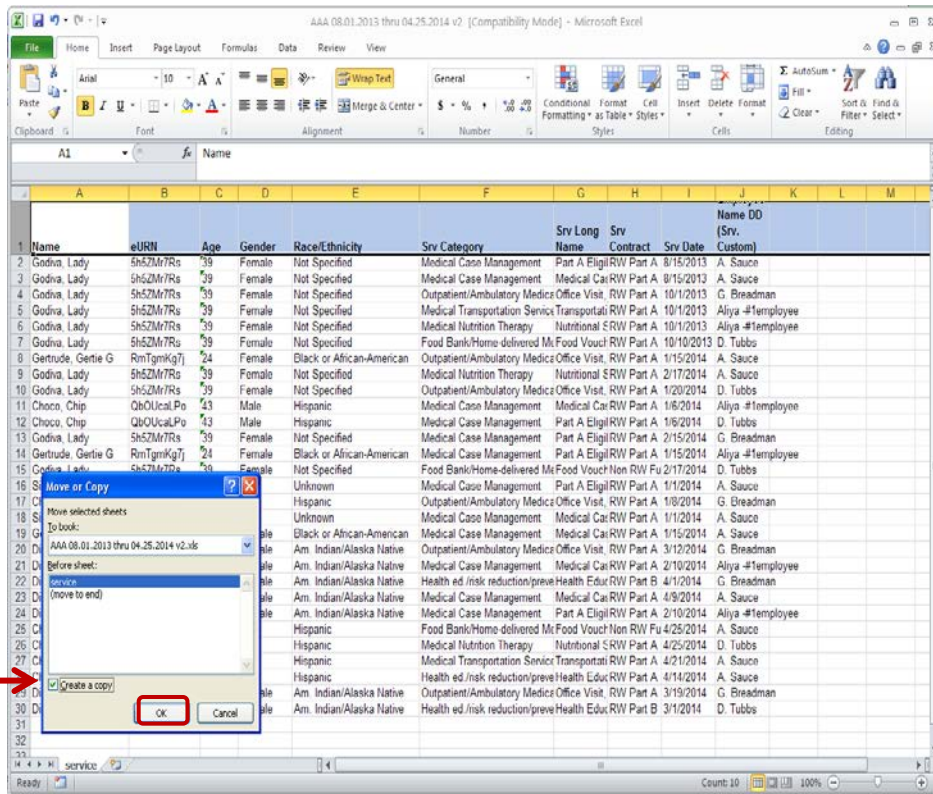
A duplicate sheet named service(2) will be created. You can rename it by right-clicking and choosing **Rename**. You can then type in a new name, for example Service Scratch
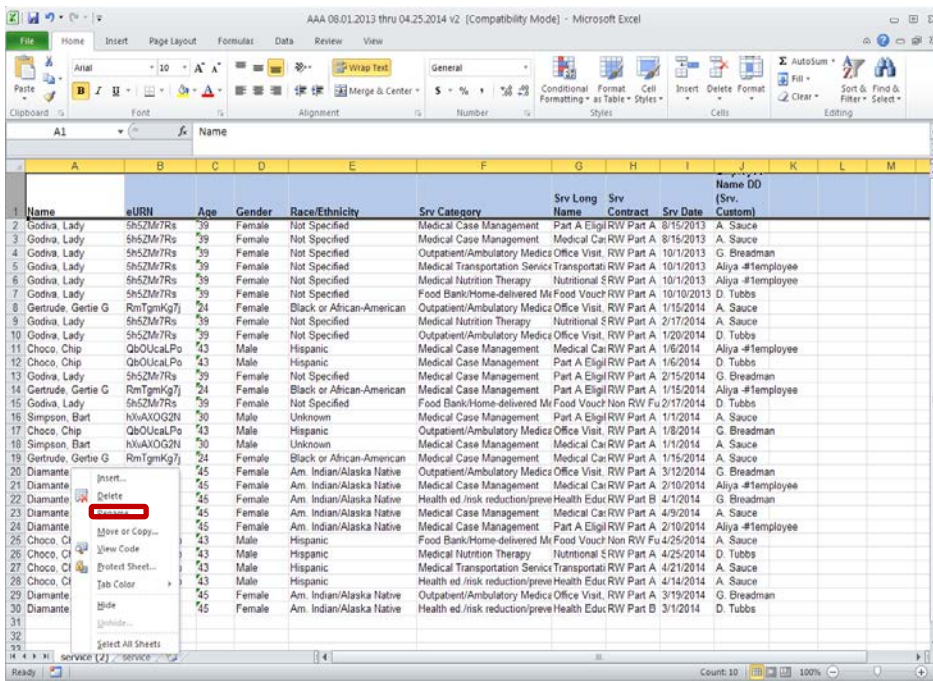
Using the Count Feature

A quick way to count the number of observations in your report is to look at the Count at the bottom right. Click the top of one of the columns and the count of observations in that column will appear at the bottom right.
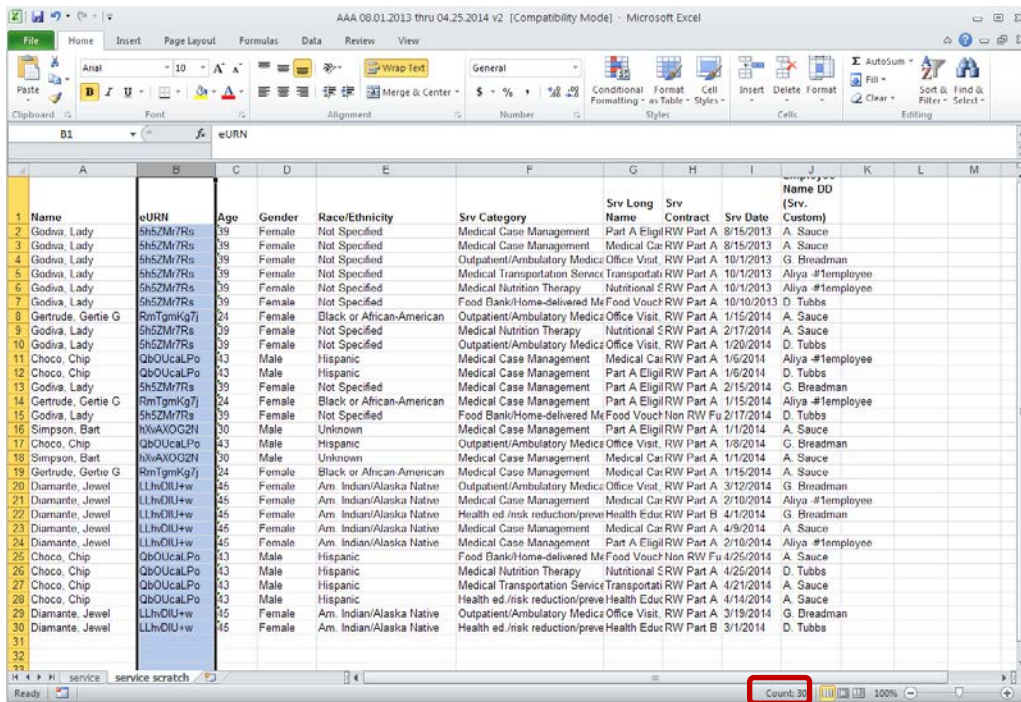
Using the Sort Function

The sort function can put your data in alphabetical and/or numerical order by using one or more fields.

Under the Data Tab, click **Sort**.
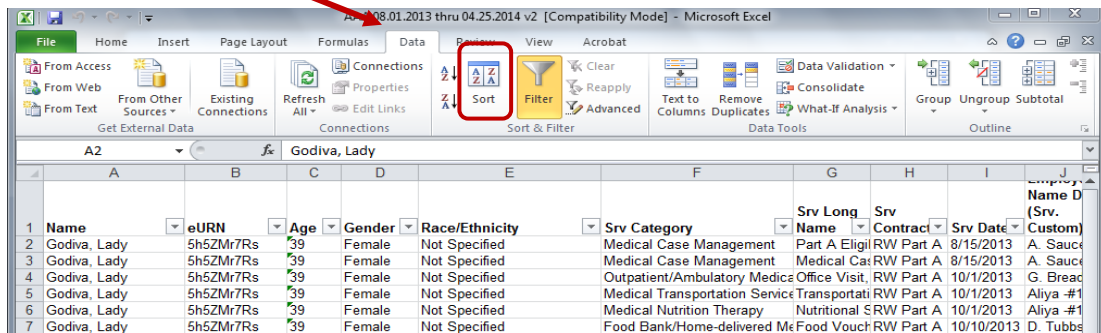
In the Sort window, make sure that **My data has headers** is checked at the top. Choose the name of the column you want to sort by under **Sort by**. For **Sort On**, you will almost always choose Values. For **Order**, choose A to Z or Z to A.
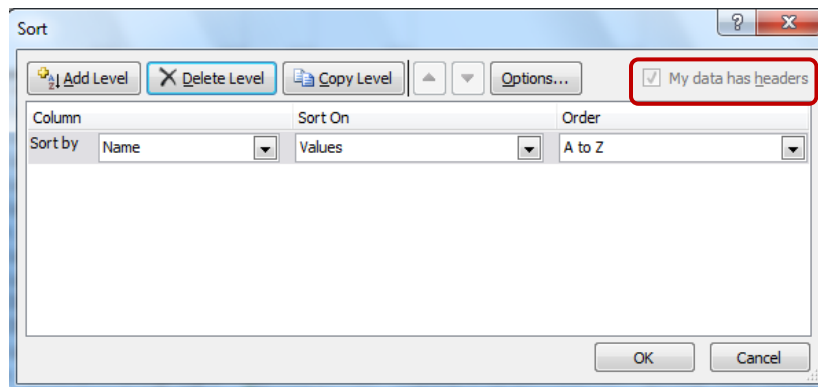
To add another level, click **Add Level** in the top left hand corner. This allows you to sort by two columns. For example, if we set up the Sort window like the one below, Names will first be put into alphabetical order, and then services will be organized by date, first to last.
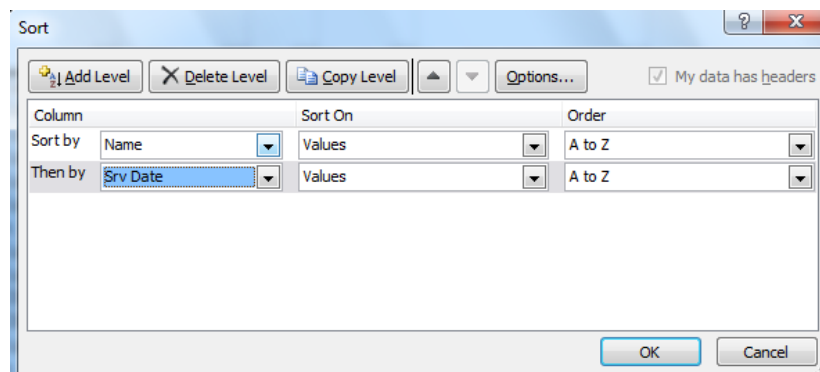
Using the Filter Function

The filter function can be used to quickly look at the categories and observations in your report. Click on one of the active cells in your report and under the Data Tab click **Filter**. The Filter Icon will become yellow and grey boxes will appear in the right hand corner of the cells in the top row.

Click on the grey box of a column to see which values it contains. You can hide certain values by clearing the check box next to it.
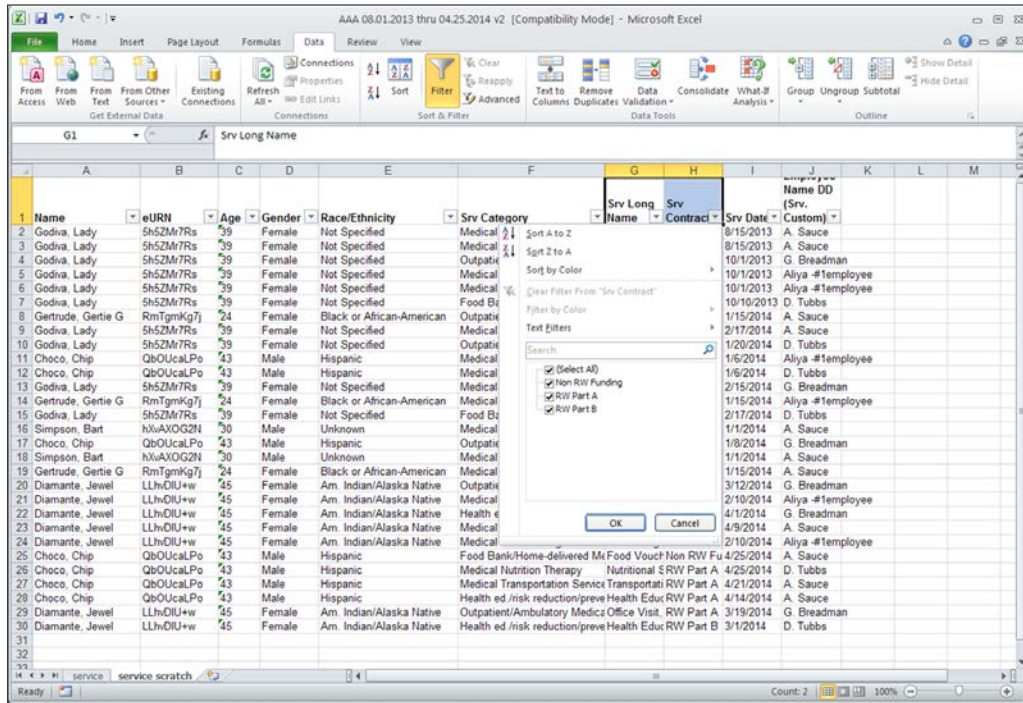
One common criterion you may need to use in your reports is including only Ryan White Part A contract services. You can do this by unselecting Part A, and then deleting all the rows except for the top row of labels.
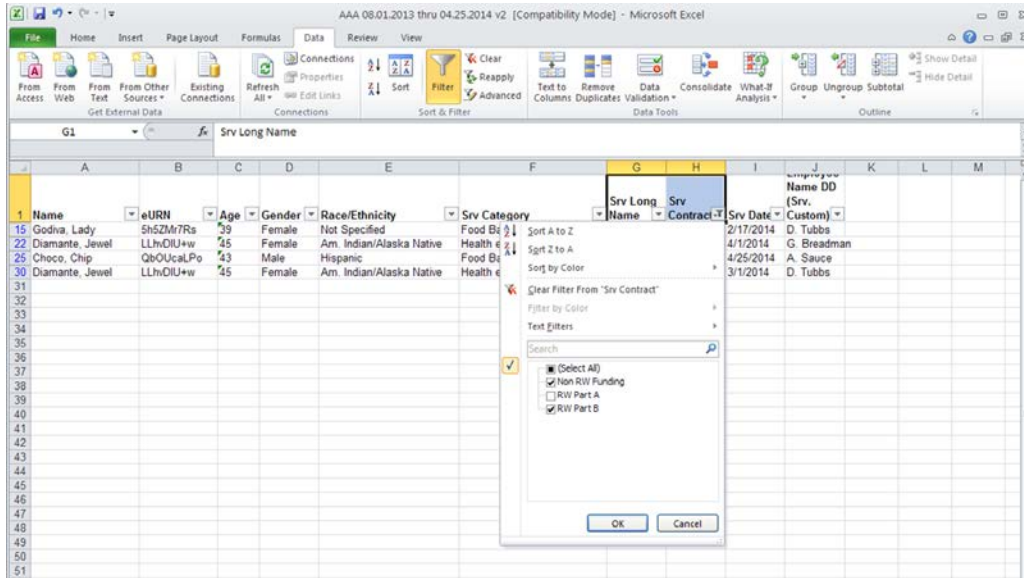
Highlight the rows you want to delete. Then right click to pull up the delete command.
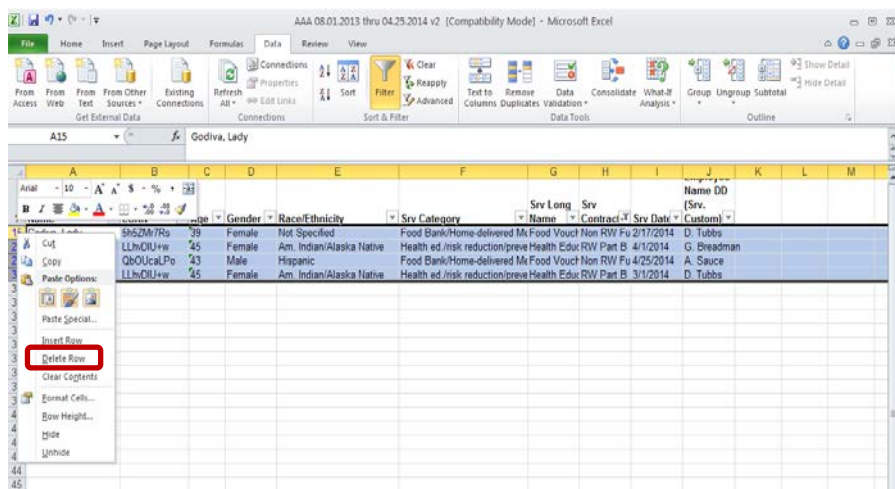
Then go back to the filter and select Part A and click **OK**.
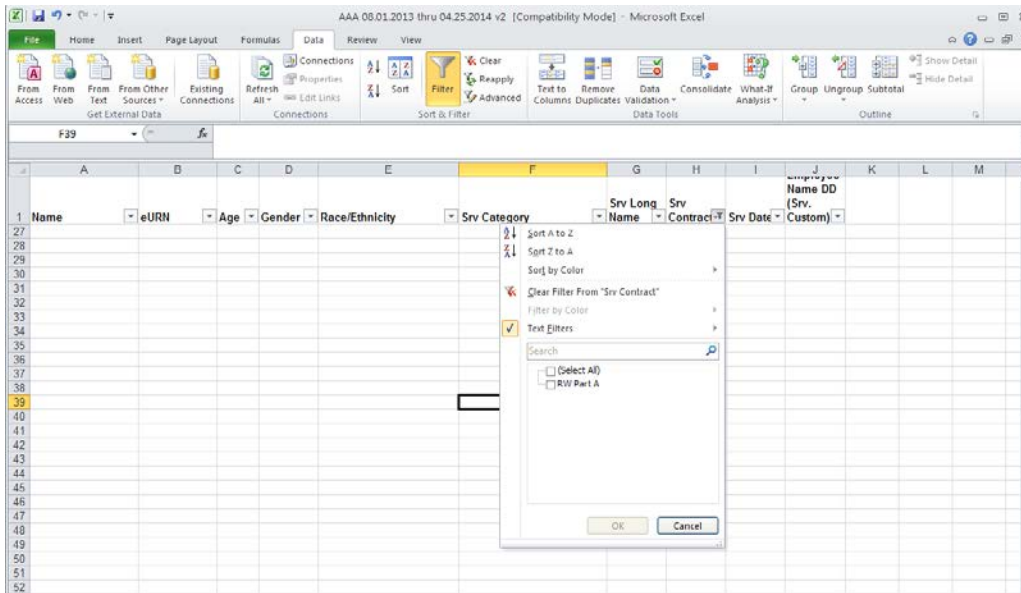
The report now contains only Part A services.

Removing Duplicates

Many Ryan White reports ask for the number of total services provided and the number of unduplicated clients. The Remove Duplicates feature can be used to easily remove duplicates. To ensure that your data does not get lost, create a backup copy of your report.

Click the Data tab and then click **Remove Duplicates**.
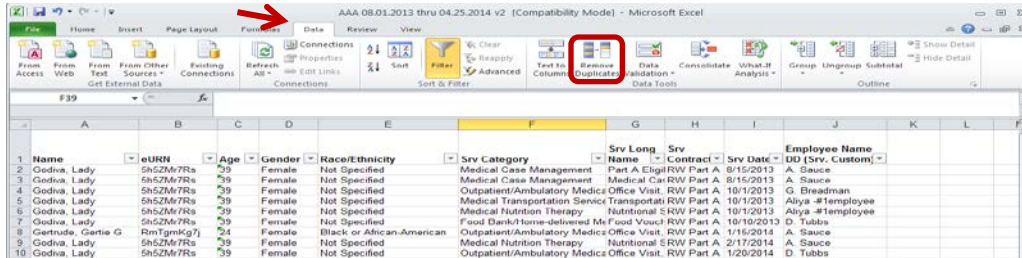
A window will appear asking you which columns contain duplicate values. Make sure to check **My data has headers** at the top so that the column labels are not included as field values.

Choose the columns you would like to include in the criteria for removing duplicates. If you select only URN, this will remove any duplicate values in the URN column alone.
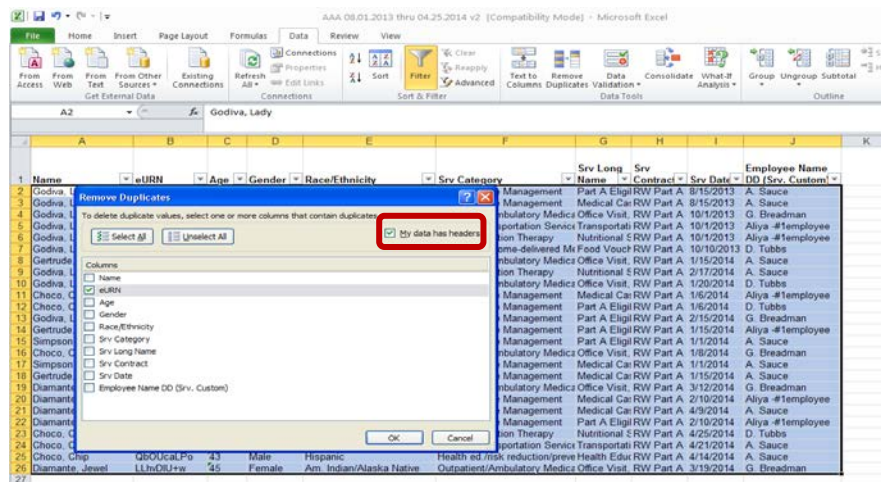
In our example report, if we choose URN only, only the 5 rows with unique URNs will remain.
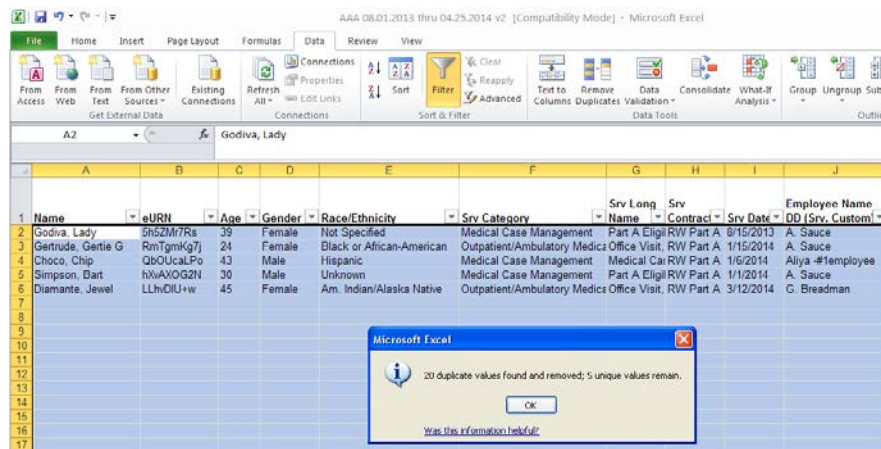
For most reports, however, you will want to know the number of unique clients per service category, so choose both the URN and service category to remove any duplicate values based on column AND URN.
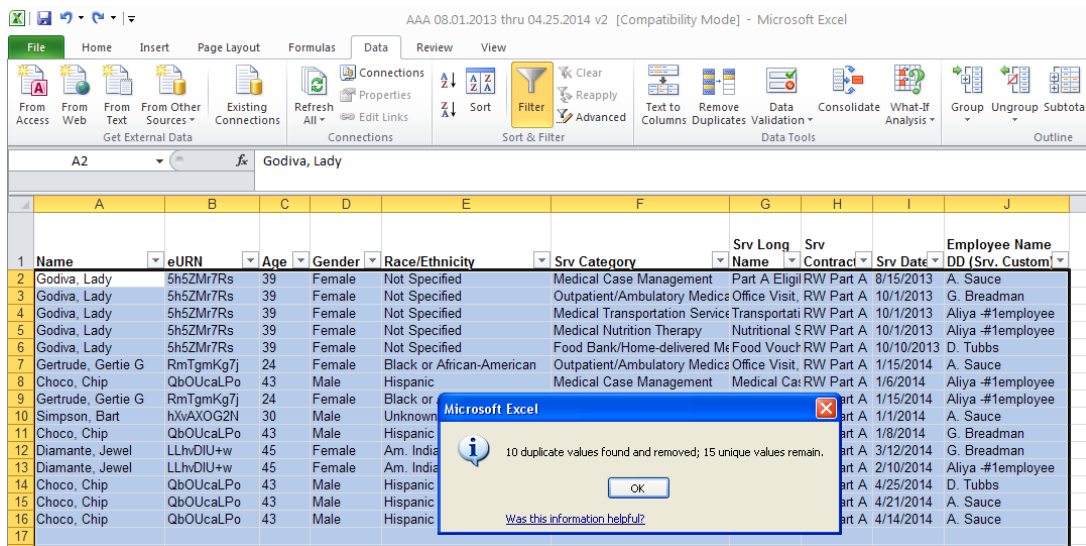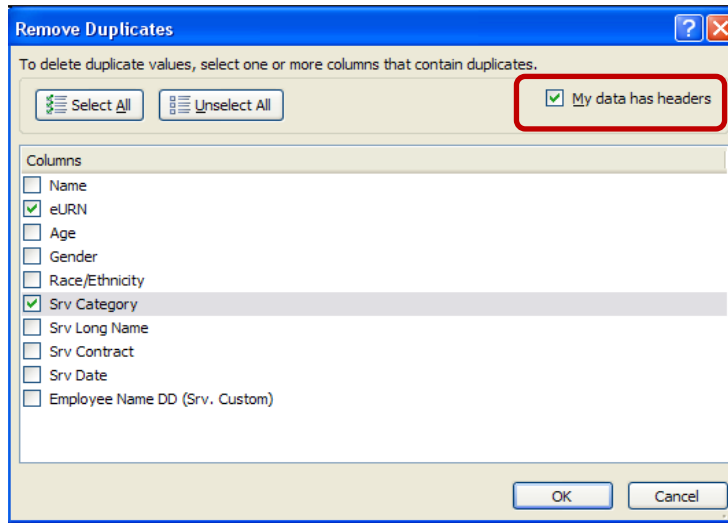
PivotTables

PivotTables offer a quick way to filter, stratify, and display data in a table.

Click on an active cell in your report. Then click the Insert tab, click PivotTable, and then click **PivotTable**.
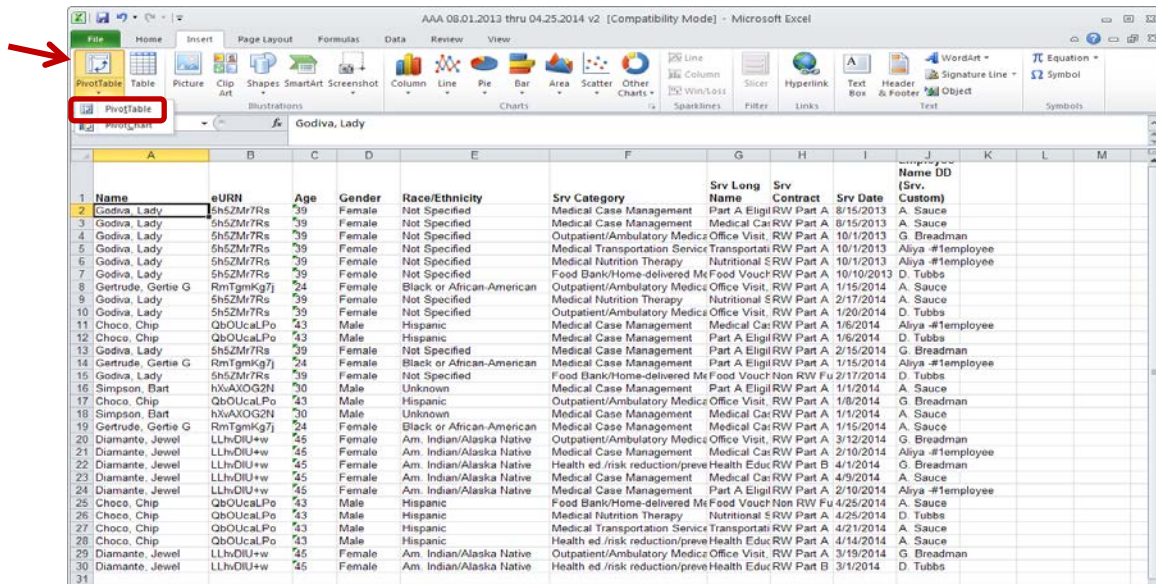
Make sure the full range of your report is selected, and then choose to have your PivotTable placed on a new worksheet.
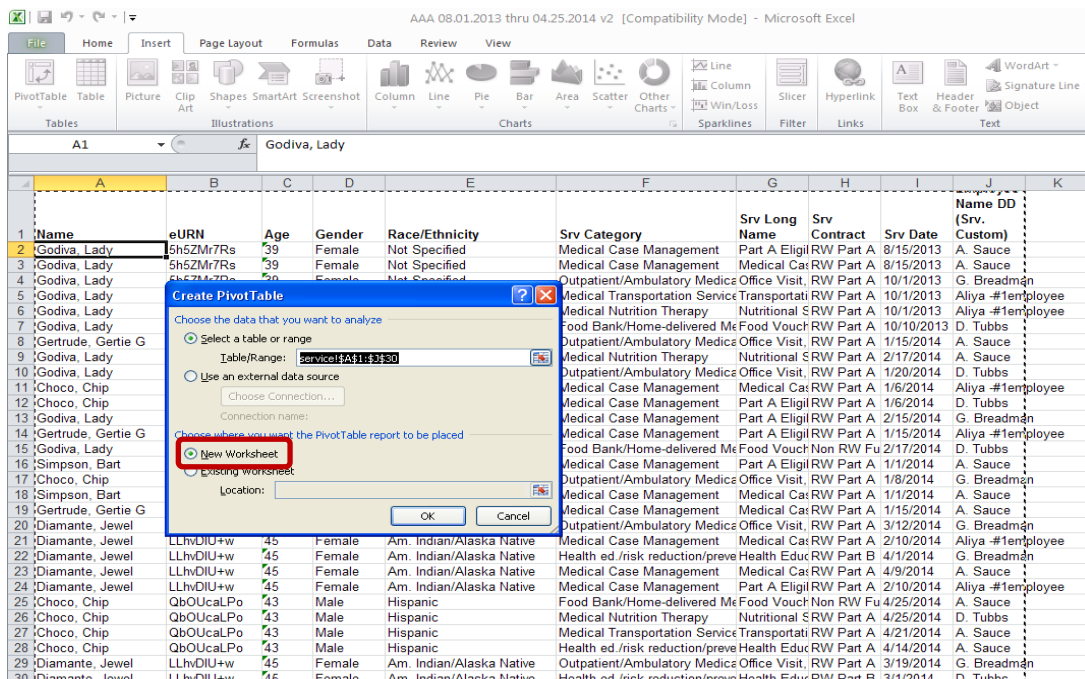
In the PivotTable, you can drag fields to the areas in the PivotTable Field List, or drag and drop them directly into the fields on the worksheet.
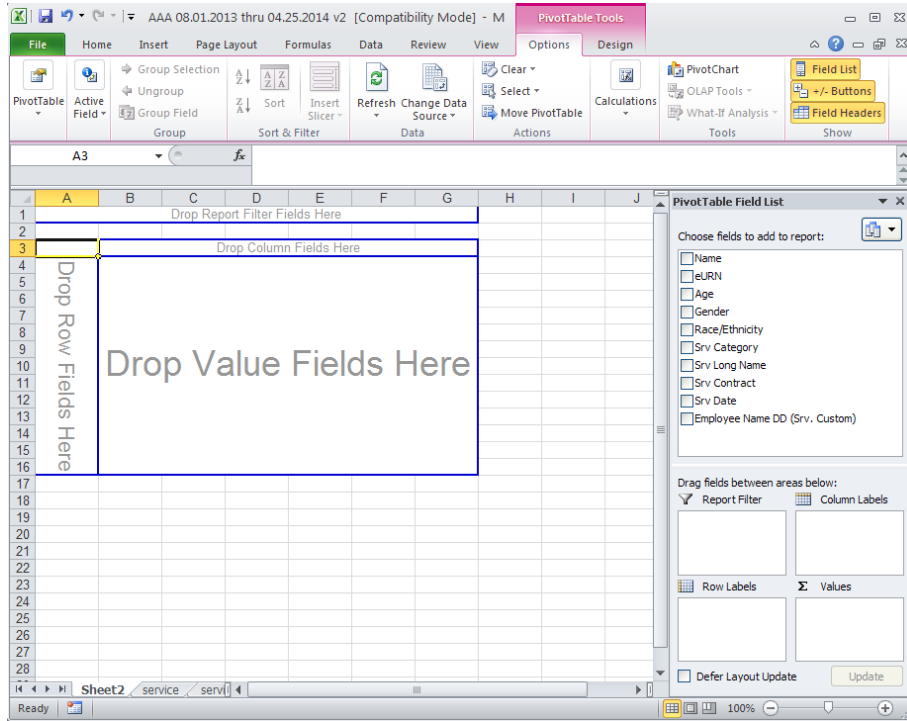
To add a filter, drag the field you would like to filter on to the Report Filter box. Click the grey arrow button to select which values you want to filter by.
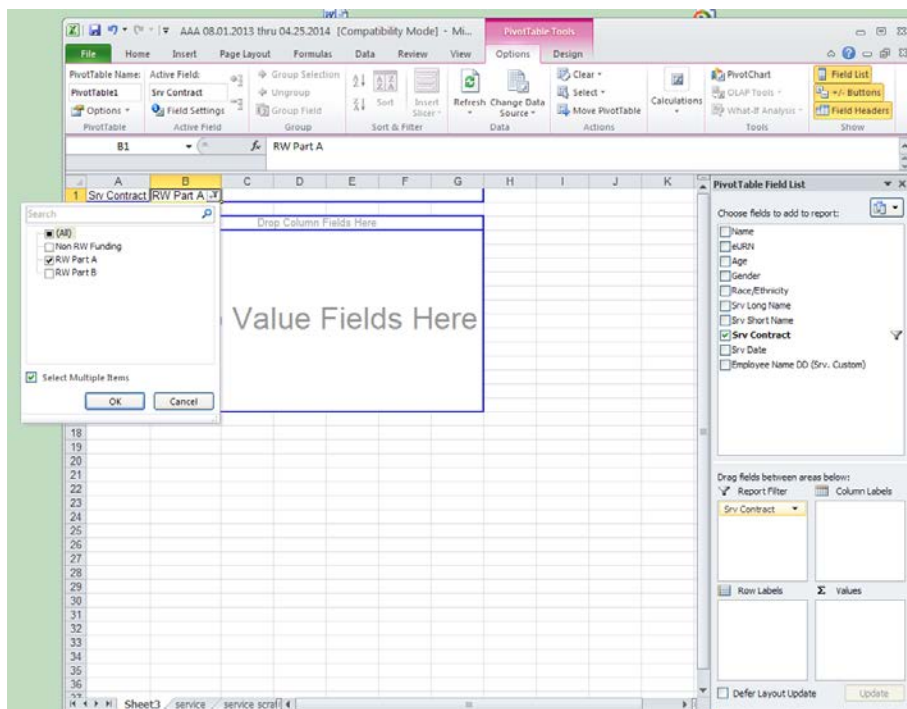
We can then quickly create a report by dragging and dropping different fields to the Row Labels, Column Labels, and Values boxes.

8. Commonly Used CAREWare Fields

CAREWare has thousands of fields, and all of these fields are listed in the Field Dictionary, which can cause confusion when selecting fields for Custom Reports. Some fields are specific to certain agencies, and many of the fields are not used by agencies in the Las Vegas TGA. In addition, many of the fields are calculated fields, meaning they are generated based on data entered into CAREWare. It is important to always spot-check a few clients in your report to make sure that the correct fields were selected and they are being calculated accurately.

Calculated Fields

For calculated fields, CAREWare often requires that you enter additional criteria to define the field. If this is needed, the following window will appear:
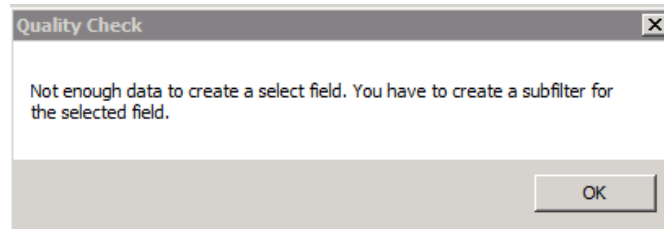
Click OK, and then in the Field Selection window, click the ellipsis next to the field name.
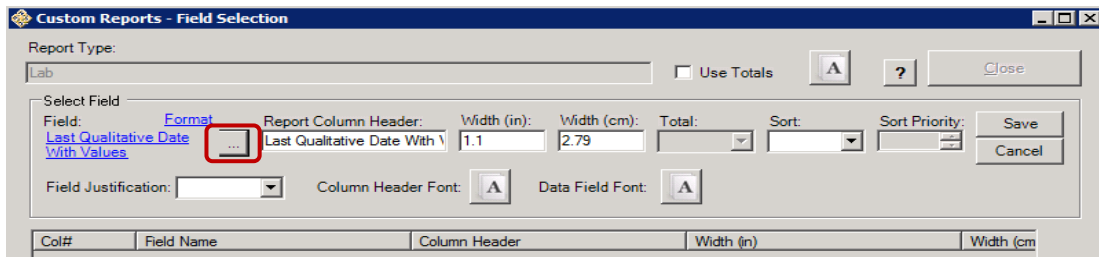
Go through the list of criteria, and for each one click **Edit Criterion** and set the parameters. **Domain Wide** refers to whether data entered by your agency only or all agencies where the client receives services will be included. Choosing **Yes** will include all agencies that provide services to the client.
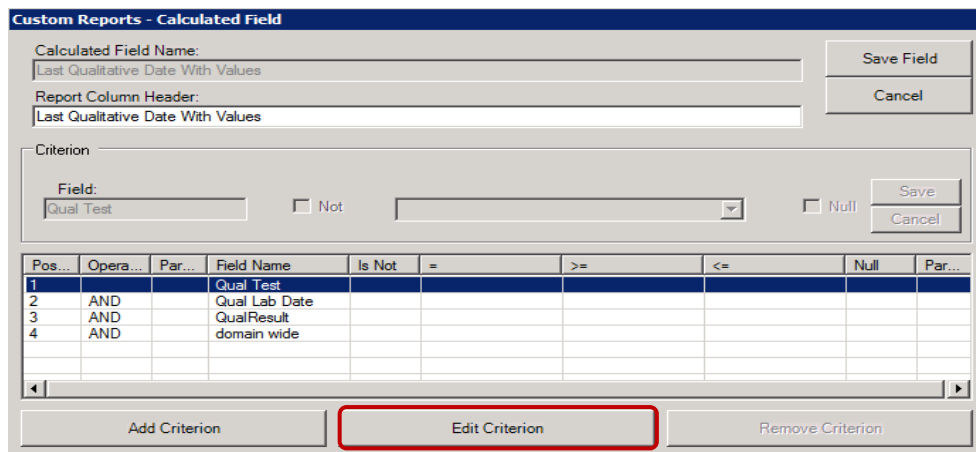
Table of Fields Commonly Used in CAREWare

The following table lists the CAREWare fields most commonly used by providers in the Las Vegas TGA. This is a brief overview and not an extensive list of all the fields available for use.

CAREWare Fields Commonly Used by Providers in the Las Vegas TGA

Variable Name	CAREWare Field	Report Type	Description/Values
Client Identifiers Generated by CAREWare			
URN	Generated by CAREWare on Demographics Tab	All report types	**Unique Record Number**; provides a unique ID for each client based on Gender and DOB
eURN	Generated by CAREWare on Demographics Tab	All report types	**Encrypted Unique Record Number**; provides a unique ID for each client without using characters from name or DOB
UCI	Generated by CAREWare on Demographics Tab	All report types	**Unique Client ID**; provides a unique ID for each client based on Gender and DOB
eUCI	Generated by CAREWare on Demographics Tab	All report types	**Encrypted Unique Client ID**; provides a unique ID for each client without using characters from name or DOB
Fields on Demographics Tab			
Name	First and last name entered on Demographics Tab	All report types	Follows format: *Last Name, First Name*
Gender	Gender on Demographics Tab	All report types	- Male - Female - Transgender
Age	Calculated based on DOB and end date	All report types	Client's age as of the end date of the report. If no dates are specified in the report, then it is as of the date the report is run. There are several age fields in CAREWare. Use the **View Field Description** command to verify how age is being calculated.
Race/Ethnicity	Calculated based on Ethnicity and Race fields on Demographics Tab	All report types	- Hispanic (anyone who is Hispanic, regardless of race) - American Indian/ Alaskan Native - Asian/ Pacific Islander - Black or African American - White - Unknown - Not specified
HIV Status	HIV status on Demographics Tab	All report types	Client's current HIV status; Values include: - HIV-positive (not AIDS) - HIV-positive (AIDS status unknown) - CDC defined AIDS - HIV-negative (affected) - Unknown - HIV-indeterminate
Date of HIV Diagnosis	HIV diagnosis date on	All report types	HIV diagnosis date

Variable Name	CAREWare Field	Report Type	Description/Values
	Demographics Tab		
Date of AIDS Diagnosis	AIDS diagnosis date on Demographics Tab	All report types	AIDS diagnosis date
HIV Risk Factor	Calculated based on risk factors on Demographics Tab	All report types	Clients can select multiple risk factors, however, this field only selects one risk – the one that is the most likely mode of transmission based on the CDC's transmission category hierarchy
Zip Code	Zip code entered for address on Demographics Tab	All report types	Zip code of where client primarily resides; if client is homeless, refers to where client is most often or the agency's zip code
Fields on Service Tab			
Service Category	Does not appear in CAREWare	Service	General service category; for example medical case management, NOT eligibility, service plan, etc.
Service Short Name	Service drop down menu on Add Service screen	Service	Specific service name; for example *Part A eligibility*
Service Long Name	Service drop down menu on Add Service screen	Service	The Specific service name and the service category; For example: *Part A Eligibility; Medical Case Management*
Service Contract	May or may not be visible in Add Service screen	Service	If agency has multiple contracts, specifies which one
Employee Name DD (Srv. Custom)	Employee drop down field in Add Service screen	Service	Name of employee who completed and/or entered service; there are several employee name fields so verify you select the correct one; this field is used most commonly
Service Date	Date entered in Add Service screen	Service	Date service was received
Service Comment (Srv. Custom)	Comments entered in Add Service window	Service	Comments entered in service window
Service custom fields	Any additional fields in the Add Service window	Service	These are customized for specific agencies and services. Use the field dictionary to find custom fields.
Date of Last Service	Calculated based on Services window	Service	Date of last service, regardless of service category
Enrollment Status	At top of Services window	Service	Status is specific to each agency; values include: - Active - Unknown - Referred or Discharged - Removed - Incarcerated - Relocated

Variable Name	CAREWare Field	Report Type	Description/Values
Annual Review Fields from Annual Review Tab			
Primary Health Insurance	Annual Sub-Tab under Annual Review Tab	All Report Types	Last Primary health insurance entered for the Clinical Review Year selected in top right hand corner of custom reports window
Housing Status	Annual Sub-Tab under Annual Review Tab	All Report Types	Last Housing Status entered for the Clinical Review Year selected in top right hand corner of custom reports window
Household Income	Annual Sub-Tab under Annual Review Tab	All Report Types	Last Household Income entered for the Clinical Review Year selected in top right hand corner of custom reports window
Household Size	Annual Sub-Tab under Annual Review Tab	All Report Types	Last Household size entered for the Clinical Review Year selected in top right hand corner of custom reports window
Poverty Level	Annual Sub-Tab under Annual Review Tab	All Report Types	Calculated using last household income and size entered for the Clinical Review Year selected in top right hand corner of custom reports window
Lab Report Values from Encounters Tab			
Lab Test	Lab type in Labs Rapid Entry window	Lab	The name of the test; for example, CD4, Viral Load, etc.
Lab Result	Result entered in Labs Rapid Entry window	Lab	Lab value; for example 500, 20, etc.
Lab Date	Date entered in Labs Rapid Entry window	Lab	Collection date of lab
Lab = ?	=, <, or > sign entered in Labs Rapid Entry window	Lab	If lab has range, sign corresponding with range
Lab Comment	Comments entered in Labs Rapid Entry window	Lab	Any comments entered by person entering data
First Quantitative Lab Date	Calculated based on fields in Labs Rapid Entry Window	All report types	NOTE: the criteria for this field must be specified; to do so, click the ellipsis next to the field name and edit the criteria
First Qualitative Lab Value	Calculated based on fields in Labs Rapid Entry Window	All report types	NOTE: the criteria for this field must be specified; to do so, click the ellipsis next to the field name and edit the criteria
Last Quantitative	Calculated based on fields	All report	NOTE: the criteria for this field

Variable Name	CAREWare Field	Report Type	Description/Values
Lab Date	in Labs Rapid Entry Window	types	must be specified; to do so, click the ellipsis next to the field name and edit the criteria
Last Qualitative Lab Value	Calculated based on fields in Labs Rapid Entry Window	All report types	NOTE: the criteria for this field must be specified; to do so, click the ellipsis next to the field name and edit the criteria

9. Additional Resources

For additional resources on CAREWare reports, database structure, and field definitions consult the following resources:

- The jProg website (the developers of CAREWare)
  http://www.jprog.com/wiki/All-CAREWare-documentation.ashx

- Target Center Data and Reporting page:
  https://careacttarget.org/category/topics/data-reporting

- Sign up for the CAREWare listserv to get updates and hear what other jurisdictions are doing. To sign up go to:
  https://list.nih.gov/cgi-bin/wa.exe?A0=CAREWARE