Welcome!

CAREWare Quick Starts will walk you through the basics of setting up, managing and using basic CAREWare functions. They're not a replacement for the CAREWare User Manual, which is where you'll need to go to learn about more advanced functions. This material is for non-technical users who just need to get information in and out of CAREWare with no worries.

About This Guide #7:
Creating Basic Custom Reports

Guides in this series:

1. *Downloading and installing CAREWare*
2. *Creating contracts and services*
3. *Entering Clients and their Service and Clinical Data*
4. *Customizing tabs and fields*
5. *Customizing clinical data*
6. *Working with CAREWare's prebuilt reports (including the Ryan White Program Data Report)*
7. *Creating basic custom reports*
8. *Creating more advanced reports*
9. *User and System Administration*

First Things First

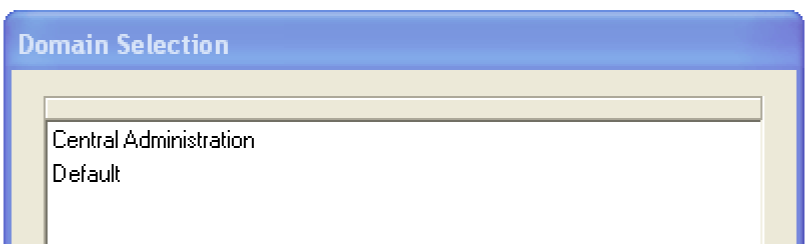
What do I need to get started?

- You must have the appropriate user privileges to run reports.
- You should have a number of clients entered in the system so you can see how your reports will look.
- You should download the following document from the CAREWare website (http://hab.hrsa.gov/careware) that describes all the fields available in each type of custom report: “Field Descriptions for Custom Reports and Crosstab Wizard.”

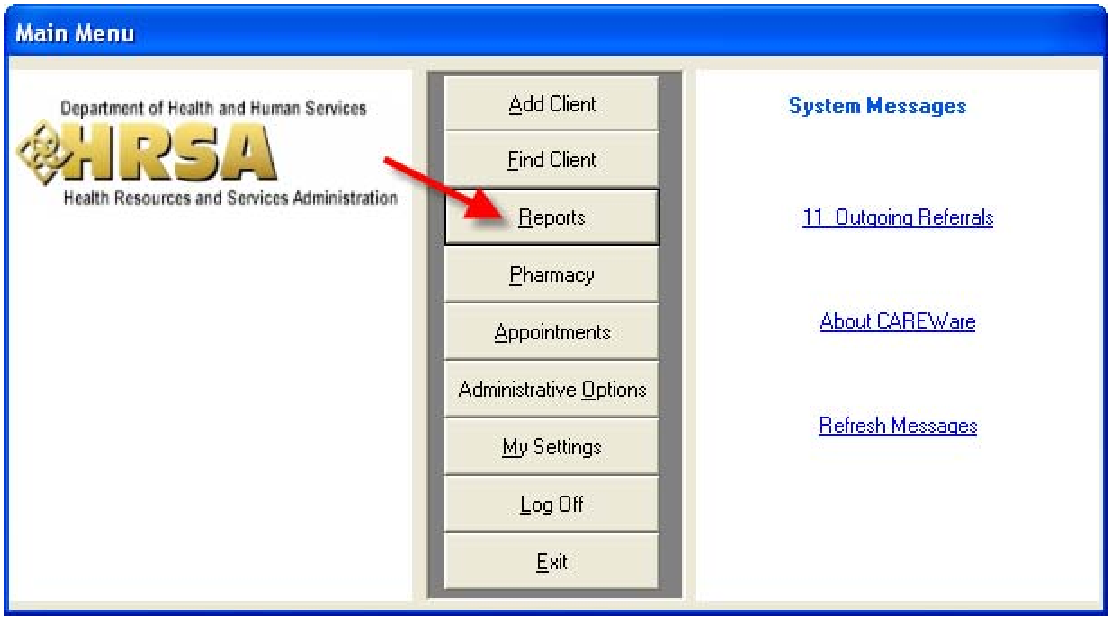
Creating Custom Reports

In addition to the prebuilt reports in CAREWare, you can use custom reports to view data sets unique to your needs. It helps if you have some familiarity with SQL databases before you use custom reports, but if not, the report builder feature will help you design a number of queries without any database experience.

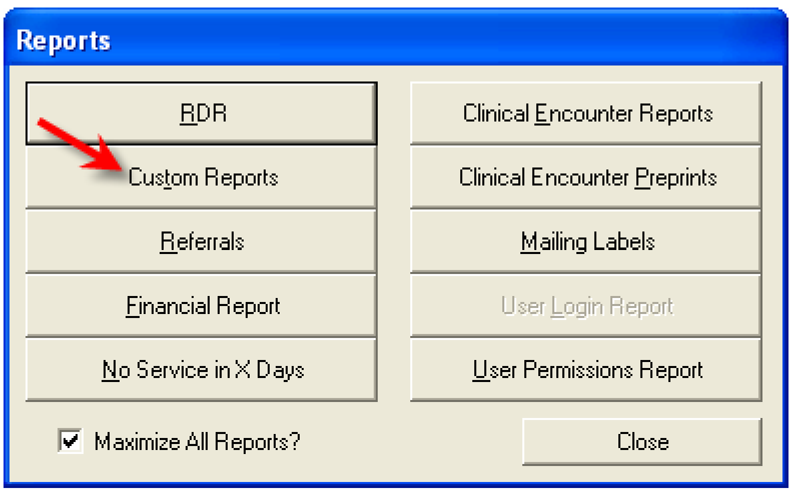
1. Log into CAREWare. If you have administrative privileges and are asked to choose between Central Administration and Provider (“Default” until you change the name), you can log in as either a Provider or Central Admin. To run reports for multiple agencies within a provider network, log in as Central Administrator.



2. Select **Reports** from the main menu.



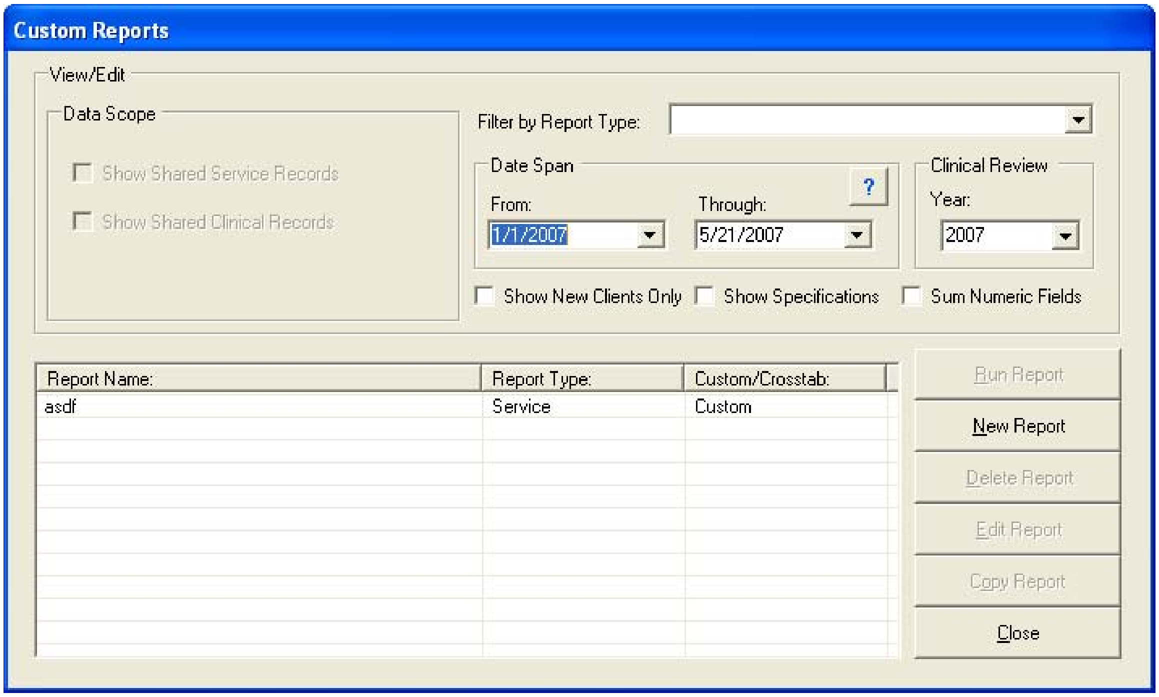
The various report categories will appear:



3. Click **Custom Reports** from this menu.

Creating a basic custom report

Take a moment to look at the custom report menu below.



You'll use this window to start new reports and work with existing reports.

The **Filter by Report Type** drop-down list refers to the types of custom reports you can create and run. These correspond with either tabs or subtabs in the client records. For instance, a Demographic report, a Service report, Encounter data report, etc.

With the inclusion of calculated fields (See Guide #8), Demographic custom reports have become especially powerful for grabbing information from different parts of CAREWare, such as labs and medications and services.

Note that the Demographic fields are available for ALL report types.

Date Span allows you to select a date range on which to report. Which dates fall into scope for a report vary by type of report, as shown in the table below.

<u>Date Range Selection for Custom Reports</u>

Report Type	Client Records Included in Custom Report if Specified field within Date Range
Counseling and Testing	HIV test date
Custom Subform	Custom subform date
Demographic	**At least one service visit (no date range will include all clients)**
Diagnoses	Diagnosis Date

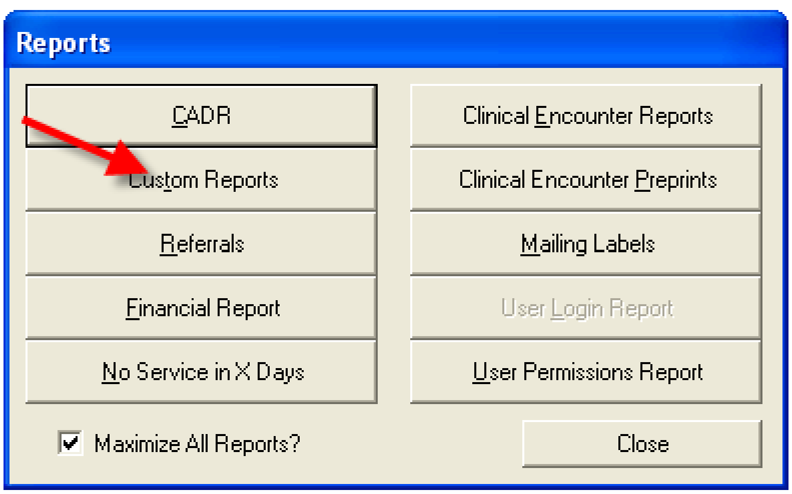
Immunization	Immunization Date
Lab	Lab Test Date
Medication	No Stop Date or Stop Date within range
Pregnancy History	Est. Conception Date
Referrals	Referral Date
Screening	Screening test date
Screening Labs	Screening lab test date
Service	Service visit date
Vital Signs	Encounter date

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).

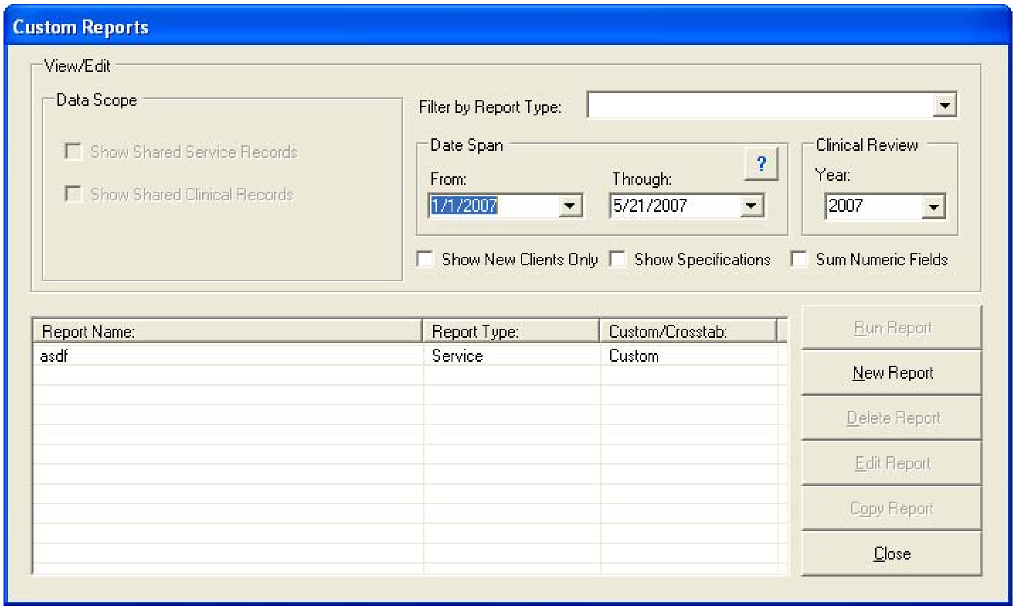
The check boxes allow you to **Show New Clients Only** (only those clients who became new clients in the specified date range, based on their enrollment year), **Show Specifications** (whether or not to display the criteria the report is run on) or **Sum Numeric Fields** (if you are using the Totals functions--GroupBy or sum or count -- see below).

Create a basic custom report: "Clients by Race and Gender"

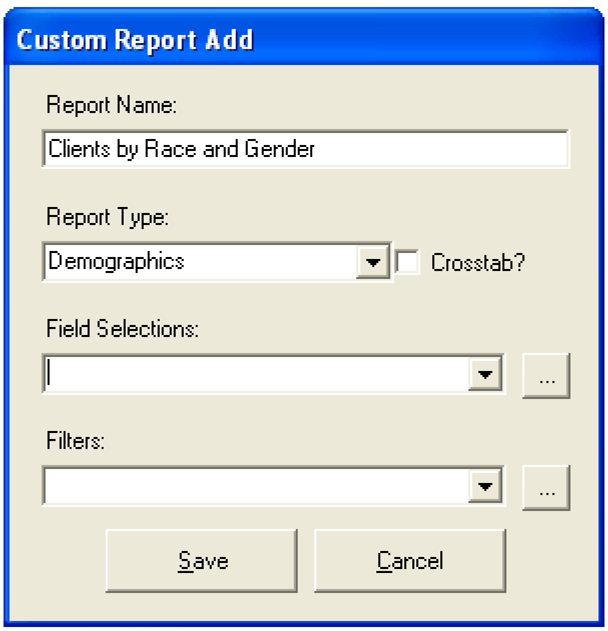
1. From the **Reports** menu, select **Custom Reports**.



2. The menu discussed above will appear.



3. Click **New Report** to add a new report.

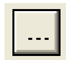


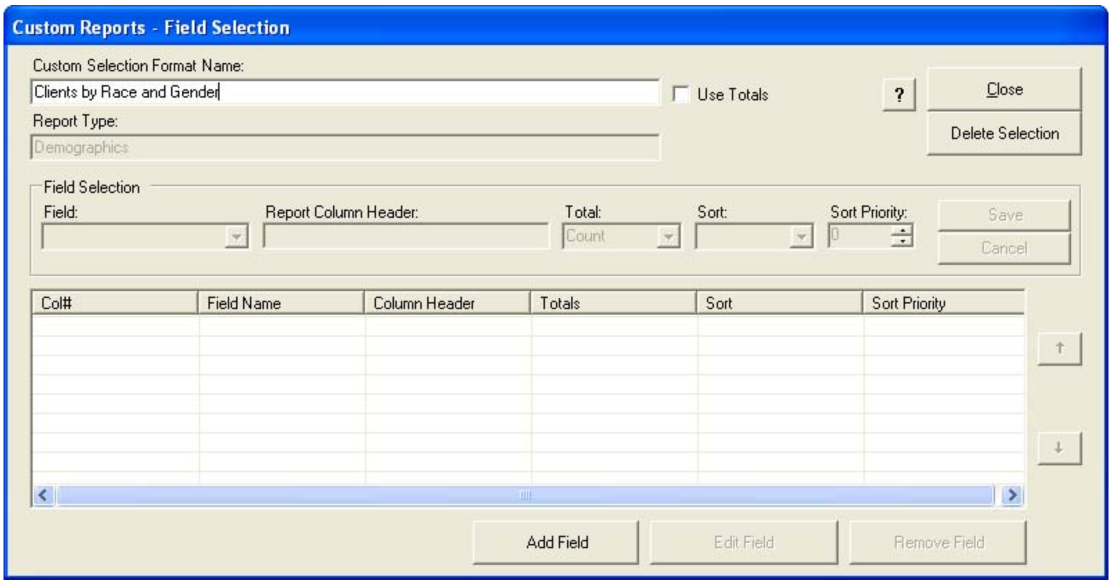
4. Enter the **Report Name**. It's best practice to use descriptive titles for your reports, field selections, and filters. If you come back later and see a report called ClsbRG1, it may be difficult to remember which report that was.

5. Enter the **Report Type** from the drop down menu. (We'll get into crosstabs later.) This will be Demographic, Service, Lab, etc.

   Next you'll select or create **Field Selections** and **Filters**. **Field Selections** are the fields you want to appear on your report (Name, Address, City, State, Zip for instance). **Filters** reduce the data set (everyone, everywhere) down to the data you need (people in your town).

Field Selections and Filters you create will be saved in CAREWare, however, they are specific to the report type. The field selection we're about to create, "Clients by Race and Gender," will be available to other demographic reports you run or create in the future, but not to any other report type.

6. Click the  button next to the **Field Selections** drop down menu. This will enable you to add a new field selection set. The screen below will appear:



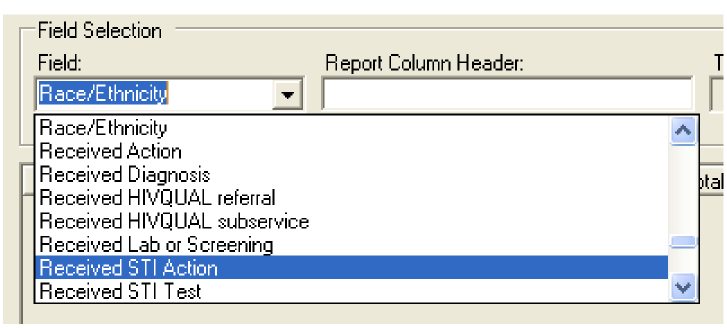
7. Enter the **Custom Selection Format Name**. This should describe the set of fields you're going to be using. Here we've entered "Clients by Race and Gender."

8. The **Use Totals** box comes into play when you need to sum certain values, or group the report in a specific way (for instance, over clients or service categories). We'll come back to that later.

9. Click **Add Field** to select the first field you'll use in your report.

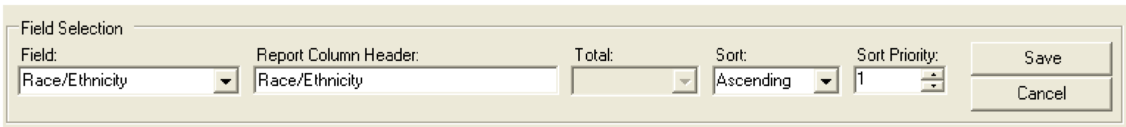
   The **Field:** field will go from shaded to clear, and you'll be able to use the dropdown menu to select a field. Remember that only fields accessible within a demographic report will display.

10. Select the first field for your report. You can also start typing the field name if you know it.

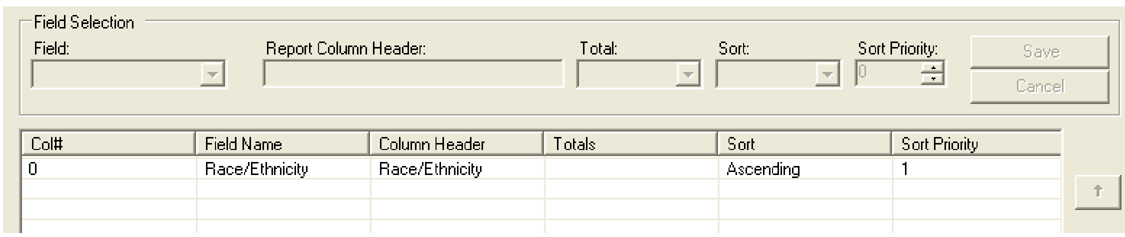


In this case, we'll start with **Race/Ethnicity.** The **Report Column Header** defaults to **Race/Ethnicity**. This is what will print on the report at the top of this column. You can change this column's name on the printed report if you wish.

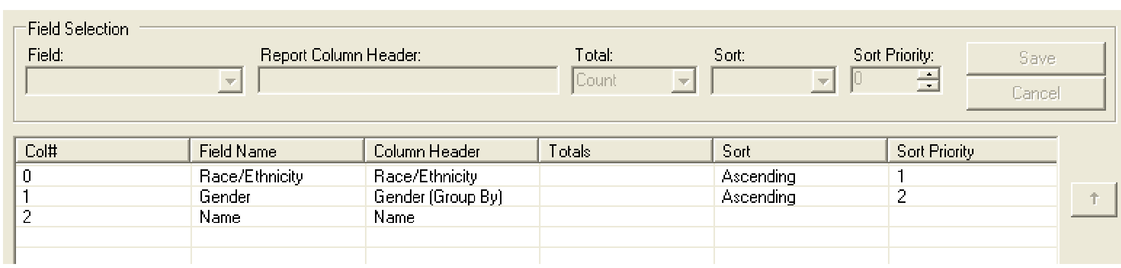
11. **Total** will not appear as available unless you choose **Use Totals**. You will have the option to **Sort** "Ascending" or "Descending" in alphanumeric order. **Sort Priority** indicates that you wish to sort first by this field.



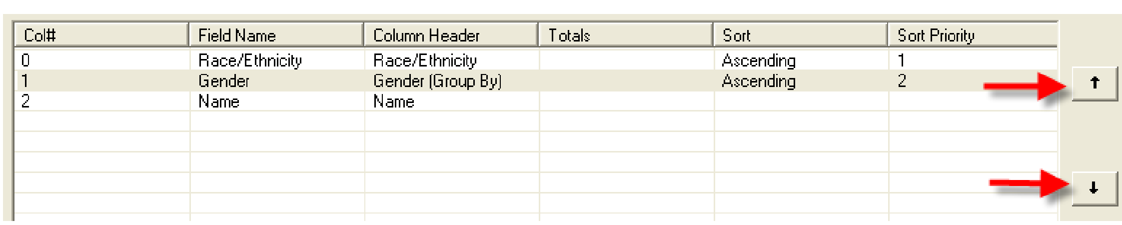
12. Click **Save** when you're done. Your first field will appear in the lower window.



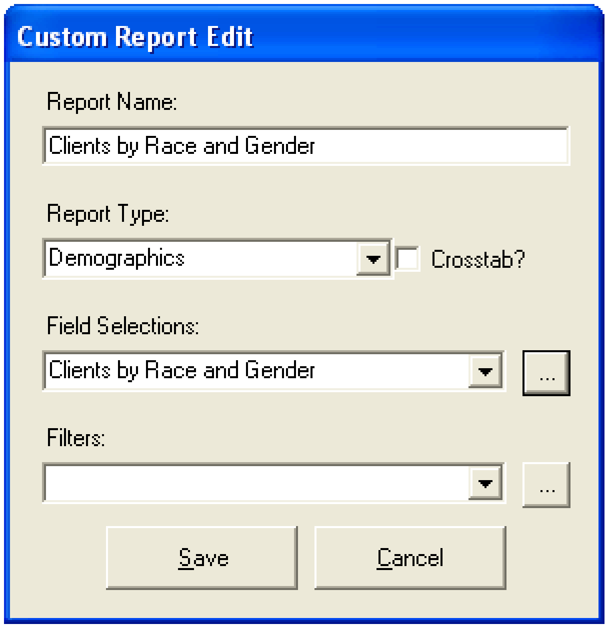
13. Use the steps above to add **Gender** (sort ascending) and **Name** to your report. Allow CAREWare to assign it a sort priority of 2. Your screen will now appear like this:



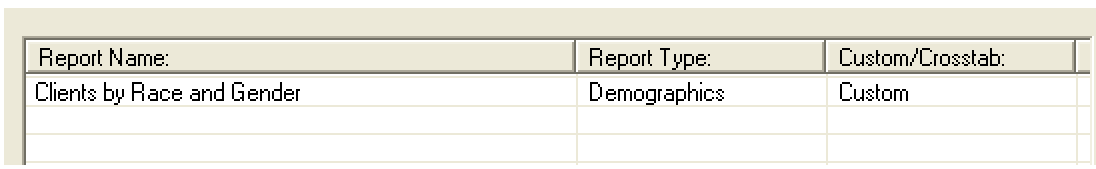
14. You can reorder columns on your report using the up and down arrows on the side of the screen. Select a field by clicking on it and using the arrows to reposition the column. (Note that "Col# 0" is actually the 1st column on your report.)



15. Click the **Close** button to save your selection.



16. Click the **Save** button on the **Custom Report Add** screen, or, go on to create a filter (see below).
17. Your report will appear on the list of reports as seen below.



18. Now click to select this report and click **Run Report**. Make sure you've specified a date span that will return client information.
19. The report will appear in a new window. (Remember to check **Maximize All Reports?** on the **Reports** menu to force all reports to open at full screen width/height.)

Clients by Race and Gender

Data Scope: Marianas Trench Care Center

Race/Ethnicity:	Gender (Group By):	Name:
Am. Indian/Alaska Native	Female	Krill, Wendy
Am. Indian/Alaska Native	Female	Starfish, Constance
Black or African-American	Male	Swordfish, Boris
Hispanic	Male	Deepwater, Geraldo
Hispanic	Male	Maguro, Juan J
More than one race	Male	Squid, Jeremiah L
Other	Male	Cuttlefish, Constantine
Pacific Islander	Male	Mantaray, Peter
White (non-Hispanic)	Female	Eel, Laura
White (non-Hispanic)	Female	Fish, Lacey
White (non-Hispanic)	Male	Seaweed, Robert
White (non-Hispanic)	Male	Crab, Cassius
White (non-Hispanic)	Male	Puckerfish, Roger

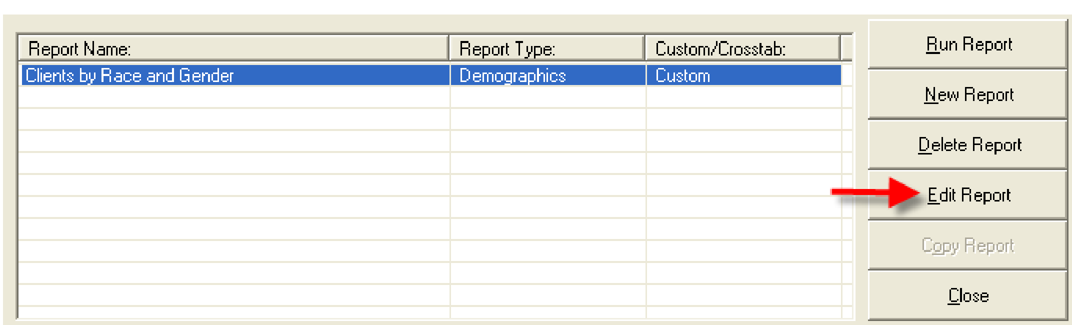
Number of Records **13**

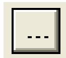
Since we sorted ascending by race/ethnicity, then by gender, the ethnicities are listed alphabetically, followed by each female and male counted within each race/ethnicity.

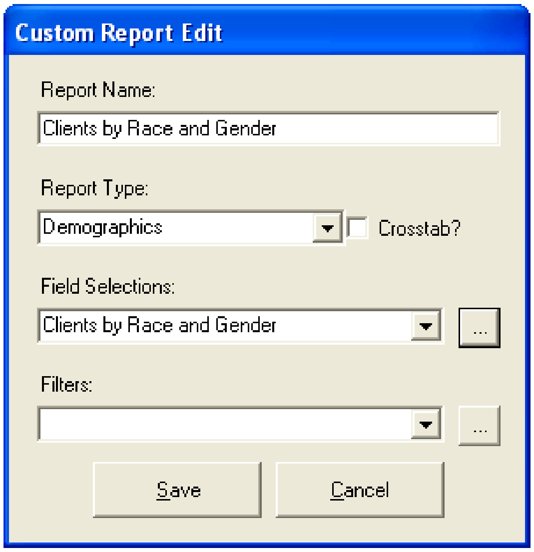
Adding filters to "Clients by Race and Gender"

You can add a filter at the same time you create your field selections, before saving your report. However, sometimes it's more efficient to run a report without filters to make sure you're getting data, and then add the filters.

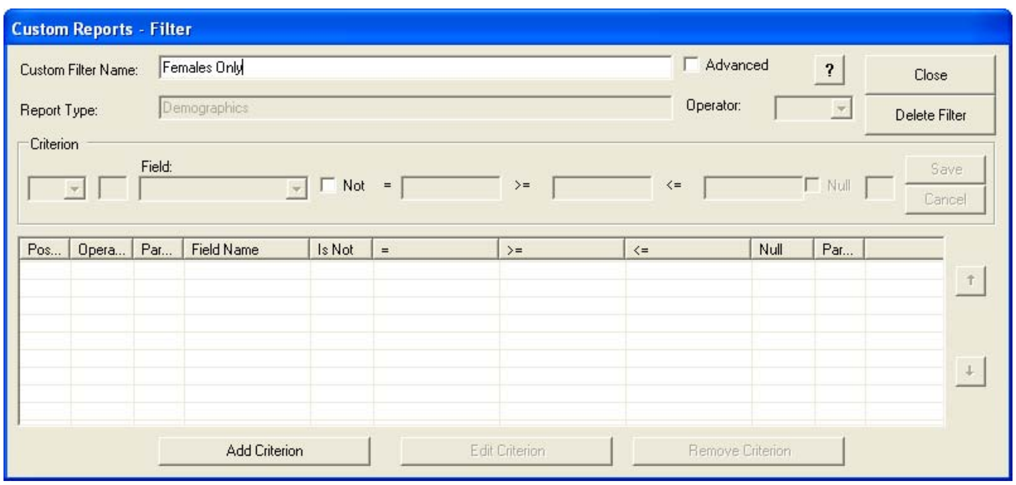
1. If you've closed your report, click to highlight it and click the **Edit Report** button.



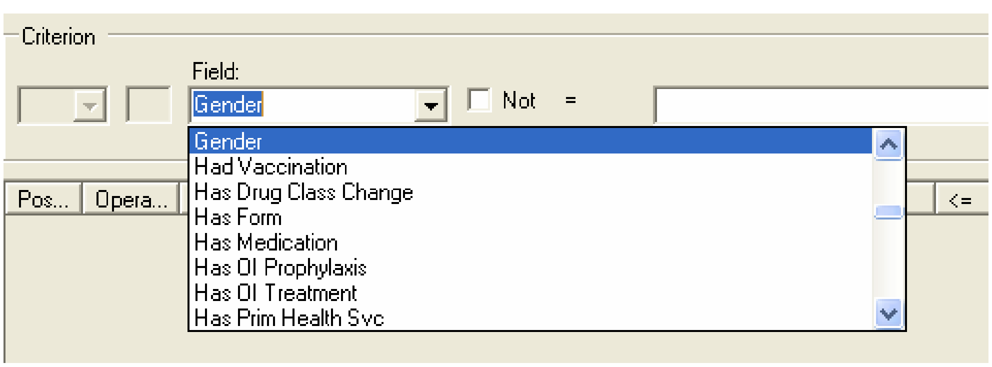
2. Click the  button next to the **Filters** drop down menu.



3. The **Filter** menu will appear. Name this filter "Females Only."

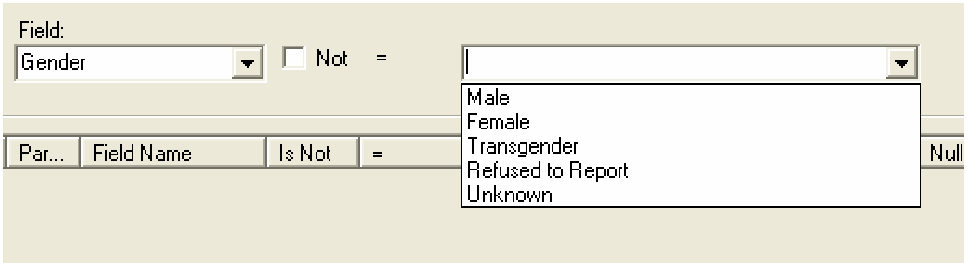


4. Click the **Add Criterion** button. The **Field** drop down will activate and give you a list of all fields by which you could filter this type of report (Demographic).



20. Select **Gender** from the menu.

21. The values for the next drop down are determined by the field you selected. In this case, since you selected Gender, only those options for gender entered into the system will be available:

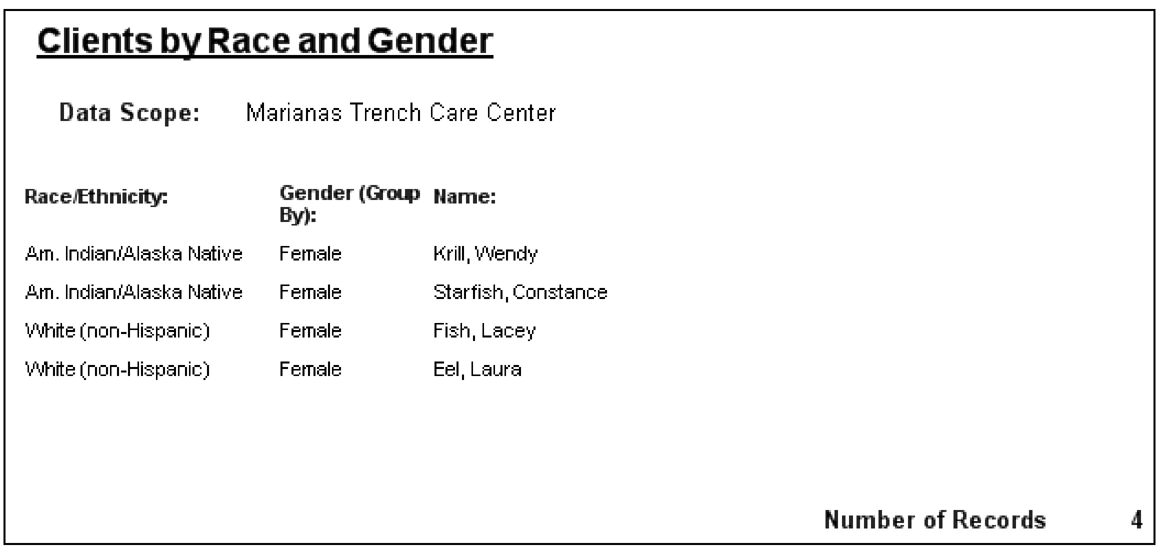


22. The default value for a field is “=”. Checking the **Not** box will return all values <u>unlike</u> the one you select. I.E., if you selected Gender NOT Female, you’ll get all males, transgenders, refused to reports, and unknowns. Select **Female** for this report.

23. Click **Save**, then **Close** the filter, then **Save** the report.

24. Now click to select this report and click **Run Report**. Make sure you’ve specified a date span that will return client information

25. The report will appear in a new window. Note that only females appear in this report.



Clients by Race and Gender

Data Scope: Marianas Trench Care Center

Race/Ethnicity:	Gender (Group By):	Name:
Am. Indian/Alaska Native	Female	Krill, Wendy
Am. Indian/Alaska Native	Female	Starfish, Constance
White (non-Hispanic)	Female	Fish, Lacey
White (non-Hispanic)	Female	Eel, Laura

Number of Records 4

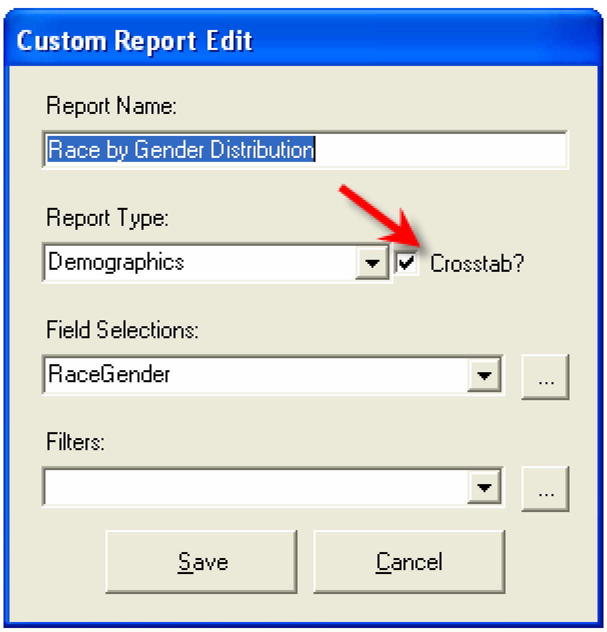
Crosstab Wizard

Turning a custom report into Custom report.

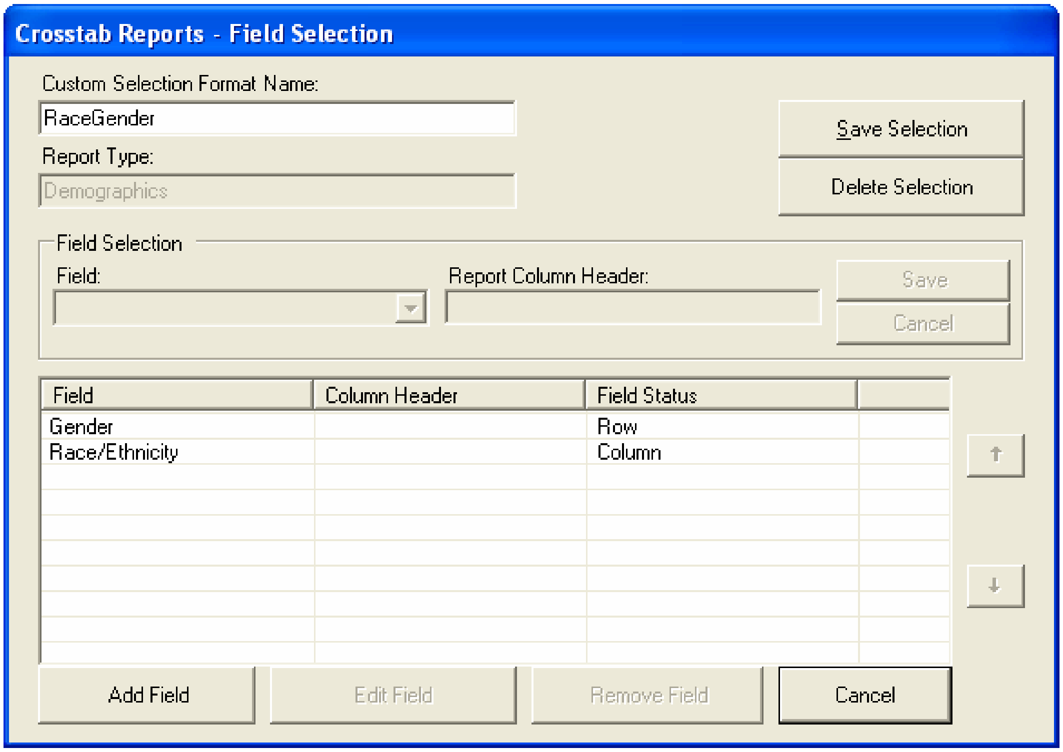
In the example above we produced a report that listed each client separately. This is especially helpful when you need a list in order to identify specific clients requiring follow up (e.g. needing a vaccine, or who haven't had an office visit for more than 3 months). In addition, custom reports can be very useful to aid in assessing data quality: List all the clients who have missing or out-of-range information for a certain field or fields.

Crosstabs, however, allow you to quickly obtain the *counts* of clients for specific criteria. For example, you may need to report the number of clients you are serving cross-classified by Race/ethnicity and Gender, or by HIV status and CD4 group. The crosstab wizard allows you to generate counts.

Let's turn the above custom report into a Crosstab Wizard. Crosstabs have a row, column, and, if specified, a strata field.



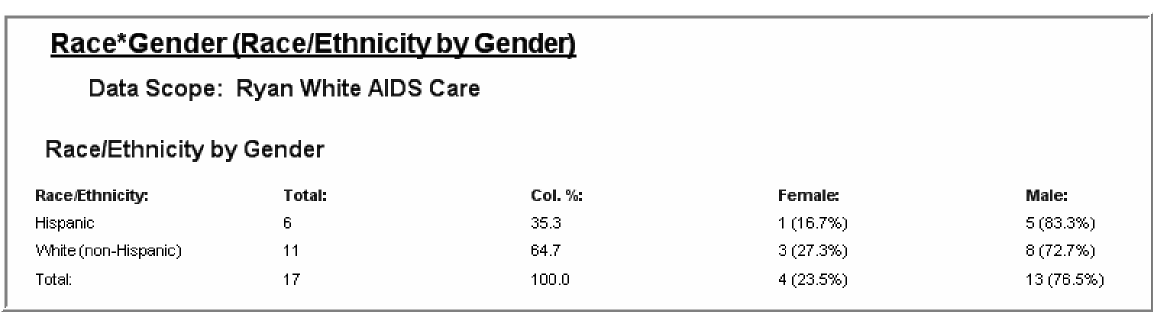
Click the ellipsis (the box with 3 dots) to the right of the field selection box to designate your row and column fields. The screen below will appear.



- We could change the row and column by simply clicking the up or down arrow on the right to change their position.

- Note that customized column headers cannot be created in crosstabs. You'll need to do that first in custom reports and then turn the report into a crosstab by selecting the checkbox on the screen described above.

Let's run this and see the result.



Race*Gender (Race/Ethnicity by Gender)

Data Scope: Ryan White AIDS Care

Race/Ethnicity by Gender

Race/Ethnicity:	Total:	Col. %:	Female:	Male:
Hispanic	6	35.3	1 (16.7%)	5 (83.3%)
White (non-Hispanic)	11	64.7	3 (27.3%)	8 (72.7%)
Total:	17	100.0	4 (23.5%)	13 (76.5%)

This simple crosstab provides a lot of information:

a) The "Col. %:" shows the percent distribution of clients by Race.

b) The Female and Male columns show the gender distribution for each Race category. For example, 16.7 percent of Hispanics (1/6) are female while 27.3 percent of Whites are female (3 of 11).

c) The Row Total provides the percent distribution of clients by gender.

By simply switching the Row and Column positions, we obtain the following:

Gender by Race/Ethnicity

Gender:	Total:	Col. %:	Hispanic:	White (non-Hispanic):
Female	4	23.5	1 (25.0%)	3 (75.0%)
Male	13	76.5	5 (38.5%)	8 (61.5%)
Total:	17	100.0	6 (35.3%)	11 (64.7%)

- Now we have the Racial/Ethnic distribution of our client population for each gender.

Now let's say you need the above information but you want it by the HIV risk of each client; in other words, you want the counts by Race and Gender ***stratified*** (or separately) by HIV risk in order to see if the Race and gender distribution of your clients differs by HIV risk. To do this, simply add HIV risk as the strata field.

Field	Column Header	Field Status	
Gender		Row	
Race/Ethnicity		Column	
HIV Risk Factor	HIV Risk Factor	Strata	

When we rerun the report, we obtain the following (we've only shown part of the report here…)

IDU

Gender:	Total:	Col. %:	Hispanic:	White (non-Hispanic):
Female	3	37.5	1 (33.3%)	2 (66.7%)
Male	5	62.5	1 (20.0%)	4 (80.0%)
Total:	8	100.0	2 (25.0%)	6 (75.0%)

MSM

Gender:	Total:	Col. %:	Hispanic:	White (non-Hispanic):
Male	5	100.0	3 (60.0%)	2 (40.0%)
Total:	5	100.0	3 (60.0%)	2 (40.0%)

MSM and IDU

Gender:	Total:	Col. %:	Hispanic:	White (non-Hispanic):
Male	3	100.0	1 (33.3%)	2 (66.7%)
Total:	3	100.0	1 (33.3%)	2 (66.7%)

- Users should explore the group format wizard that allows you to put into categories any continuous, quantitative field including lab results and dates. For example, with the format wizard we could create CD4 categories (<200, 200-350, >350) and use this in the crosstab wizard. Or we could classify clients by the Year of enrollment in your agency.